वार्षिक रिपोर्ट ANNUAL REPORT वार्षिक लेखा

ANNUAL ACCOUNTS

2020 - 2021





राष्ट्रीय प्रौद्योगिकी संस्थान कालिकट National Institute of Technology Calicut ANNUAL REPORT & ANNUAL ACCOUNTS 2020-2021



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ANNUAL REPORT

2020-2021

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1 INTRODUCTION

1.1 MISSION

To develop high quality technical education and personnel with a sound footing on basic engineering principles, technical and managerial skills, innovative research capabilities and exemplary professional conduct to lead and to use technology for the progress of mankind, adapting themselves to changing technological environment with the highest ethical values as the inner strength.

1.2 VISION

International standing of the highest caliber

2 AN OVERVIEW

2.1 HISTORICAL BACKGROUND

The National Institute of Technology Calicut (NITC), originally established in 1961 as a Regional Engineering College and got transformed to NIT on 26th June 2002, is one of the 31 NITs and IIEST, Shibpur in the country. It is fully funded by the Government of India and an Institute of National Importance under NIT Act 2007.

2.2 LOCATION

The institute is located at Chathamangalam, 22 km east of Calicut city, along the Kunnamangalam-Mukkam road and covers an area of over 120 hectares, at the foot of the Western Ghats. The Calicut Railway Station and Airport are respectively 22 km and 45 km away from the Campus.

2.3 CAMPUS

The institute campus has all the essential amenities required. The library, computer centre and laboratories of the institute are well equipped. There is a campus school managed by a society formed by faculty members, a branch of State Bank of India, a Post Office, a Telephone exchange and canteens functioning within the institute campus. The institute has a Health centre to look after the medical needs of the students, employees and their families. The Institute has adequate facilities for indoor and outdoor games, recreation and co-curricular activities. There are 11 hostels for the boys. One hostel with four blocks with an attached recreational centre and one mega hostel with 500 rooms are available for girls. One International hostel with twenty semi-furnished rooms is also available. There are 90 apartments for the married scholars. The institute has a good number of staff quarters and a guest house with 20 rooms.

2.4 ADMINISTRATION

2.4.1 GOVERNANCE

Institute is governed by the NIT Act 2007 and the statutes. Board of Governors and the Senate are the authority of the Institute. Hon'ble President of India is the Visitor of the Institute. Chairperson of the Board of Governors is nominated by the Visitor.

Institute follows multi-tier hierarchical administrative structure, with proper delegation from top to bottom. Director appointed by the Government of India is at the helm of the affairs. Six Deans spearhead the consultative mechanism that assists the Director in administration and management. The academic units of Departments and Schools are headed by faculty and the administrative sections are headed by officers of appropriate rank.

2.5 ACADEMIC PROGRAMMES

The Institute imparts technical education at the degree and postgraduate levels viz., (1) Undergraduate (UG) programme of four years duration leading to B.Tech Degree, (2) UG programme of five years duration leading to B.Arch. degree, (3) Postgraduate (PG) programme of two years duration leading to M.Tech degree, (4) PG programme of two years duration leading to M.Sc degree (5) a programme of three years duration leading to the Master of Computer Applications (MCA) degree and (6) a two year MBA programme. All the programmes are offered in credit-semester pattern. In addition, Ph.D programmes in all disciplines are also offered.

2.6 PROGRAMMES OFFERED

- (a) Bachelor of Architecture (B. Arch)
- (b) Bachelor of Technology (B. Tech) in the following disciplines:

Biotechnology Chemical Engineering Civil Engineering Computer Science and Engineering Electronics and Communication Engineering Electrical and Electronics Engineering Engineering Physics Mechanical Engineering Production Engineering

(c) Master of Technology (M. Tech) Programmes

Department/ School	Department/ School code	M. Tech Programmes	Program me Code
		Structural Engineering	CE61
0. 1		Traffic and Transportation Planning	CE62
Civil Engineering	CE	Offshore Structures	CE63
Engineering		Environmental Geotechnology	CE64
		Water Resources Engineering	CE65
Computer	~~~	Computer Science and Engineering	CS61
Science & Engineering	CS	Computer Science & Engineering (Information Security)	CS62
		Instrumentation and Control Systems	EE61
Electrical	EE	Power Systems	EE62
Engineering		Power Electronics	EE63
8 8		Industrial Power and Automation	EE64
		High Voltage Engineering	EE65
Electronics and		Electronics Design and Technology	EC61
Communication	EC	Microelectronics and VLSI Design	EC62
Engineering	LC	Telecommunication	EC63
		Signal Processing	EC64
		Industrial Engineering and Management	ME61
		Thermal Sciences	ME62
Mechanical	ME	Manufacturing Technology	ME63
Engineering		Energy Engineering and Management	ME64
		Material Science and Technology	ME65
		Machine Design	ME66

Nano Science and Technology	NST	Nanotechnology	NS61
Chemical Engineering	СН	Chemical Engineering	CH61

(d) Master of Science

M.Sc. programmes are offered in the following disciplines:

- 1. Chemistry
- 2. Mathematics
- 3. Physics

(e) Master of Computer Applications (MCA)

M.C.A. Programme is offered by the Department of Computer Science and Engineering.

(f) Master of Business Administration (MBA) M.B.A. Programme is offered by the School of Management Studies.

(g) Doctor of Philosophy (Ph. D)

Ph.D. programmes are offered by all the departments/schools.

(i) One-Credit Course in Physical Education - (ZZ1093)

Physical Education, compulsory entity in NITC curriculum, unique in nature, offers to all B. Tech students a one Credit Course in Physical Education (Code ZZ 1903) has become a big hit on the campus and students are rushing to Physical Education Department for the credit during as early as their 2nd semester itself. The course consisted of a compulsory two semester long pursuance of a choice-activity of the student under guidance and supervision of Physical Education Faculty and Professional Coaches to learn practice and master it. The credit can be earned in any semester between 2nd and 6th. Attendance up to 80% is mandatory and they are declared passed or failed at the end of every semester without grading.

Name of the Credit Awarded	Duration	Specialization	Year of Commencement of the program	Present intake
One- Credit in Physical Education	One Semester	Any one Major Game/Swimming/ Fitness/Yoga	Since 2002- '03	900 students per semester

ii) O T Program for first year students (included in NITC time-table)

Another unique program that exist only in NIT Calicut but now being taped by other counterparts, figure in the NITC time table for the first year students. This is a 8- month class room contact program where the Physical Education teachers introduce the fresher's to the campus sports environment preparing them for the four/ five years course providing extra stress to healthy well-being and inculcation of fitness awareness. The program culminates in the play fields where outstanding sports talents are spotted for future utilization by the institute. The NITC time-table provided one afternoon session of 3 hours each per week per batch for executing this program. In the process, outstanding sports talents from among the fresher's were also spotted and singled out for specialist coaching along

with their senior counterparts. Such outstanding students were straight away enrolled in to the various NITC teams.

2.7 ADMISSION PROCEDURE

Name of the Course	Duration	Specialization	Year of Commencement of the program	Present intake
O T Program in Physical Education. as per NITC Time table	One Semester July to November	Any one Major Game/Swimming/ Fitness/Yoga	Since 2002-'03	All the students admitted to B. Tech & B. Arch

Admission to B.Tech /B. Arch. programmes offered at NIT Calicut is made under the following categories:

Sl. No.	Category	Basis of Admission	Sanctioned Intake
1	Candidates from Kerala state (Home State Quota) †	*JEE (Main) Rank	622
2	Candidates from Other State (Other State Quota) [†]	* JEE (Main) Rank	622
3	Candidates from Lakshadweep &Khandvi (Home State Quota) †	* JEE (Main) Rank	33
4	Foreign Nationals \$	Marks in the Qualifying Examination	16
5	MEA Welfare Scheme #	Marks in the Qualifying Examination	06
6	Direct Admission of Students from Abroad (DASA) scheme	* JEE (Main) Rank	145
		Total	1444

Reservations as per Rules of Government of India (GoI).
 Ioint Entrance Examination (Main) conducted by the National Conducted by the National Conducted by the National Conducted Science Conducted Scienc

- * Joint Entrance Examination (Main), conducted by the National Testing Agency (NTA).
- Nominated by the Ministry of External Affairs (Students Cell), GoI, through Indian Council for Cultural Relations (ICCR).
- # Nominated by the Ministry of External Affairs, GoI

2.8 STUDENTS

The Students' Affairs Council (SAC) 2020-21 was elected and constituted with 59 Branch Councilors and 10 Executive Council members. The online election was conducted during December 2020. The annual techno-management festival Tathva'20 was successfully conducted in online mode from April 2021 to June 2021. The event witnessed an all-time high registration count of above 5000, (count of external participation alone). The annual cultural festival RAGAM 2021 was organized in the online mode during March 2021 to April 2021. Sneharagam was organized this year also as a Post-Ragam event, exclusively for physically challenged students of different schools of Kerala which witnessed excellent participation. The event marked an all-time record in terms of external participation. Three new technical clubs were formed during this year- AI Club, CP Hub, Nova Club and Club IGNITTE. The Women Empowerment (WE) wing of SAC has started a monthly programme from WE. This series was announced on the event 'She-Era" organized by SAC on 8th March 2021((International Women's Day 2021). The sports and Fitness club organized 'Fit India Freedom Run' during October. The Team Unwired of the SAE India Collegiate Club, NITC, successfully participated in the E-Baja-2021 competition organized by Society of Automotive Engineers India (SAE) India during April 21-25, 2021. The event was held in the virtual mode this year. The team secured the following positions during the 5-day event. (1) First Place in Brake Performance Test (Dynamic) (2) Second Place in Engineering Design (Static) (3) Overall Ranking of Ninth. The Adventure Club organized a one-day online workshop along with Snapchat regarding Lens Studio.

2.9 EXAMINATION & EVALUATION

All academic programmes of the Institute follow the credit-semester system. Minimum credits to be earned for the award of various degrees are specified in the respective curricula. The modalities for continuous evaluation of various courses being offered by the departments/schools are decided by the Institute Senate from time to time and are followed scrupulously. Slow learners are given adequate chances to pursue the studies.

2.10 PLACEMENT

During the session 2020-2021, for the students of 2021 graduating year, 145 companies visited the campus for placement drives and made a total of 714 offers. The summary of the placement drive is as follows:

- B. Tech Programme: 515 students out of 590 eligible B.Tech students (87.3%) got placed
- M.Tech Programme: 199 students out of 342 eligible M.Tech students (58.19%) got placed
- The highest salary (CTC) offered for B Tech is 43.31 Lakhs
- The highest salary (CTC) offered for M Tech is 28.01 Lakhs
- The average salary offered is 10.75 Lakhs

Moreover, during the session 2020-2021, for the students of 2022 graduating year, 38 companies visited the campus for internship drives and made a total of 186 offers. The summary of the placement drive is as follows:

- B. Tech Programme : 128 out of 678 eligible B.Tech students (18.9%) got an Internship offer
- M.Tech Programme: 58 out of 442 eligible M.Tech students (13.12%) got an Internship offer
- The highest monthly stipend offered for B Tech is 1.00 Lakhs.
- The highest monthly stipend offered for M Tech is 0.5 Lakhs.

DETAILS OF PLACEMENT

Programme	Total Placed*	_	Percent age	Min Salary [in lakhs INR]	Max Salary [in lakhs INR]	Avg. Salary [in lakhs INR]	Median Salary [in lakhs INR]
UG							
[B.Tech+B. Arch]	515	590	87.3	3	43.31	10.99	8.1
PG [M.Tech+M CA+MBA+ M.Sc.]	199	342	58.19	3.33	28.01	10.11	8.2
TOTAL [UG+PG]	714	932	76.61	3	43.31	10.75	8.1

* Indicates total number of students placed [double offers not counted] ** Includes students with CGPA $\geq = 6.5$ and who participated in all T&P registrations. If a company has offered a job to a student having CGPA < 6.5, it is included in both placed as well registered counts

2.11 ALUMNI AFFAIRS

NITC has a vibrant Alumni of over 39,000 all of whom are part of the NITC Alumni Association (NITCCAA) and get back to their Alma mater on every occasion. The Institute is very proud of its former students now occupying key positions in the country and outside. These alumni who have grown to be responsible global citizens, have always been desirous of giving back to their Alma Mater and enhance its reputation as the Alumni are the brand ambassadors of any Institute. The Office of Dean Alumni Affairs and International Relations has been coordinating through the NITCAA to enhance the interaction between NITC and its alumni. NITCAA has chapters in USA, Singapore, Delhi, Mumbai, Bangalore, Chennai, Cochin and in many other parts of India and abroad. Silver Jubilee Endowment Trust of NITC, funded by alumni, gives merit scholarships to economically backward students. SEWA - charitable society started by the 1978 batch, sponsors several activities for the society and to the students of NITC. Silver Jubilee and Golden Jubilee meet of pass out batches is conducted every year in the campus. North America NITC Alumni Alumni association is coordinating the NITC Alumni Mentoring Program (NITCAMP) for providing academic and career guidance to current students of NITC. Distinguished alumni visit the campus and interact with students under the Distinguished Alumni Lecture Series. These constant interactions have resulted in the successful completion of many projects at NIT Calicut. NITCAA executed projects like the Creative Zone (35 Lakhs), Maitri (5 Lakhs), etc. for contributing back to the institute. NITCAA and 1997 Batch contributed 350 laptops (1 crore) for the needy students of NITC towards attending online classes during COVID19. The preliminary phase of the IoT project sponsored by the Batch of 1985 has been installed in the campus. An Amphitheatre (15 Lakhs) is being designed and constructed by NITCAA and 1993 batch.

2.12 GAMES AND SPORTS

To achieve our objective of "FITNESS FOR ALL", Physical Education is a compulsory entity in the NITC Curriculum and target the fresher's so that he/she inculcates awareness of the need to be physically fit on the campus and off it.

As has been the practice, Programs were planned and executed giving due importance to the new comers to the Institute. More than 100 days during July to November were spent on fresher orientation program in order to acclimatize them to the NITC environment and to inculcate awareness on the need to pursue activities to keep themselves fit and healthy with in campus and to follow-up in the post-campus life.

The senior-graduate and the post graduate students on their part have thronged the Physical Education activity centers in big numbers on a voluntary basis. The shortage of playfields continued to haunt and every attempt was made to provide them to meet the student demand. One systematic and successful method adopted was to provide floodlights on small area games like, Kho Kho, Kabaddi, Tennis, Basketball, Volleyball, and Swimming. However, the existing infrastructure has been utilized to the full and equipment purchased has been exhausted due to the overwhelming use.

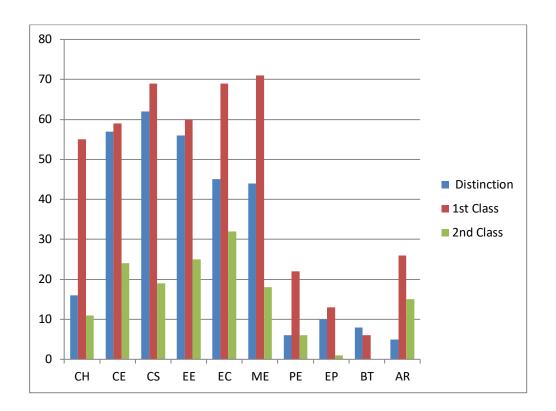
2.13 STAFF POSITION

TEACHING STAFF

The sanctioned strength of teaching staff is 483. The department wise break-up of the sanctioned and in position strength of faculty is given below.

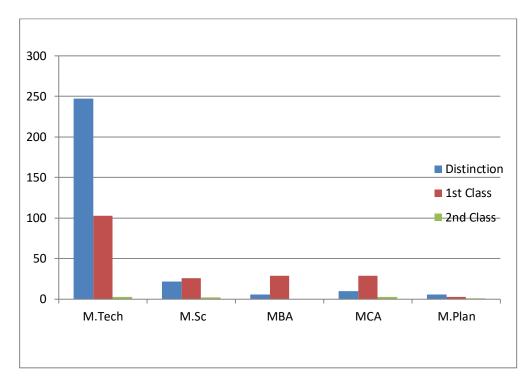
Department/School	Sanctioned	In position as on 31.03.2021
Architecture	23	11
Chemical Engineering	27	19
Civil Engineering	64	36
Computer Science & Engineering	58	29
Electrical & Electronics Engineering	62	31
Electronics & Communication	60	34
Engineering	00	54
Mechanical Engineering	81	40
Mathematics	25	15
Physics, Chemistry and Humanities	42	29
Physical Education	3	1
Biotechnology	16	11
School of Management Studies	16	9
School of Materials Science &	6	6
Engineering	0	6
Total	483	271

2.14 NOTABLE ACHIEVEMENTS USING GRAPHS, CHARTS, AND DIAGRAMS

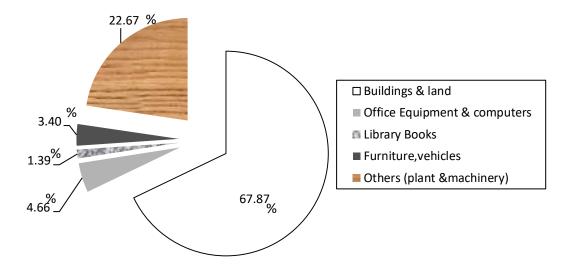


(a) Details of B.Tech / B.Arch Students passed out in 2020-21

(b) Details of M. Tech, MCA, MBA & Ph. D Students passed out in 2020-2021



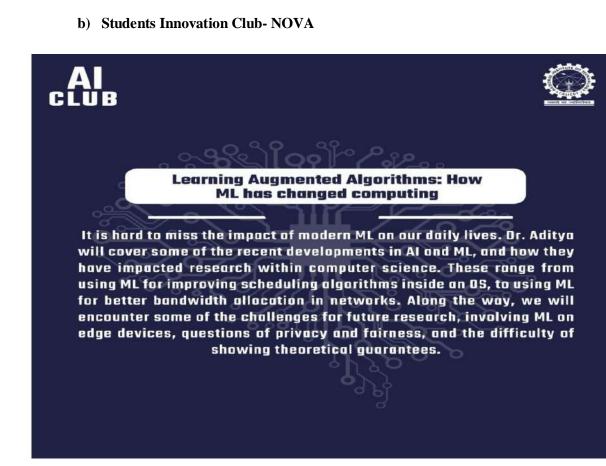
(c) Details of Assets as on 31.03.2021



2.15 VISUALS OF MAJOR STUDENT ACTIVITIES



a) Technical Club, Al-Club





c) A Sapling planting programme (October 2020)





d) Tathva Lecture by Nobel Laureate Sir Anthony James Leggett





e) UV Disinfection Chamber developed by NITC team for sanitizing office files and other medium sized objects



f) COVID Vaccination camp at NITC conducted in association with MVRCCR





3 THE STAFF

DIRECTOR	:	Dr. Sivaji Chakravorti (upto 18-Aug-2020) Dr. Sathidevi P. S. (i/c from 18-Aug-2020)
DEPUTY DIRECTOR	:	Dr. P. S. Sathidevi
DEANS		
Dr. Saly George	:	Academic
Dr. M.V.L.R. Anjaneyulu	:	Planning & Development
Dr. Ashok S	:	Research & Consultancy
Dr. Chandrasekharan K	:	Faculty Welfare
Dr. S D Madhu Kumar	:	Students Welfare
Dr. Jeevamma Jacob	:	Alumni Affairs & International Relations
REGISTRAR	:	Lt. Col. Pankajakshan K (Retd)
REGISTRAR ASSOCIATE DEANS	:	Lt. Col. Pankajakshan K (Retd)
	:	Lt. Col. Pankajakshan K (Retd) Academic
ASSOCIATE DEANS	:	
ASSOCIATE DEANS Dr. Raghu C V	:	Academic
ASSOCIATE DEANS Dr. Raghu C V Dr. Sindhu T K	:	Academic Academic
ASSOCIATE DEANS Dr. Raghu C V Dr. Sindhu T K Dr. K Krishnamurthy	:	Academic Academic Planning & Development
ASSOCIATE DEANS Dr. Raghu C V Dr. Sindhu T K Dr. K Krishnamurthy Dr. G Gopakumar	:	Academic Academic Planning & Development Planning & Development
ASSOCIATE DEANS Dr. Raghu C V Dr. Sindhu T K Dr. K Krishnamurthy Dr. G Gopakumar Dr. Arun P	:	Academic Academic Planning & Development Planning & Development Research & Consultancy

3.1 ACADEMIC STAFF (Teaching)

DEPARTMENT OF ARCHITECTURE

Sl. No.	Name	Designation	Qualification	Specialization
1	Dr. Kasthurba A. K	Professor	B. Arch, M. Tech, Ph. D	Architecture, Building Technology and Architectural Conservation
2	Dr. P.P AnilKumar.	Professor & Head	B. Tech, MCP, Ph.D.	Architectural Engg., City Planning
3	Dr. Naseer M.A	Professor	B. Tech, MCP, Ph. D	Architectural Engg., City Planning
4	Dr. Mohammed Firoz C.	Assistant Professor, Gr-I	B. Arch, M Plan, Ph. D	Architecture, Urban and Regional Planning

		I		
5	Dr. Chithra K.	Assistant Professor, Gr-I	B. Arch, M Plan, Ph.D.	Architecture, Urban Planning
6	Dr. Shyni Anilkumar	Assistant Professor, Gr-I	B. Tech, M Plan, Ph.D.	Architectural Engg., Disaster Management
7	Dr. Bimal P	Assistant Professor, Gr-I	B. Arch, MCP, Ph.D.	Architecture, City Planning
8	Dr. Deepthi Bendi	Assistant Professor, Gr-II	B.Arch, M.Sc, Ph.D.	Architecture, Construction Management
9	Dr. Anjana Bhagyanathan	Assistant Professor, Gr-II	B.Arch, M.Arch., Ph.D.	Landscape Architecture
10	Dr. Amritha P.K.	Assistant Professor, Gr-II	B. Arch, M.Arch, Ph.D.	Architecture, Landscape Architecture
11	Ar. Ritesh Ranjan	Assistant Professor, Gr-II	B.Arch, M Urban Planning	Architecture, Urban Planning
12	Er. Abhijith R	Ad-hoc Faculty	M. Tech.	Marine Structures
13	Ar. Haneen Pallathodi	Ad-hoc Faculty	B. Arch, M.Arch	Sustainable Architecture
14	Er. Riya Robi	Ad-hoc Faculty	B.Tech., M.Plan.	Urban Planning
15	Ar. Suchitra Karthik	Ad-hoc Faculty	B. Arch., M.Plan.	Architecture, Urban & Regional Planning
16	Dr.Himasree P R	Ad-hoc Faculty	M.Tech, Ph.D	Structural Engineering
17	Ar. Akansha Ruchi Horo	Ad-hoc Faculty	M.Arch	Urban Planning
18	Ar. Anna john	Ad-hoc Faculty	M.Plan	Housing
19	Ar.Swati Sharma	Ad-hoc Faculty	M.C.P	City Planning

DEPARTMENT OF CHEMICAL ENGINEERING

Sl. No	Name	Designation	Qualifi- cation	Specialization
1	Dr. Aparna K	Associate Professor & HOD	Ph.D	Process simulation and control, Biofuels
2	Dr. Lity Alen Varghese	Professor	Ph.D	Polymer Technology, Adhesives and surface coatings, Nanocomposits
3	Dr. Shiny Joseph	Professor	Ph.D	Membrane applications, fuel cells
4	Dr. V Sivasubramanian	Professor	Ph.D	Fluidization Engineering , Hydrodynamics ,Mass Transfer, Biochemical engineering, Environmental engineering
5	Dr. M V Pavan Kumar	Assistant Professor Grade I	Ph.D	Design, Modeling, Simulation and Control, Control of Reactive Distillation Systems, Process heat integration,Nonlinear Analysis &

				Bifurcation analysis of a chemical process
6	Dr. S Bhuvaneshwari	Assistant Professor Grade I	Ph.D	Wastewater treatment, Separation science and technology, Electrochemical sensors
7	Dr. Haribabu K	Assistant Professor Grade I	Ph.D	Effluent Treatment in Inverse Fluidised Bed reactor, Microbial Fuel Cell, Nanoadsorption of fluoride
8	Dr. Vineesh Ravi	Assistant Professor Grade I	Ph.D	Fuel cells, control of reactive distillation columns
9	Dr. Panneerselvam R	Assistant Professor Grade I	Ph.D	Chemical reactor modelling, Computational flow modelling, Thermochemical conversion of biomass, CO2 capture storage & conversion
10	Dr. Chandrasekhar Bestha	Assistant Professor Grade II	Ph.D	Control Systems, Multivariable Controller Design, PID Controller Tuning
11	Dr. Noel Jacob K	Assistant Professor Grade II	Ph.D	Membrane based Technologies, Water treatment, fuel cells
12	Dr. Sudev Das	Assistant Professor Grade II	Ph.D	Micro/Nanoscale phase change heat transfer, Boiling and Condensation, Solar thermal energy storage and applications
13	Dr. Teja Reddy Vakamalla	Assistant Professor Grade II	Ph.D	CFD, Mineral Processing, Multiphase Flow Modelling, Experimental fluid mechanics, Fluidization, Cyclone separators
14	Dr. Susmita Das	Assistant Professor Grade II	Ph.D	Soft matter, Fracture, Polymers, Nanotechnology, Environmental Engineering, Microfluidic reactor
15	Dr. Prasanna Kumar Mural	Assistant Professor Grade II	Ph.D	Piezoelectric materials, Polymer nanocomposites
16	Dr. Dhanya Ram V	Assistant Professor Grade II	Ph.D	Process Control and Dynamics,Process Identification, Modelling and Simulation
17	Dr. Fathima Fasmin	Assistant Professor Grade II	Ph.D	Fuel cells, Batteries, Corrosion, Modelling and simulation
18	Dr. P Swapna Reddy	Assistant Professor Grade II	Ph.D	Process modelling and simulation, Dynamic control, State estimation
19	Dr. Praveen Kumar G	Assistant Professor Grade II	Ph.D	Biofuels,Chemical reaction engineering

DEPARTMENT OF CIVIL ENGINEERING

Sl. No.	Name	Designation	Qualification	Specialization
1	Dr. P.V. Indira	Professor (HAG) and Head	M.Tech, Ph. D	Structural Engg.
2	Dr. A. P. Shashikala	Professor	M.Sc (Engg), Ph.D	Structural/ Ocean Engg.
3	Dr. J. Sudhakumar	Professor	M.Tech., Ph.D	Building Technology
4	Dr. K. Krishna Murthy	Professor	M.E., Ph.D	Transportation Engg.
5	Dr. M.V.L.R. Anjaneyulu	Professor (HAG)	M.Tech, Ph.D	Transportation Engg.
6	Dr. Mohammed Ameen	Professor	M.E., Ph.D	Structural Engg.
7	Dr. N. Sankar	Professor	M.Tech. Ph.D	Geotechnical Engg
8	Dr. Praveen Nagarajan	Professor	M.Tech., Ph.D	Structural Engg.
9	Dr. S. Chandrakaran	Professor (HAG)	M.E., Ph.D	Geotechnical Engg
10	Dr. Santosh.G. Thampi	Professor (HAG)	M.Tech., Ph.D	Environmental Hydrology
11	Dr. T. M. Madhavan Pillai	Professor	M.Tech., Ph.D	Structural Engg.
12	Dr. Kodi Ranga Swamy	Associate Professor	M.Tech., Ph.D	Geotechnical Engg.
13	Dr. Sajith A S	Associate Professor	M.E., Ph.D	Structural Engg.
14	Mr. K. Saseendran	Associate Professor	B.Sc., M.Tech.	Geology
15	Dr. K. Sasikumar	Associate Professor	M.Tech., Ph.D	Water Resources Engg.
16	Dr. Chitra N R	Asst. Professor	M.Tech., Ph.D	Hydraulics & Water Resources Engg
17	Dr. George K Varghese	Asst. Professor	M.Tech., Ph.D	Environmental Engg.
18	Dr. Harikrishna M	Asst. Professor	M.Tech., Ph.D	Transportation Engg.
19	Dr. M. Sivakumar	Asst. Professor	M.E., Ph. D	Transportation Engg.
20	Dr. Mini Remanan	Asst. Professor	M.Tech., Ph.D	Structural Engg.
21	Dr. Pramada S K	Asst. Professor	M.Tech., Ph.D	Water Resources Engg
22	Ms. Reesha Bharath K	Asst. Professor	M.Tech.	Construction Technology
23	Dr. Sathish Kumar D	Asst. Professor	M.Tech., Ph.D	Remote Sensing & GIS, Hydrology
24	Dr. Robin Davis	Asst. Professor	M.E., Ph.D	Structural Engg.
25	Dr. Anjana Bhasi	Asst. Professor	M.S., Ph.D	Geotechnical Engg

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26	Dr. Arun Kumar	Asst. Professor	M.Tech., Ph.D	Water Resources Engg
27	Dr. Renjitha Mary Varghese	Asst. Professor	M.Tech., Ph.D	Geotechnical Engg
28	Dr. K.V. Anand	Asst. Professor	M.S., Ph.D	Ocean Engineering
29	Dr. Agilan V	Asst. Professor	M.Tech., Ph.D	Remote Sensing & GIS, Hydrology
30	Dr. Aswathy E.V.	Asst. Professor	M.Tech., Ph.D	Environmental Engg.
31	Dr. Yogeshwar V Navandar	Asst. Professor	M.Tech., Ph.D	Transportation Engg.
32	Dr. Jayachandran K	Asst. Professor	M.Tech., Ph.D.	Construction Engg & Management
33	Dr. Seethalakshmi P	Asst. Professor	M.Tech., Ph.D.	Geotechnical Engg
34	Dr. Anantha Singh T. S.	Asst. Professor	M.Tech., Ph.D	Environmental Engg
35	Dr. Muhamed Safeer Pandikkadavath	Asst. Professor	M.Tech., Ph.D.	Structural Engg.
36	Dr. Anil Kumar Dash	Asst. Professor	M.Tech., Ph.D.	Offshore Structures
37	Dr. Suman Saha	Asst. Professor	M.Tech., Ph.D.	Structural Engg.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Sl. No	Name	Designatio n	Qualification	Specialization
1	Dr. Abdul Nazeer K A	Professor	Ph. D	Artificial Intelligence, Bioinformatics, Data Mining
2	Dr. Anil Pinapati	Assistant Professor	Ph. D	Cryptography, Data Hiding and Information Security, Elliptic Curve Cryptography
3	Dr. Anu Mary Chacko	Assistant Professor	Ph. D	Big Data Analytics, Health Informatics, Computer Security
4	Dr. Arun Raj Kumar P	Assistant Professor	Ph. D	Computer Networks and Security, Vehicular Ad Hoc Networks (VANET), Internet of Things (IoTs), Machine Learning
5	Dr. Gopakumar G	Assistant Professor	Ph. D	Bioinformatics, data Mining
6	Dr. Hiran V Nath	Assistant Professor	Ph. D	Cyber Security and Digital Forensics
7	Dr. Jay Prakash	Assistant Professor	Ph. D	Machine Learning, Computational Intelligence, Data and Text Mining, Multi-objective Optimization
8	Dr. Jayaraj P B	Assistant Professor	Ph. D	High Performance Computing, Parallel computing, Machine Learning
9	Dr. Jimmy Jose	Associate Professor	Ph. D	Cryptography and Security

10	Dr. Lijiya A	Assistant Professor	Ph. D	Image Processing, Pattern Recognition, Artificial Intelligence, Machine Learning
11	Dr. Madhu Kumar S.D	Professor	Ph. D	Cloud Computing, Big Data Analytics, DBMS, Software Engineering
12	Dr. Murali Krishnan K	Associate Professor and Head	Ph. D	Algorithms and Complexity, Coding Theory
13	Dr. Pournami P N	Assistant Professor	Ph.D	Computer vision, Machine Learning
14	Dr. Prabu M	Assistant Professor	Ph. D	Image Processing, Acoustic Classification, Machine Learning
15	Dr. Pranesh Das	Assistant Professor	Ph. D	Data Mining,Computational Intelligence,Machine Learning
16	Dr. Priya Chandran	Professor	Ph. D	Computer Architecture, Algorithms
17	Dr. Raju Hazari	Assistant Professor	Ph. D	Cellular Automata: Theory and Applications, Machine Learning, Cryptography and Security
18	Dr. S Sheerazuddin	Assistant Professor	Ph. D	Logic and Formal Verification
19	Dr. Saidalavi Kalady	Associate Professor	Ph.D	Computational Intelligence, Data Mining, Operating Systems
20	Dr. Saleena N	Associate Professor	Ph. D	Program Analysis, Compilers
21	Mr. Sreenu Naik Bhukya	Assistant Professor	M. Tech	Computer Networks, WSNS
22	Mr. Srinivasa T M	Assistant Professor	M. Tech	DNA Computing
23	Dr. Subashini R	Associate Professor	Ph. D	Design and analysis of Algorithms
24	Dr. Subhasree M	Associate Professor	Ph. D	Computational Geometry
25	Mr. Sumesh T A	Assistant Professor	M. Tech	Computer Networks, Computer Vision
26	Dr. T. Veni	Assistant Professor	Ph. D	Operating systems, Cloud computing, Fog Computing and Internet of Things (IoTs).
27	Dr. Vasudevan A R	Assistant Professor	Ph. D	Computer Networks, Network Security and Internet of Things (IoTs).
28	Dr. Vineeth Kumar Paleri	Professor	Ph. D.	Programming Languages & Compilers.
29	Dr. Vinod P	Associate Professor	Ph. D	Information Security Management

SI. No.	Name	Designation	Qualification	Specialization
1	Dr. Rijil Ramchand	Professor & Head	Ph.D. (IISc, Bangalore)	Power Electronics
2	Dr Sivaji Chakravorti	Former Director	Ph.D. Jadavpur University	High Voltage Technique
3	Dr. Ashok S	Professor (HAG)	Ph.D. (IIT Bombay)	Power & Energy Systems
4	Dr. Paul Joseph K.	Professor (HAG)	Ph.D. (IIT Madras)	Biomedical Instrumentation
5	Dr. Jeevamma Jacob	Professor (HAG)	Ph.D. (IIT Bombay)	Instrumentation and Control
6	Dr. Saly George	Professor (HAG)	Ph.D. (REC Calicut)	Power Electronics
7	Dr. Abraham T Mathew	Professor	Ph.D. (IIT Delhi)	Instrumentation & Control
8	Dr. Elizabeth P. Cheriyan	Professor	Ph.D. (IIT Bombay)	Power Systems
9	Dr. Susy Thomas	Professor	Ph.D. (IIT Bombay)	Control Systems
10	Mr. P. Ananthakrishnan	Associate Professor	M.Tech. (IIT Madras)	Power Electronics & Drives
11	Dr. Jagadanand G	Associate Professor	Ph.D. (NIT Calicut)	Power Electronics
12	Dr. Mukti Barai	Associate Professor	Ph.D. (IIT Kharagpur)	Power Electronics
13	Dr. Preetha. P.	Associate Professor	Ph.D. (IISc Bangalore)	High Voltage Engg.
14	Dr. Sindhu T K	Associate Professor	Ph.D. (IIT Chennai)	High Voltage Engg, Power Systems
15	Dr. Subha. D.P	Associate Professor	Ph.D (NIT Calicut)	Power Systems, Biomedical Engineerir
16	Dr. Sunitha K		Ph.D.	High Voltage Engg.

DEPARTMENT OF ELECTRICAL ENGINEERING

		Associate	(IISc,Bangalore	
		Professor)	
17	Dr. Sunitha R	Associate Professor	Ph.D (NIT Calicut)	Power Systems
18	Mr. K. S. Suresh Kumar	Associate Professor	M.Tech. (IIT Madras)	Power Electronics
19	Dr. Gopakumar P	Assistant Professor	Ph.D (NIT Trichy)	Power System
20	Ms. Hema Rani.P	Assistant Professor	M.Tech (IIT Kanpur)	Power Electronics
21	Dr. Kanagalakshmi S	Assistant Professor	Ph.D (Anna University)	Process Control Instrumentation
22	Dr. Karthikeyan V	Assistant Professor	Ph.D (NIT Allahabad)	Power Electronics and Drives
23	Dr. Kumaravel S	Assistant Professor	Ph.D. (NIT Calicut)	Power Systems
24	Dr. Mija S J	Assistant Professor	Ph.D (NIT Calicut)	Control Systems
25	Dr. Nikhil Sasidharan	Assistant Professor	Ph.D (Asian Institute of technology, bankok,Tailand)	Power Electronics and Power Systems
26	Dr. Sanjay M	Assistant Professor	Ph.D (Christian Medical College, Vellore)	Electronics and Biomedical Engineering
27	Mr. Subhash K.M.	Assistant Professor	M.Tech (NIT Calicut)	Control and Instrumentation
28	Dr. T K Sunil Kumar	Assistant Professor	Ph.D. (IIT Kharagpur)	Power Systems
29	Dr. Shreelakshmi M P	Assistant Professor	Ph.D (IIT Bombay)	Power Electronics and Drives
30	Dr. Arun Neelimegham K M		Ph.D. (IIT Kharagpur)	Control Systems
31	Dr.Deepak M	Assistant Professor	Ph.D. (IISST, Thiruvananthap uram)	Power and Energy Systems
32	Dr.Nasirul Haque	Assistant Professor	Ph.D.	High Voltage Engg.

			(Jadavpur University, Kolkata)	
33	Dr.Shihabudheen K V	Assistant Professor	Ph.D. (IIT Roorkee)	Control, Computing and Renewable Energy Systems
34	Dr. Mithun M S	Assistant Professor	Ph.D. (IIT Madras)	Instrumentation and Measurements
35	Dr. Tarakanath Kobaku	Faculty (inspire scheme	Ph.D (IIT Bombay)	Control Systems

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Sl. No.	Name	Designation	Qualification	Specialization
1	Dr Lillykutty Jacob	Professor (HAG)	PhD	Communication Networks
2	Dr P. S. Sathidevi	Professor (HAG)	PhD	Speech and Audio Processing
3	Dr C. K. Ali	Professor	PhD	Communication Engg.
4	Dr Sameer S. M.	Professor	PhD	Wireless Communication
5	Dr A. V. Babu	Professor	PhD	Wireless communications & Networking
6	Dr Deepthi P. P.	Professor	PhD	Secure Communication & Signal Processing
7	Dr Sreelekha G.	Professor	PhD	Image and Video Processing
8	Dr G. Abhilash	Associate Professor	PhD	Signal Theory / Processing
9	Ms Lyla B. Das	Associate Professor	M. Tech	Embedded Systems
10	Mr Suresh Rangan	Associate Professor	M. Tech.	Electronics Engineering
11	Mr Jaikumar M. G.	Associate Professor	M. Tech	Microelectronics and VLSI design
12	Dr Praveen Sankaran	Assistant Professor,Gra de I	PhD	Signal Processing
13	Dr Dhanaraj K. J.	Assistant Professor Grade I	PhD	Analog IC Design, , VLSI DSP Systems
14	Dr Sudhish N. George	Assistant Professor Grade I	PhD	Signal Processing
15	Dr V. Sakthivel	Assistant Professor Grade I	PhD	Multirate Signal Processing
16	Dr Suja K. J.	Assistant Professor Grade I	PhD	VLSI

		Assistant		
17	Dr Bindiya T. S.	Professor Grade I	PhD	VLSI and Signal Processing
18	Dr Ameer P. M.	Assistant Professor Grade I	PhD	Signal Processing, Wireless Networking
19	Dr Vinay Joseph	Assistant Professor Grade I	PhD	Resource allocation in communication networks, Stochastic optimization
20	Dr Jayakumar E.P.	Assistant Professor Grade I	PhD	VLSI and Digital Signal Processing
21	Dr Lintu Rajan	Assistant Professor Grade II	PhD	VLSI Design
22	Dr Venu Anand	Assistant Professor Grade II	PhD	Microelectronics
23	Dr Sudeep P. V.	Assistant Professor Grade II	PhD	Medical Image Analysis, Machine Learning, Deep Learning
24	Dr Gopi Krishna Saramekala	Assistant Professor Grade II	PhD	Semiconductor Devices
25	Dr Waquar Ahmad	Assistant Professor Grade II	PhD	Speech Signal Processing
26	Dr M. Surya Prakash	Assistant Professor Grade II	PhD	VLSI Signal Processing
27	Dr B. Bhuvan	Assistant Professor Grade II	M. Tech	Electronic Design and Technology
28	Dr Raghu C. V.	Assistant Professor Grade II	PhD	Electronic System Design
29	Dr Aswathi R .Nair	Assistant Professor Grade II	PhD	Microelectronics
30	Dr Lalit Kumar	Assistant Professor Grade II	PhD	RF / Microwave Filters and Antenna
31	Dr Chandan Yadav	Assistant Professor Grade II	PhD	Microelectronics and VLSI Design
32	Dr Akhil P. T.	Assistant Professor Grade II	PhD	Communication Networks
33	Dr Ashutosh Mishra	Assistant Professor Grade II	PhD	VLSI Signal Processing
34	Dr Anup Aprem	Assistant Professor Grade II	PhD	Machine Learning

DEPARTMENT OF MECHANICAL ENGINEERING

Sl. No.	Name	Designation	Qualification	Specialization
1	Dr. C Muraleedharan	Professor (HAG) and Head	Ph.D.	Refrigeration & Air Conditioning
2	Dr. Jayaraj S	Professor (HAG)	Ph.D.	Thermal Sciences, Energy Engineering & CFD
3	Dr. Sridharan R	Professor (HAG)	Ph.D.	Industrial Engineering
4	Dr. Jose Mathew	Professor (HAG)	Ph.D.	Manufacturing Science
5	Dr P.K. Rajendrakumar	Professor (HAG)	Ph.D.	Machine Design & Tribology
6	Dr. Joseph M A	Professor	Ph.D.	Production Engineering
7	Dr. Joy M L	Professor	Ph.D.	Machine Design & Tribology
8	Dr. Madhusudanan Pillai V	Professor	Ph.D.	Industrial Engineering
9	Dr. Shaija A	Professor	Ph.D.	Computational Fluid Dynamics & Heat Transfer
10	Dr. Biju T. Kuzhiveli	Professor	Ph.D.	Cryogenics
11	Dr. Manu R	Professor	Ph.D.	Manufacturing Engineering
12	Dr. Narayanan M D	Associate Professor	Ph.D.	Nonlinear Dynamics
13	Dr. Dhanish P B	Associate Professor	Ph.D.	Production Engineering
14	Dr. Arun P	Associate Professor	Ph.D.	Energy Management
15	Dr. Jinu Paul	Associate Professor (Joined on 01 st May 2020)	Ph.D.	Materials & Manufacturing
16	Dr. Sekar K	Assistant Professor Gr I	Ph.D.	Manufacturing Engineering
17	Dr. Sudheer A P	Assistant Professor Gr I	Ph.D.	Manufacturing Engineering / Robotics
18	Dr. Rohini Kumar B	Assistant Professor Gr I	Ph.D.	Thermal Engineering/ Thermodynamic Modelling
19	Dr. Jayadeep U B	Assistant Professor Gr I	Ph.D.	Machine Design/ Solid Mechanics
20	Dr. Varaprasad G	Assistant Professor Gr I	Ph.D.	Industrial Engineering & Management/ Marketing Management & Consumer Behaviour
21	Dr. Srinivas M	Assistant Professor Gr I	Ph.D.	Thermal Engineering/ Non- conventional Energy Systems
22	Dr. Jagadeesha T	Assistant Professor Gr I	Ph.D.	Manufacturing Engineering
23	Dr. Sarvoththama Jothi T J	Assistant Professor Gr I	Ph.D.	Energy Engineering/ Fluids and Thermal Sciences

24	Dr. Vinay V. Panicker	Assistant Professor Gr I	Ph.D.	Industrial Engineering
25	Dr. K.P. Murali	Assistant Professor Gr I	Ph.D.	Metallurgical Engineering & Materials Science/ Electronic Materials
26	Dr. Saleel Ismail	Assistant Professor Gr I	Ph.D.	Thermal Engineering
27	Dr. Ratnakumar K	Assistant Professor Gr II	Ph.D.	Industrial Engineering and Management
28	Dr. Gangadhara Kiran Kumar L	Assistant Professor Gr II	Ph.D.	Fluids and Thermal Sciences
29	Dr. Sujith Kumar C S	Assistant Professor Gr II	Ph.D.	Nanotechnology/ Thermal Engineering
30	Dr. Gangolu Srinu	Assistant Professor Gr II	Ph.D.	Material Science
31	Dr. Ashesh Saha	Assistant Professor Gr II	Ph.D.	Machine Design
32	Dr. Simon Peter	Assistant Professor Gr II	Ph.D.	Computational Fluid Dynamics
33	Dr. Deepak Lawrence K	Assistant Professor Gr II	Ph.D.	Manufacturing Engineering/ Metrology
34	Dr. Vineesh K P	Assistant Professor Gr II	Ph.D.	Mechanical Systems Design/ Finite element modeling
35	Dr. Sumer B Dirbude	Assistant Professor Gr II	Ph.D.	Mechanical-Heat Power/ Computational Fluid Dynamics, Combustion and associated areas of thermo-fluid sciences
36	Dr.Sandip Rudha Budhe	Assistant Professor Gr II	Ph.D.	Machine Design/ Composite Materials
37	Dr. Devendra K Yadav	Assistant Professor Gr II	Ph.D.	Industrial Engineering
38	Dr. Basil Kuriachen	Assistant Professor Gr II (Joined on 14 th May 2020)	Ph.D.	Manufacturing
39	Dr. P. V. Manu	Assistant Professor Gr II	Ph. D.	Propulsion Engineering/ IC Engines and Combustion/ Alternative fuels
40	Sri. Sreenath A M	Assistant Professor	M. Tech. (On deputation under QIP at IITM)	Machine Design

DEPARTMENT OF MATHAMATICS

Sl. No.	Name	Designation	Qualification	Specialization
1.	Dr. Jessy John C	Professor	Ph.D	Time Series Modelling and Applied Statistics
2.	Dr. M J Jacob	Professor	Ph.D.	Applied Probability
3.	Dr. Sunitha M S	Professor	M.Phil, Ph.D	Fuzzy Graph Theory

4.	Dr. Sunil Jacob John	Professor	Ph.D	Topology, Set Generalization
5.	Dr. Satyananda Panda	Professor	Ph.D	Mathematical Modeling and Scientific Computing
6.	Dr. Chithra A V	Associate Professor	Ph.D	Operator Theory
7.	Dr. Sushama C M	Associate Professor	Ph.D	Optimization, Data Envelopment Analysis.
8.	Dr. Lineesh M C	Assistant Professor	Ph. D	Time Series Modelling using Wavelets Theory
9.	Dr. Sanjay P K	Assistant Professor	Ph.D	Harmonic Analysis
10.	Dr. Sunil Mathew	Assistant Professor	Ph. D	Fractal Geometry Fuzzy Graph Theory
11.	Dr. Krishnan Paramasivam	Assistant Professor	Ph.D.	Graph Theory and Commutative Algebra
12.	Dr. Mahesh Kumar	Assistant Professor	Ph.D.	Applied Probability, Reliability Estimation and Test Plans.
13.	Dr. Suresh Kumar Nadupuri	Assistant Professor	M.Tech ,Ph.D	Numerical Methods and Scientific Computing
14.	Dr. Ashish Awasthi	Assistant Professor	Ph.D.	Numerical Analysis, Numerical Methods for Singularly Perturbed Differential Equations, Scientific Computing
15.	Dr. Tamal Pramanick	Assistant Professor	Ph.D., Post- Doc.	Numerical Analysis, Scientific Computing, Finite Element Method, Composite Finite Element Method.

DEPARTMENT OF CHEMISTRY

Sl. No.	Name	Designation	Qualification	Specialization
1	Dr. A. Sujith	Associate Professor & Head	PhD	Material Science
2	Dr. G. Unnikrishnan	Professor	PhD	Polymer Science & Technology
3	Dr. Lisa Sreejith	Professor	PhD	Soft Materials
4	Dr. Lakshmi C	Professor	PhD	Bioorganic chemistry
5	Dr. Parameswaran P.	Associate Professor	PhD	Theoretical and Computational Chemistry
6	Dr. Suni Vasudevan	Assistant Professor	PhD	Bioinorganic Chemistry
7	Dr. Janardhan Banothu	Assistant Professor	PhD	Heterocyclic chemistry
8	Dr. Mini Mol M	Assistant Professor	PhD	Advanced Materials
9	Dr. M. Sankaralingam	Assistant Professor	PhD	Bioinspired & biomimetic inorganic chemistry
10	Dr. Raju Dey	Assistant Professor	PhD	Organic synthesis & Catalysis

11	Dr. Anuj A Vargeese	Assistant Professor	PhD	Energetic & Energy materials
12	Dr. Chinna Ayya Swamy P.	Assistant Professor	PhD	Main group organometallic materials, supramolecular chemistry & catalysis
13	Dr. Mausumi Cahttopadhyaya	Assistant Professor	PhD	Theoretical modelling & computational chemistry

DEPARTMENT OF PHYSICS

Sl. No.	Name	Designation	Qualification	Specialization
1.	Dr. P Predeep	Professor	Ph.D.	Organic and molecular Electronics and Photonics (Organic, Solar Cells, OLED, OFETs, Organic Semiconductors.),
2.	Dr. Chandrasekhara n. K	Professor	Ph.D.	Non-linear Optical Materials for Photonics Condensed Matter Physics,
3.	Dr. M.K Ravi Varma	Professor	Ph.D.	Spectroscopy, Applied Optics, Atmospheric Sciences
4.	Dr. Raghu Chatanathodi	Professor	Ph.D.	Computational-Condensed Matter Physics, Density Functional Theory
5.	Dr. Aji A. Anappara	Associate Professor	Ph.D.	Light-matter interaction, Nano science, Energy harvesting, Semiconductor nanophotonics
6.	Dr. P.K Madhavan Unni	Assistant Professor	Ph.D.	Critical Point Phenomenon
7.	Dr. Vari Sivaji Reddy	Assistant Professor	Ph.D.	Organic Electronics & Photovoltaics
8.	Dr. C. S. Suchand Sangeeth	Assistant Professor	Ph.D.	Charge Transport, Molecular electronics, Organic Semiconductors, molecular self-assembly and meta- materials
9.	Dr. Ram Ajor Maurya	Assistant Professor	Ph.D.	Solar Astrophysics: Helioseismology, MHD Waves in Solar Atmosphere, Solar Eruptions and associated phenomenon
10.	Dr. Aswathi G	Assistant Professor	Ph.D.	Material Science and Nanotechnology: Multifunctional nanostructured materials for energy storage/environmental applications

				(Batteries, Supercapacitors, Hybrid energy devices, Catalysis, Gas storage etc.).
11.	Dr.Subramanyan Namboodiri Varanakkottu	Assistant Professor	Ph.D.	Optofluidics, Interface physics
12.	Dr.Maneesh Chandran	Assistant Professor	Ph.D.	Surface Science, Carbon based Nanomaterials (Diamond, Graphene, CNTs), Raman spectroscopy
13.	Dr Goutam Kumar Chandra	Assistant Professor	Ph. D.	Experimental Condensed matter Physics, Spectroscopy
14.	Dr. Saurabh Gupta	Assistant Professor	Ph.D.	Theoretical High Energy Physics, Particle physics, Quantum Field Theory
15.	Dr. Sreeraj T P	Assistant Professor	Ph.D.	Lattice Gauge Theory, Quack Confinement, Low Energy Aspects of QCD, Duality in Gauge Theories and Spin Systems
16.	Dr. P N Bala Subramanian	Assistant Professor	Ph.D.	Holography, Black holes Resurgence in Quantum Systems

DEPARTMENT OF PHYSICAL EDUCATION

Sl. No.	Name	Designation	Qualification	Specialization
			M. P. Ed. (Bharathiar University)	
			M. Phil. (Alagappa University)	
1	Mr. Sunil M. S	HOD Physical Education	[Ph. D.] (Tamil Nadu Physical Education and Sports University, Chennai TNPESU) B. Sc. Zoology (Kerala University)	Sports Physiology, Soccer Training Methods, Fitness Principles, Football and Yoga.
			B. P. Ed. (Bharathiar University)	
			T. T. C. Yoga (Alagappa University)	
			C. T. P. Football	

(Kozhikode District Football Association & Sports Education Promotion Trust KDFA & SEPT)	
N. T. C. M.R.A.C. (Govt. of India)	

SCHOOL OF METERIAL SCIENCE AND ENGINEERING

Sl. No.	Name	Designation	Qualification	Specialization
1	C.B. Sobhan	Professor (HAG)	Ph.D.	Micro and Nanoscale heat transfer
2	N. Sandhyarani	Professor	Ph.D.	Nanoscience/Spectroscopy
3	Sajith V.	Assoc. Professor	Ph.D.	Optical Measurements, Nanofluids, Automobile Engineering
4	Soney Varghese	Assoc. Professor & Head	Ph.D.	Nano Materials an Devices
5	Shijo Thomas	Asst. Professor	Ph.D.	Nanofluids,Heat Transfer,IC Engines
6	Hanas T.	Asst. Professor	Ph.D	Materials Science, Medical materials
7	Lakshmi V Nair	Inspire Faculty	Ph.D.	Nanomaterials and Nano bio interface

SCHOOL OF MANAGEMENT STUDIES

Sl. No.	Name	Designation	Qualification	Specialization
1	Dr. T K Suresh Babu	Professor	PhD	Finance Management
2	Dr. T Radha Ramanan	Associate Professor	PhD	Operations Management
3	Dr. K Muhammad Shafi	Associate Professor	Ph.D.	Finance & General Management
4	Dr. Sunitha S	Assistant Professor	Ph.D.	Economics
5	Dr. Preeti Navaneeth	Assistant Professor	Ph.D.	English Studies and Communication
6	Dr. Nithya M	Assistant Professor	PhD	Marketing Management

7	Dr. Sreejith S S	Assistant Professor	PhD	Human Resource Management
8	Dr. Althaf S	Assistant Professor	PhD	Economics and Public Policy
9	Dr. Reju George Mathew	Assistant Professor	PhD	English Studies and Communication

SCHOOL OF BIOTECHNOLOGY

Sl. No.	Name	Designation	Qualification	Area of Specialization
1	Dr. Suchithra T V	Assoc. Professor & Head of Dept.	Ph.D	Microbiology, & Bioprospecting
2	Dr. Md Anaul Kabir	Professor	Ph.D	Molecular Genetics, Genetic Engineering
3	Dr. Santhiagu .A	Professor	Ph.D	Bioprocess Technology, Recombinant Technology, Enzymology
4	Dr. Rajanikant G.K	Professor	Ph.D	Radiation biology Neuroscience
5	Dr. Rathinasamy .K	Assoc. Professor	Ph.D	Cell biology, Cancer research, Apoptosis
6	Dr. Prem Raj. P	Asst. Professor	Ph.D	Pathogenesis of Airborne Microbes
7	Dr. Baiju G Nair	Asst. Professor	Ph. D	Bio-nanotechnology, Tissue engineering, Stem cell technology
8	Dr. Suresh P S	Asst. Professor	Ph.D	Endocrine cancers and signal transduction
9	Dr. Tom Skaria	Asst. Professor	Ph.D	Inflammation, Cytokine and Chemokine Immunology, Blood Vessel and Hypertensive Heart Diseases
10	Dr. Cecil Antony F	Asst. Professor	Ph.D	Immunology
11	Dr. Ravindra Kumar	Asst. Professor	Ph.D	Bioinformatics

3.2 NON-ACADEMIC STAFF (Non-Teaching)

SL.NO.	NAME	DESIGNATION	DEPARTMENT
1	Jayesh Kumar P	Sr. Mechanic	CED
2	Ajayakumar. R	Sr.Mechanic	CED
3	Noushad. K.K	Sr.Mechanic	CED

4	Sathiyan P K	Sr.Mechanic (Sl.Gr.)	CED
5	Ajayachandran V R	Computer Operator	CSED
6	Sasidharan Pillai G	Computer Technician	CSED
7	Biju Francis	Sr. Mechanic	CSED
8	Sreeja. V	Sr. Mechanic	CSED
9	Abdulsathar V M	Sr.Mechanic	CSED
10	Beljith. P	Sr.Mechanic	CSED
11	Rajagopalan A	System Analyst	CSED
12	Santhosh Kumar S	System Programmer	CSED
13	Praveen H Babu	Sr. Mechanic	ECED
14	Anandan K R	Sr.Mechanic (Sl.Gr.)	ECED
15	Krishnan kutty V	Sr.Mechanic (Sl.Gr.)	ECED
16	Sasesh A R	Sr.Mechanic (Sl.Gr.)	EED
17	Jayan V S	Sr.Mechanic	EED
18	Nandakumar K	Sr.Mechanic	EED
19	Mohammed Sali N K	Sr.Mechanic (Sl.Gr.)	EED
20	Somanath K A	Sr.Mechanic (Sl.Gr.)	EED
21	Mohan Kumar A K	Asst. Engineer	ENGG. UNIT
22	Thomas T E	Asst. Engineer	ENGG. UNIT
23	Alavikutty K	Sr.Mechanic (Sl.Gr.)	ENGG. UNIT
24	Prajith. P	Sr.Mechanic	ENGG. UNIT
25	Abdulsidheek P K	Sr.Mechanic	ENGG. UNIT
26	Mathew Varghese	Sr.Mechanic	ENGG. UNIT
27	Shibu K	Instructor	ENGG.UNIT
28	Anwar Sadath C	LD Steward	HOSTEL OFFICE
29	Chandramohan M K	Graphic Artist (Hr.Gr.)	LIBRARY
30	Sobhana J	Libraian Gr.IV.Hr.Gr	LIBRARY
31	Jayarajan T	Librarian Gr. IV(Hr.Gr.)	LIBRARY

32	Shaju K P	Librarian Gr.IV	LIBRARY
33	Jayaraman K	Offset Mechnine Operator (Hr.Gr)	LIBRARY
34	Climson C R	Sr. Mechanic	MAINTENANCE UNIT
35	Mahesan K A	Sr. Mechanic	MAINTENANCE UNIT
36	Radhakrishan M K	Sr. Mechanic	MAINTENANCE UNIT
37	Raju K P	Sr. Mechanic	MAINTENANCE UNIT
38	Santhosh Kumar M V	Sr. Mechanic	MAINTENANCE UNIT
39	Venugopalan K P	Asst. Engineer(Electrical	MAINTENANCE. UNIT
40	Pradeep Kumar K K	i/c) Instructor	MED
41	Rajendran M K	Instructor	MED
42	Hariharan C P	Programmer	MED
43	Eldho. P. Varghese	Sr. Mechanic	MED
44	Manoj. K. G	Sr. Mechanic	MED
45	Sasi K K	Sr.Mechanic (Sl.Gr.)	MED
46	Narayanalal M	Sr.Mechanic	MED
47	Prasad Moochikkal Variath	Sr.Mechanic	MED
48	Shaly Joseph. K	Sr.Mechanic	MED
49	Unnikrishnan R	Sr.Mechanic	MED
50	Sudheer.P.R	Sr.Mechanic	MED
51	Anandan P	Sr.Mechanic (Sl.Gr.)	MED
52	Velayudhan Kutty N P	Sr.Mechanic (Sl.Gr.)	MED
53	Abhilash. A	Sr.Mechanic (Sl.Gr.)	MED
54	Ajayan A	Sr.Mechanic (Sl.Gr.)	MED
55	George T M	Sr.Mechanic (Sl.Gr.)	MED
56	Raghu P V	Sr.Mechanic (Sl.Gr.)	MED
57	Sanal P R	Sr.Mechanic (Sl.Gr.)	MED
58	Surendran P K	Sr.Mechanic (Sl.Gr.)	MED

59	Suresh.K.C.	Sr.Mechanic (Sl.Gr.)	MED
60	Vasu.T.C.	Sr.Mechanic (Sl.Gr.)	MED
61	AnilKumar P	Supervisor	MED
62	Pradeep Kumar E	Supervisor	MED
63	Prakash Peter	Lab Assistant	PHYSICS
64	Tomin Sunny	Executive Engineer	MAINTENANCE. UNIT

MINISTERIAL STAFFS

SL.NO.	NAME	DESIGNATION	DEPARTMENT
1	Lt Col Pankajakshan K	Registrar	Registrar's Office
2	Gejo C V	Deputy Registrar	Finance
3	Praveen Kumar.P	UD Clerk	Engg. Unit
4	Sethumadhavan Mechery	UD Clerk	Accounts
5	S.M.Shafi	UD Clerk	Accounts
6	Purushothaman Pillai K N	UD Clerk	Purchase
7	K.T. Sasikumar	UD Clerk	Dean R & C
8	P. Muraleedharan	JS	Establishment
9	K. Unnikrishnan	UD Clerk	Academic
10	M.Reejish Kumar	JS	Hostel Office
11	Petson Andrew	UD Clerk	Admission
12	M.V. Prasad	DA	Engg. Unit
13	Ashok Kumar Dev	AR (Finance)	Accounts
14	S.Saravanan	AR (Admn.)	Administration
15	Dr.A.A.Celine	RMO	Health Center
16	C Veluthaki	CA Gr.II (Hr.Gr.)	ECED
17	Sindu .P	UD Clerk	Academic
18	Sobhana.T	UD Clerk	Academic
19	G. Chandrika	UD Clerk	Academic

20	J.L. Soosykutty	UD Clerk	Establishment
21	Smera K.S	UD Clerk	Establishment
22	P.D.Juliet Das	UD Clerk	Establishment
23	Mereena John	U D Clerk	Accounts
24	K. Mini	JS	Accounts
25	P. Prama	UD Clerk	Accounts
26	C.P. Rugmini	SS	Accounts
27	S. Sreeda	AR Estt.	Establishment
28	Dr. Asha Gopalan	AR (S&P)	Stores & Purchase

SUPPORTING STAFF

SL.NO.	NAME	DESIGNATION	DEPARTMENT
1	C Preman	Watchman cum Gardner	Director Office
2	C.Geetha	Sweeper Cum Sanitation	First Year Cordinator Office
3	C.Unnikrishnan	Vehicle Cleaner	MED/CED
4	Devi Poolakkal	Sanitation Worker	Accounts
5	Jameela. A.K	Sweeper Cum Sanitation	Dean R&C, FW
6	K Bhaskaran	Watchman cum Gardner	Physics
7	K P Devi	Sanitation Worker	Dean Academic/ Dean P&D
8	K Thankamani	Sanitation Worker	Engineering Unit
9	K V Chandu	Peon	Hostel Office
10	L. Sasikala	Sweeper Cum Sanitation	Health Center
11	M.K.Rajan	Watchman cum Gardner	EED
12	M.M.Sadanandan	Watchman cum Gardner	Guest House
13	M.Mamukoya	Watchman cum Gardner	Guest House
14	N.K.Ummerkutty	Watchman	Purchase
15	P.Abdul Razack	Watchman cum Gardner	Sergeant Office

16	P.K.Sangeeta	Peon	Establishment
17	P.V.Bhagianathan	Watchman cum Gardner	Sergeant Office
18	Saroja. T M	Sanitation Worker	Chemistry
19	T.Janardhanan	Watchman cum Gardner	Accounts
20	T.P.Ravia	Peon	Maths
21	Thanka.C	Sweeper Cum Sanitation	CSED
22	V.Pushpavalli	Sanitation Worker	Academic, Admission office
23	Vinod. K.P	Watchman cum Gardner	Library

3.3 TRAINING STATUS

DEPARTMENT OF ARCHITECTURE

Department	Members of the Faculty
Architecture and Planning	Dr. Deepthi Bendi
	• Internet of Things: Industry, Academy & Startup from December 21 - 23, 2020
	 Professional Development Training Programme for Faculty & Administrators of Project Institutions- at IIM Visakhapatnam, 17 February to 19 February 2021
Architecture and Planning	Dr. Amritha P K
	 TEQIP online workshop on "Visual Tools and Techniques for Effective Communication" organized at IIT Hyderabad between November 16 – 18, 2020. 1st Training program on Water Resources Management & Sustainable Habitat, organized by IIPA, New Delhi and sponsored by DST, February 01-05, 2021
Architecture and Planning	Ar. Ritesh Ranjan
	 TEQIP online workshop on "Visual Tools and Techniques for Effective Communication" organized at IIT Hyderabad between November 16 – 18, 2020. 3rd Training program on Science and Technology for Rural Societies, from Dec 7-11, 2020, organized by IIPA, New Delhi and sponsored by DST,

DEPARTMENT OF CHEMICAL ENGNEERING

Members of the Faculty
Dr. Praveen Kumar G
Dr. Lity Alen Varghese
Dr. Noel Jacob Kaleekkal
Dr. P Swapna Reddy
Dr. Panneerselvam Ranganathan
Dr. Aparna K
Dr. Fathima fasmin
Dr.S.Bhuvaneshwari

DEPARTMENT OF CIVIL ENGNEERING

Department	t Members of the Faculty		
	Dr. A P Shashikala, Attended Digital Transformation in Teaching Learning Process- 6-		
	22 April, 2020		
	Dr. T M Madhavan Pillai, Attended International Conference on Material, Mechanics		
Civil	and Structures 2020 (ICMMS2020), National Institute of Technology Calicut, July 14-		
Civil Engineering	15, 2020.		
Engineering	Dr. Sajith A.S, Participated in the Online Course on Digital Transformation in Teaching		
	Learning Process conducted by IIT Bombay during April 2020.		
	Dr. Agilan V, Grant Writing under Earth Sciences Domain, 10-December-2020, MoE-		
	STARS		

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Name of the Faculty Member	Training Programme Participated
Dr.Gopakumar G.	MHRD Sponsored TEQIP assisted FDP on "Essential Mathematics for Machine Learning with Hands on Training", organized by Dept. of Mathematics, IIT Roorkee, November 23-27,2020
	TEQIP course on Machine Learning and Artificial Intelligence conducted by IIT Indore during 21/12/2020 to 30/12/2020,
Dr. A. Lijiya	MHRD Sponsored TEQIP assisted FDP on "Essential Mathematics for Machine Learning with Hands on Training", organized by Dept. of Mathematics, IIT Roorkee, November 23-27,2020
Dr. Pranesh Das	Matrix Analysis using Python, 03-08 November 2020, IIT Hyderabad, sponsored by TEQIP III.
Dr. Jay Prakash	[1] Matrix Analysis using Python, 03-08 November 2020, IIT Hyderabad, sponsored by TEQIP III
	[2] Digital transformation in Teaching-Learning process, 06-22 April, 2020, IIT Bombay, by TEQIP III & power by SWAYAM.
	[3] TEQIP-III Sponsored Workshop on Design Thinking for Educators in the New Normal For Faculty Members from TEQIP Institutions, 28th to 30th Sept 2020, by Bharatiya Vidya Bhavan's Sardar Patel College of Engineering, Andheri (W), Mumbai.

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Dr. Veni T.	TEQIP III sponsored online workshop on "Advanced Algorithms"
	organized at IIT Hyderabad between November 28, 29, December 05, 06
	& 12, 2020
Dr. Anil Pinapati	[1]. "Advanced Algorithms" organized at IIT Hyderabad between
	November 28, 29, December 05, 06 & 12, 2020 sponsored by TEQIP III.
	[2]. Participated in INDOCRYPT-2020 Virtual Conference from 13-16
	Dec 2020.
	[3]. Participated in Live Materclass on India Patents Act, 1970 conducted
	by Turnip Innovations on 30th April , 2021 .
Dr. Pournami P. MHRD Sponsored TEQIP assisted FDP on "Essential Mathematic	
N.	Machine Learning with Hands on Training", organized by Dept. of
	Mathematics, IIT Roorkee, November 23-27,2020.
Dr. Raju Hazari	"Advanced Algorithms" organized at IIT Hyderabad between November
	28, 29, December 05, 06 & 12, 2020 sponsored by TEQIP III.
Dr. Jimmy Jose	ACRI 2020, the 14th International Conference and School on "Cellular
	Automata for Research and Industry", 02-04 December, 2020
Dr. S	"Advanced Algorithms" organized at IIT Hyderabad between November
Sheerazuddin	28, 29, December 05, 06 & 12, 2020 sponsored by TEQIP III
T M Srinivasa	Indian Workshop on Post-Quantum Cryptography, A two-day workshop
	organized by TCS Innovation Labs Hyderabad & IIT Kharagpur, Virtual
	Event, November 17th and 18th, 2020

DEPARTMENT OF ELECTRICAL ENGINEERING

Sl.No	Name of Faculty Member	Details of Training Programme
1	Dr. Preetha P	 i. Sarov Mohan S , Preetha P, "Prediction of AC Breakdown Voltage of Mineral Oil Nanofluid", IEEE Region 10 Conference TENCON, Osaka Japan, 16-19 November 2020. Virtual Edition ii. Sarov Mohan S , Preetha P, "Optimization of Filler Loading of Multi-Particle Mineral Oil Nanofluid for Transformer Insulation", IEEE International Conference on Dielectrics 6th to 31st July 2020, Virtual Edition, Valencia (Spain).
2	Dr.S.Kanagalaksh mi	2 week course on Digital Transformation in Teaching Learning Process IIT Bombay Online course, 6-22, Apr 2020
3	Mr. Subhash K.M.	 i. TEQIP Online Certification on Digital Transformation in Teaching Learning Process (April 6th – 22nd 2020) – IIT Bombay ii. Training programme on Optogenetics and fibre photometry in freely moving lab animals- 28th May 2020 – Bio Signal Technologies

Sl. No	Members of the Faculty	Training
1.	Dr G Abhilash	Attended (on line) IEEE SPCOM, International Conference on Signal Processing and Communication, July 19 – 24, 2020, Indian Institute of Science, Bangalore
2.	Dr Venu Anand	TEQIP 3 online certification for 2 week course on Digital Transformation In Teaching Learning Process
3.	Dr Gopi Krishna Saramekala	IEEE conference proceedings, ICCS 2020, 10-13December 2020 at Chengdu, China. (Online)Digital Pedagogy Online SWAYAM Training, April- 2020
4.	Dr M Surya Prakash	TEQIP sponsored course on Digital Transformation in Teaching and Learning Process, IIT Bombay conducted online from 6th April, 2020 to 22nd April 2020
5.	Dr Waquar Ahmad	TEQIP sponsored course on Digital Transformation in Teaching and Learning Process, IIT Bombay conducted online from 6th April, 2020 to 22nd April 2020
6.	Mr Bhuvan B	Attended (virtual mode) and presented a paper in the 27th IEEE International Conference on Electronics, Circuits and Systems (ICECS)Attended (virtual mode) and presented a paper in IEEE 17th India Council Internatio Conference (INDICON)
7.	Dr Aswathi R Nair	TEQIP online certification for completing the course on Digital Transformation in Teaching Learning Process
8.	Dr Sudeep PV	TEQIP sponsored course on Digital Transformation in Teaching and Learning Process, IIT Bombay conducted online from 6th April, 2020 to 22nd April 2020
9.	Dr Chandan Yadav	TEQIP sponsored course on Digital Transformation in Teaching and Learning Process, IIT Bombay conducted online from 6th April, 2020 to 22nd April 2020.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION

DEPARTMENT OF MECHANICAL ENGINEERING

Department	Members of the Faculty	
Mechanical Engineering	Dr. Jose Mathew was invited as panelist on the areas of Advanced Manufacturing Technologies, Precision/Micro Nano Manufacturing/ Surface Engineering, in the VAI shwik BHA ratiya Vaigyanik Summit VAIBHAV , Global Summit of Overseas and Resident Indian Scientists and Academicians. The event was organised by the GoI on 12 October 2020.	
	Dr. Jagdeesha T has attended a conference on Recent Advances in Manufacturing Processes and Systems: Select Proceedings of RAM 2021, Organized by S V NIT Surat, During 10-12 June 2021	

 Dr. K Sekhar has attended a Two day's online workshop on "3D Printing Solutions for Medical Innovation (3DPSMI-2021), organized NIT Calicut from 17-18 July 2021. Dr. Basil Kuriachen has attended Teaching and Learning of Additive Manufacturing Technology (Emphasis of Metal 3D Printing) Organized by NIT Warangal, from 13-18 July 2020 Dr. Sumer Dirbude has participated in TEQIP Online Certification (Funded by Ministry of HRD, Govt. of India), Powered by "SWAYAM", Two Week Course on "Digital Transformation in Teaching Learning Process", from April 6th – April 22th, 2020, organized by the IIT Bombay, India. He has also attended a TEQIP III sponsored Symposium on Biomicrofluidics, organized by the Department of Mechanical Engineering, Indian Institute of Technology Guwahati, 19-20 February 2021. Dr Vinay V. Panicker participated in TEQIP III Sponsored five days Online Short Term Program on Innovation and Incubation of Start-ups – Paving the way for Aatmanirbhar Bharat, organized by Malaviya National Institute of Technology Jaipur, August 10 – 14, 2020. He has also participated in AICTE sponsored Quality Inprovement Programme (QP) short-term course on "Machine Learning Techniques" organized by Indian Institute of Technology Roorkee, 21-25 December-2020 Dr V. Madhusudanan Pillai participated in an Online training session "Orientation and Adoption of NISP at HEI level & Policy Implementation Strategy and Program 2020 organized by Indian Institute of Second Coup, 5th & 7th May 2020. He has attended, Basics of Human Factor Design organized by Adroitec Engineering Solutions (P) L4, 19th May 2020. He has attended, Information in Teaching and Learning Process organized by IIT Bombay, 06-22 April 2020. Dr. Sujth Kumar C S particpated in Digital Transformation in Teaching and Learning Process organized by IIT Bombay, 06-22 April 2020. Dr. Sujth Kumar C S particpated in Digital Transformation in Teaching and Learning Process org	
 Technology (Emphasis of Metal 3D Printing) Organized by NIT Warangal, from 13-18 July 2020 Dr. Sumer Dirbude has participated in TEQIP Online Certification (Funded by Ministry 01 HRD, Govt. of India), Powered by "SWAYAM", Two Week Course on "Digital Transformation in Teaching Learning Process", from April 6^m – April 22^m, 2020, organized by the IIT Bombay, India. He has also attended a TEQIP III sponsored Symposium on Biomicrofluidics, organized by the Department of Mechanical Engineering, Indian Institute of Technology Guwahati, 19-20 February 2021. Dr Vinay V. Panicker participated in TEQIP III Sponsored five days Online Short Term Program on Innovation and Incubation of Start-ups – Paving the way for Aatmanirbhar Bharat, organized by Malaviya National Institute of Technology Jaipur, August 10 – 14, 2020. He has also participated in AICTE sponsored Quality Improvement Programme (QIP) short-term course on "Machine Learning Techniques" organized by Indian Institute of Technology Roorkce, 21-25 December-2020 Dr V. Madhusudanan Pillai participated in an Online training session "Orientation and Adoption of NISP at HEI level & Policy Implementation Strategy and Progress Monitoring at HEI Level, organized by MoE's innovation Cell, Gol, 7th-21st August 2020. He has attended, Basics of Human Factor Design organized by Adroitec Engineering Solutions (P) Ltd, 19th May 2020. He has learned Use of Scopus research analytics in research workflow organized by Elsevier Research Solution Sales, Gurgaon, 27th April 2020 Dr. Sujith Kumar C S particpated in Digital Transformation in Teaching and Learning Process organized by IIT Bombay, 06-22 April 2020. Dr. Sujith Kumar C S particpated in Digital Transformation in Teaching and Learning Process organized by IIT Bombay, 06-22 April 2020. Dr. Sujith Kumar C B has undergone three day's Pedagogy Workshop on Teaching Process organized by IIT Bombay, 06-22 April 2020. Dr.	for Medical Innovation (3DPSMI-2021), organized NIT Calicut from 17-18 July
 Ministry of HRD, Govt. of India), Powered by "SWAYAM", Two Week Course on "Digital Transformation in Teaching Learning Process", from April 6th April 22th, 2020, organized by the IIT Bombay, India. He has also attended a TEQIP III sponsored Symposium on Biomicrofluidics, organized by the Department of Mechanical Engineering, Indian Institute of Technology Guwahati, 19-20 February 2021. Dr Vinay V. Panicker participated in TEQIP III Sponsored five days Online Short Term Program on Innovation and Incubation of Start-ups – Paving the way for Aattmanirbhar Bharat, organized by Malaviya National Institute of Technology Jaipur, August 10 – 14, 2020. He has also participated in AICTE sponsored Quality Improvement Programme (QIP) short-term course on "Machine Learning Techniques" organized by Indian Institute of Technology Roorkee, 21-25 December- 2020 Dr V. Madhusudanan Pillai participated in an Online training session "Orientation and Adoption of NISP at HEI level & Policy Implementation Strategy and Progress Monitoring at HEI Level, organized by MoE's innovation Cell, Gol, 7th-21st August 2020. He has undergone JCR-South Asia Training & Certification Program 2020 organized by Clarivate Analytic Company, Web of Science Group, 5th & 7th May 2020. He has attended, Basics of Human Factor Design organized by Adroitec Engineering Solutions (P) Ltd, 19th May 2020. He has learned Use of Scopus research analytics in research workflow organized by Elsevier Research Solution Sales, Gurgaon, 27th April 2020 Dr. Sujith Kumar C S particpated in Digital Transformation in Teaching and Learning Process organized by IIT Bombay, 06-22 April 2020. Dr. Saleel Ismail particpated in Digital Transformation in Teaching and Learning Process organized by IIT Bombay, 06-22 April 2020. Dr. Simon Peter particpated in Digital Transformation in Teaching and Learning Process organized by IIT Bombay, 06-22 April 2020. Dr. Simon Peter particpate	Technology (Emphasis of Metal 3D Printing) Organized by NIT Warangal, from 13-
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 and Adoption of NISP at HEI level & Policy Implementation Strategy and Progress Monitoring at HEI Level, organized by MoE's innovation Cell, GoI, 7th-21st August 2020. He has undergone JCR-South Asia Training & Certification Program 2020 organized by Clarivate Analytic Company, Web of Science Group, 5th & 7th May 2020. He has attended, Basics of Human Factor Design organized by Adroitec Engineering Solutions (P) Ltd, 19th May 2020. He has learned Use of Scopus research analytics in research workflow organized by Elsevier Research Solution Sales, Gurgaon, 27th April 2020 Dr. Sujith Kumar C S particpated in Digital Transformation in Teaching and Learning Process organized by IIT Bombay, 06-22 April 2020 Dr. Saleel Ismail particpated in Digital Transformation in Teaching and Learning Process organized by IIT Bombay, 06-22 April 2020. He attended International Workshop on "Technologies for emission control" organized by IIT Bombay, 09-17 February 2020. He has undergone three day's Pedagogy Workshop on Teaching Thermodynamics organized by IIT Bombay, 19-21 February 2020 Dr. Simon Peter particpated in Digital Transformation in Teaching and Learning Process organized by IIT Bombay, 06-22 April 2020 Dr. Simon Peter particpated in Digital Transformation in Teaching and Learning Process organized by IIT Bombay, 06-22 April 2020 Dr. Simon Peter particpated in Digital Transformation in Teaching and Learning Process organized by IIT Bombay, 06-22 April 2020. 	Term Program on Innovation and Incubation of Start-ups – Paving the way for Aatmanirbhar Bharat, organized by Malaviya National Institute of Technology Jaipur, August 10 – 14, 2020. He has also participated in AICTE sponsored Quality Improvement Programme (QIP) short-term course on "Machine Learning Techniques" organized by Indian Institute of Technology Roorkee, 21-25 December-
 Learning Process organized by IIT Bombay, 06-22 April 2020 Dr. Saleel Ismail participated in Digital Transformation in Teaching and Learning Process organized by IIT Bombay, 06-22 April 2020. He attended International Workshop on "Technologies for emission control" organized by IIT Bombay, 09-17 February 2020. He has undergone three day's Pedagogy Workshop on Teaching Thermodynamics organized by IIT Bombay, 19-21 February 2020 Dr. Simon Peter participated in Digital Transformation in Teaching and Learning Process organized by IIT Bombay, 06-22 April 2020. Dr. Simon Peter participated in Digital Transformation in Teaching and Learning Process organized by IIT Bombay, 06-22 April 2020. 	and Adoption of NISP at HEI level & Policy Implementation Strategy and Progress Monitoring at HEI Level, organized by MoE's innovation Cell, GoI, 7 th -21 st August 2020. He has undergone JCR-South Asia Training & Certification Program 2020 organized by Clarivate Analytic Company, Web of Science Group, 5 th & 7 th May 2020. He has attended, Basics of Human Factor Design organized by Adroitec Engineering Solutions (P) Ltd, 19 th May 2020. He has learned Use of Scopus research analytics in research workflow organized by Elsevier Research Solution Sales,
 Process organized by IIT Bombay, 06-22 April 2020. He attended International Workshop on "Technologies for emission control" organized by IIT Bombay, 09-17 February 2020. He has undergone three day's Pedagogy Workshop on Teaching Thermodynamics organized by IIT Bombay, 19-21 February 2020 Dr. Simon Peter participated in Digital Transformation in Teaching and Learning Process organized by IIT Bombay, 06-22 April 2020. Dr. Biju T. Kuzhiveli participated in 21st International Cryocooler Conference (ICC 	
Process organized by IIT Bombay, 06-22 April 2020.Dr. Biju T. Kuzhiveli participated in 21st International Cryocooler Conference (ICC)	Process organized by IIT Bombay, 06-22 April 2020. He attended International Workshop on "Technologies for emission control" organized by IIT Bombay, 09-17 February 2020. He has undergone three day's Pedagogy Workshop on Teaching

DEPARTMENT OF CHEMISTRY

Department	Members of the Faculty
Chemistry	Dr. Janardhan Banothu
	Dr. Chinna ayya swamy P, as an Assistant Professor in the Department Chemistry

DEPARMENT OF PHYSICS

Department	Members of the Faculty
Physics	Dr. Ram Ajor Maurya
Physics	Dr. C. S. Suchand Sangeeth Dr. Subramanyan Namboodiri Varanakkottu

- International Conference on Computational Sciences-Modelling, Computing and Soft Computing (CSMCS), 26-29 Mar 2020
- 39th Annual Meeting of the Astronomical Society of India (ASI), February 18-23, 2021
- National Conference of Soft Matter and Functional Materials (SMFM 2020) March 2-4, 2020

SCHOOL OF MANAGEMENT STUDIES

Department	Members of the Faculty
SOMS	Dr. Muhammad Shafi, ARICON, Oxford London

SCHOOL OF BIOTECHNOLOGY

Sl No	Name of Faculty Member	Details of Training programme		
1	Dr. Tom Skaria	1. Successfully completed TEQIP online workshop on "Advanced		
		Pedagogies: Active Learning & Digital Tools" organized at IIT		
		Hyderabad between December 14 - 18, 2020		
		2. Successfully completed one week National Online Faculty		
		Development Program through PMMMNMTT of Ministry of Education		
		and Providence Women's College, University of Calicut, from		
		23.11.2020–27.11.2020 (equivalent to one week face to face FDP, got		
		A+ grade, AICTE/UGC CAS)		
2	Dr. Suchithra .	Successfully completed Professional Development Programme IIM-K		
	ΤV	(11-Jan-2021 to 15-Jan- 2021)		

3.4 PLACEMENT OF STAFF FOR ACADEMIC EXCELLENCE

DEPARTMENT OF ELECTRICAL ENGINEERING

Sl. No.	Name	Academic Excellence
1	Mr. Subhash K M	Undergoing Ph.D in Biosignal Processing at NIT
		Calicut
2	Ms. Hemarani P	Undergoing Ph.D in Industrial Converters at NIT
		Calicut

DEPARTMENT OF ELECTRONICS AND COMMUNICATION

Sl. No	Name	Academic Excellence
1	Mr B. Bhuvan	Pursuing PhD under QIP scheme at IIT Delhi
2	Mr Jaikumar M G	Pursuing PhD under QIP scheme at IIT Madras

4 TEACHING PROGRAMMES

4.1 COURSES OFFERED

DEPARTMENT OF ARCHITECTURE

- Year Bachelor of Architecture
- Year Masters of Planning (Urban Planning)
- Ph. D (Full/Part time)

DEPARTMENT OF CHEMICAL ENGINEERING

- B.Tech
- M.Tech
- PhD

DEPARTMENT OF CIVIL ENGINEERING

Sl. No.	Course	Year of starting
1	B.Tech. (Civil Engineering)	1961
2	M.Tech (Structural Engineering)	1971
3	M.Tech (Traffic and Transportation Planning)	1985
4	M.Tech (Offshore Structures)	1987
5	M.Tech (Environmental Geotechnology)	2006
6	M.Tech (Water Resources Engineering)	2014
7	Ph.D	1985

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

- B.Tech.
- MCA
- M.Tech
- M.Tech. (Information Security)
- Ph. D

DEPARTMENT OF ELECTRICAL ENGINEERING

Sl. No.	Courses	Branch/Discipline
1	B.Tech.	Electrical and Electronics Engineering
2	M. Tech.	Instrumentation and Control Systems
3		Power Systems
4		Power Electronics
5		Industrial Power and Automation

6		High Voltage Engineering
	Ph. D.	Power & Energy Systems
		Electrical Machines & Power Electronics
7		Control and Signal Processing
		Industrial Power & Automation
		High Voltage Engineering
		Biomedical & Signal Processing

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

- B. Tech.(Electronics and Communication Engineering)
- M.Tech. (Electronics Design and Technology)
- M.Tech. (Microelectronics and VLSI Design)
- M.Tech.(Telecommunication)
- M.Tech.(Signal Processing)
- Ph.D (Full-time, Part-time, QIP and Visweswarayya scheme)

DEPARTMENT OF MECHANICAL ENGINEERING

- Under Graduate Programmes
 - ✤ B.Tech. Mechanical Engineering
 - ✤ B.Tech. Production Engineering
- Post Graduate Programmes
 - * M.Tech. Industrial Engineering and Management
 - ✤ M.Tech. Thermal Sciences
 - M.Tech.- Manufacturing Technology
 - M. Tech. Energy Engineering and Management
 - M.Tech. Materials Science and Technology
 - ✤ M.Tech. Machine Design
- Doctoral Programme Ph. D.

DEPARTMENT OF CHEMISTRY

- MSc
- PhD

DEPARTMENT OF MATHAMATICS

- MSc
- PhD

DEPARTMENT OF PHYSICS

- B.Tech (Engineering Physics)
- MSc
- PhD

SCHOOL OF BIOTECHNOLOGY

- B.Tech Biotechnology
- Ph.D Biotechnology

SCHOOL OF METERIAL SCIENCE AND ENGINEERING

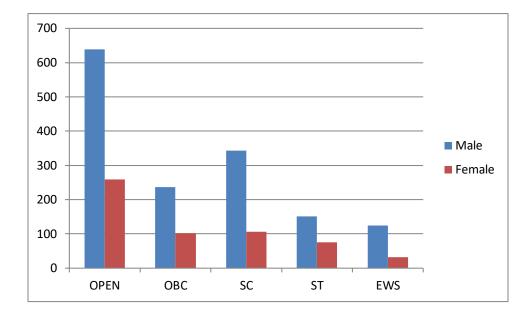
- M. Tech
- Ph. D

SCHOOL OF MANAGEMENT STUDIES

- MBA
- Ph. D.

Level	GI	EN	OI	BC	S	С	S	Т	EV	VS	TOTAL
Level	Boys	Girls	IUIAL								
B. Tech/B. Arch	390	123	78	28	256	78	123	62	69	24	1231
M.Tech./M.Plan.	177	52	112	32	67	13	23	9	46	2	533
MCA	15	7	11	5	6	2	2	2	5	1	56
MBA	12	17	11	8	6	3	2	2	1	0	62
M. Sc	20	10	10	10	5	6	1	1	3	4	70
Ph. D	25	50	15	19	3	4	0	0	1	1	118
Total	639	259	237	102	343	106	151	76	125	32	2070

4.2 COURSE WISE ENROLMENT WITH GENDER, CATEGORY, BREAK UP 2020-2021



4.3 Admission Statistics – UG/PG Programmes, course – wise

SPECIALISATION	Q	OP(PH)	OP(EWS)	OP(EWS)PH	OP(OB)	OP(SC)	EWS	EWS(PH)	OB	OB(PH)	sc	SC(PH)	ST	ST(PH)	DASA	FOREIGN	MEA(WELFARE)	SUPERNUMERARY	TOTAL	MALE	FEMALE	TOTAL
Architecture	14	1	1	0	6	0	6	0	16	0	10	0	5	0	2	1	0	0	62	33	29	62
Bio Technology	10	0	1	0	2	0	3	0	8	1	4	0	2	0	1	0	0	0	32	19	13	32
Civil	34	2	12	0	20	1	16	1	45	0	25	1	13	0	5	3	0	0	178	118	60	178
Chemical	23	1	9	0	15	0	8	0	29	2	17	0	8	0	5	1	0	0	118	86	32	118
Computer	53	4	11	0	4	0	18	0	47	2	26	1	12	1	21	0	0	0	200	156	44	200
Electrical	56	1	6	0	11	0	13	0	45	2	24	1	13	0	7	3	1	0	183	139	44	183
Electronics& Communication	54	2	12	0	3	0	17	1	47	1	25	1	12	1	21	1	1	2	201	148	53	201
Engineering Physics	15	0	0	0	0	0	3	0	10	0	6	0	3	0	3	0	0	0	40	29	11	40
Materials Science & Engineering	10	1	1	0	0	0	2	0	8	0	5	0	2	0	0	0	0	0	29	20	9	29
Mechanical	65	2	10	0	13	0	14	0	54	1	30	0	15	1	11	0	0	0	216	176	40	216
Production	17	1	2	0	5	0	4	0	16	0	9	0	5	0	3	0	0	0	62	50	12	62
Total	351	15	65	0	79	1	104	2	325	9	181	4	90	3	79	9	2	2	1321	974	347	1321

4.3.1 1st Semester B. Tech./B. Arch – 2020-2021

4.3.2 1st Semester M. Tech 2020-2021

				G	ATE Q	ualifi	ed							Ċ			То	tal	
Department	Branch	OP	ОР-РН	OBC	OBC-PH	SC	SC-PH	ST	Hd-TS	EWS	EWS-PH	SP	QIP	біР (РОLY)	DASA	ICCR	Male	Female	Total
ARCHITECTURE	AR61	9	0	4	0	2	0	1	0	0	0	_	_	-	_	_	5	11	16
	CE61	10	0	7	0	4	0	2	0	2	0	_	_	-	_	_	14	11	25
	CE62	10	0	6	0	3	0	2	0	3	0	_	_	-	_	_	17	7	24
CIVIL ENGINEERING	CE63	11	0	7	0	4	0	0	0	1	0	_	_	-	_	_	13	10	23
	CE64	10	0	6	0	4	0	2	0	3	0	_	_	-	_	_	13	12	25
	CE65	6	0	4	0	2	0	1	0	2	0	_	_	-	_	_	13	2	15
CHEMICAL ENGINEERING	CH61	5	0	1	0	0	0	0	0	0	0	_	_	Ι	_	_	2	4	6
COMPUTER	CS61	10	0	6	0	4	0	2	0	3	0	_	_	2	_	_	26	1	27
SCIENCE AND ENGINEERING	CS62	10	0	7	0	4	0	2	0	2	0	-	-	-	-	-	19	6	25
	EC61	9	0	7	0	4	0	2	0	2	0	_	_	1	_	_	20	5	25
ELECTRONICS AND COMMUNICATION	EC62	10	0	7	0	4	0	2	0	2	0	-	-	-	-	-	21	4	25
ENGINEERING	EC63	7	0	4	0	2	0	1	0	2	0	_	_	-	_	_	9	7	16
	EC64	5	0	4	0	3	0	0	0	1	0	-	-	-	-	-	9	4	13
	EE61	10	0	7	0	4	0	2	0	2	0	_	-	-	_	1	20	6	26
ELECTRICAL	EE62	10	0	6	0	4	0	1	0	3	0	_	_	_	_	_	20	4	24
ENGINEERING	EE63	9	1	7	0	4	0	2	0	2	0	_	_	-	_	_	20	5	25
	EE64	9	1	6	0	4	0	2	0	3	0	_	_	-	_	1	23	3	26
	EE65	7	0	5	0	2	0	1	0	1	0	_	_	-	_	_	13	3	16
	ME61	10	0	7	0	3	0	2	0	3	0	_	_	-	_	_	25	0	25
	ME62	9	0	7	0	4	0	2	0	2	0	_	_	-	_	_	23	1	24
MECHANICAL	ME63	10	0	6	0	4	0	0	0	3	0	-	-	-	-	-	23	0	23
ENGINEERING	ME64	10	0	7	0	4	0	0	0	2	0	-	-	-	-	-	22	1	23
	ME65	11	0	7	0	4	0	1	0	1	0	-	-	-	-	-	23	1	24
	ME66	7	0	4	0	2	0	1	0	2	0	-	-	1	-	-	17	0	17
SCHOOL OF MATERIALS SCIENCE AND ENGINEERING	MT61	7	0	5	0	1	0	1	0	1	0	-	-	-	-	-	15	0	15

	221	2	144	0	80	0	32	0	48	0	0	0	4	0	2	425	108	533	
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4.3.3 M. Sc, MCA & Ph.D. 2020-2021

Department	Branch	OP	Hd-q0	OBC	OBC-PH	SC	ST	EWS	Total	SP	QIP	QIP (POLY)	Full Time	Part Time	Internal	External	Male	Fema Fema	Total
Mathematics (MA62)		10	0	7	0	4	1	1	23	0	0	0	23	0	0	0	17	6	23
Physics (PH62)	M. Sc	10	0	6	0	4	1	3	24	0	0	0	24	0	0	0	15	9	24
Chemistry (CY62)		9	1	7	0	3	0	3	23	0	0	0	23	0	0	0	7	16	23
Computer	MCA	21	1	15	1	8	4	6	56	0	0	0	56	0	0	0	39	17	56
Soms	MBA	28	0	19	0	9	4	1	61	1	0	0	62	0	0	0	32	30	62
Architecture	_	5	0	3	0	0	0	0	8	0	0	0	4	3	1	0	3	5	8
Biotechnology	_	2	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	2	2
Chemical Engineering		2	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	2	2
Civil Engineering		11	0	5	0	0	0	0	16	0	1	0	12	3	0	0	7	9	16
Computer Science & Engineering		9	0	3	0	1	0	0	13	0	0	0	12	1	0	0	4	9	13
Electrical Engineering		8	0	2	0	0	0	0	10	0	3	0	6	1	0	0	2	8	10
Electronics & Communication Engineering	PhD	10	0	3	0	2	0	0	15	0	1	0	11	3	0	0	4	11	15
Mathematics		6	0	2	0	0	0	0	8	0	0	0	8	0	0	0	2	6	8
Mechanical Engineering		9	0	6	0	2	0	1	18	0	1	0	16	1	0	0	17	1	18
School of Materials Science & Engineering		1	0	2	0	0	0	0	3	0	0	0	3	0	0	0	0	3	3
Chemistry		4	0	5	0	1	0	0	10	0	0	0	9	1	0	0	0	10	10
Physics		2	0	2	0	1	0	1	6	0	0	0	6	0	0	0	2	4	6
Management Studies		6	0	1	0	0	0	0	7	0	0	0	7	0	0	0	3	4	7
Total		75	0	34	0	7	0	2	118	0	6	0	98	13	1	0	44	74	118

4.4 Student's Total strength

4.4.1 B. Tech/B. Arch

Branch		OP			P(PI	H)		P(EW	S)	0P(EWS)PH	C	P(OE	3)	0	P(SC	C)		EWS	5	EV	VS (P	H)		OB		OE	B (PI	I)
Dranch	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т
AR	8	6	14	0	1	1	1	0	1	0	0	0	4	2	6	0	0	0	3	3	6	0	0	0	9	7	16	0	0	0
BT	5	5	10	0	0	0	1	0	1	0	0	0	1	1	2	0	0	0	3	0	3	0	0	0	5	3	8	1	0	1
CE	24	10	34	1	1	2	10	2	12	0	0	0	13	7	20	1	0	1	9	7	16	1	0	1	30	15	45	0	0	0
СН	20	3	23	1	0	1	7	2	9	0	0	0	10	5	15	0	0	0	6	2	8	0	0	0	22	7	29	2	0	2
CS	45	8	53	2	2	4	7	4	11	0	0	0	4	0	4	0	0	0	14	4	18	0	0	0	39	8	47	1	1	2
EE	42	14	56	0	1	1	6	0	6	0	0	0	8	3	11	0	0	0	11	2	13	0	0	0	37	8	45	1	1	2
EC	42	12	54	0	2	2	11	1	12	0	0	0	2	1	3	0	0	0	13	4	17	0	1	1	39	8	47	0	1	1
EP	13	2	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	6	4	10	0	0	0
MT	6	4	10	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	6	2	8	0	0	0
ME	50	15	65	1	1	2	8	2	10	0	0	0	13	0	13	0	0	0	12	2	14	0	0	0	43	11	54	1	0	1
PE	14	3	17	1	0	1	2	0	2	0	0	0	4	1	5	0	0	0	2	2	4	0	0	0	14	2	16	0	0	0
Total	269	82	351	7	8	15	54	11	65	0	0	0	59	20	79	1	0	1	77	27	104	1	1	2	250	75	325	6	3	9
Branch		SC		S	C(PI	H)		ST		S	Г (РН	I)		DASA	L	FO	REI	GN	(W	MEA VELFA			ERNI RARY				ΤΟΤΑΙ	_		
	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F	T	М	F	Т	М		F		Т	
AR	5	5	10	0	0	0	3	2	5	0	0	0	0	2	2	0	1	1	0	0	0	0	0	0	33		29		62	
BT	2	2	4	0	0	0	0	2	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	19		13		32	
CE	13	12	25	1	0	1	10	3	13	0	0	0	4	1	5	1	2	3	0	0	0	0	0	0	118	}	60		178	1
СН	11	6	17	0	0	0	6	2	8	0	0	0	1	4	5	0	1	1	0	0	0	0	0	0	86		32		118	i i
CS	18	8	26	1	0	1	8	4	12	1	0	1	16	5	21	0	0	0	0	0	0	0	0	0	156)	44		200	1
EE	16	8	24	1	0	1	10	3	13	0	0	0	4	3	7	2	1	3	1	0	1	0	0	0	139)	44		183	i
EC	17	8	25	1	0	1	10	2	12	1	0	1	10	11	21	1	0	1	1	0	1	0	2	2	148	3	53		201	
EP	4	2	6	0	0	0	2	1	3	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	29		11		40	
MT	2	3	5	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20		9		29	
ME	24	6	30	0	0	0	12	3	15	1	0	1	11	0	11	0	0	0	0	0	0	0	0	0	176)	40		216	,
PE	7	2	9	0	0	0	3	2	5	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	50		12		62	
Total	119	62	181	4	0	4	66	24	90	3	0	3	52	27	79	4	5	9	2	0	2	0	2	2	974	ŀ	347		132	1

4.4.2 1st Semester M. Tech

SI. No	Branc h	av	5		нд-до		OBC		OBC-PH	ι υ	אר		SC-PH	E	10		H4-18	U.T.L.	EWS		EWS-PH	Ę	х Х		лъ	qıp	(FOLY)	VOVU	ACAU	u))1	וררע	Total (M)	Total (F)
•		М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М	F	Μ	F	М	F	М	F	М	F	М	F
1	AR61	2	7	0	0	1	3	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	11
1	CE61	6	4	0	0	2	5	0	0	3	1	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	14	11
2	CE62	7	3	0	0	3	3	0	0	3	0	0	0	1	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	17	7
3	CE63	6	5	0	0	3	4	0	0	3	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	13	10
4	CE64	5	5	0	0	2	4	0	0	3	1	0	0	1	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	13	12
5	CE65	5	1	0	0	3	1	0	0	2	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	13	2
1	CH61	2	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4
1	CS61	9	1	0	0	6	0	0	0	4	0	0	0	2	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	0	26	1
2	CS62	7	3	0	0	4	3	0	0	4	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	19	6
1	EC61	8	1	0	0	5	2	0	0	3	1	0	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	20	5
2	EC62	8	2	0	0	7	0	0	0	3	1	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	21	4
3	EC63	2	5	0	0	4	0	0	0	2	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	9	7
4	EC64	4	1	0	0	2	2	0	0	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9	4
1	EE61	7	3	0	0	7	0	0	0	2	2	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	20	6
2	EE62	6	4	0	0	6	0	0	0	4	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	20	4
3	EE63	8	1	1	0	5	2	0	0	2	2	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20	5
4	EE64	8	1	1	0	5	1	0	0	4	0	0	0	1	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	23	3
5	EE65	6	1	0	0	4	1	0	0	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	13	3
1	ME61	1 0	0	0	0	7	0	0	0	3	0	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0
2	ME62	8	1	0	0	7	0	0	0	4	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	23	1
3	ME63	1 0	0	0	0	6	0	0	0	4	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0
4	ME64	1 0	0	0	0	7	0	0	0	3	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	22	1
5	ME65	1 1	0	0	0	7	0	0	0	4	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	23	1
6	ME66	7	0	0	0	4	0	0	0	2	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	17	0

4.4.3 M. Tech., M. Sc & Ph.D.

BRANCH		SC			ST			OPEN		OF	PEN-P	D		OBC		O	BC-PI)		EWS	5		TOTAL	
DRANCH	М	F	Т	М	F	Т	М	F	Т	м	F	Т	М	F	Т	м	F	Т	Μ	F	Т	М	F	Т
AR	1	1	2	1	0	1	2	7	9	0	0	0	1	3	4	0	0	0	0	0	0	5	11	16
CED	14	3	17	4	З	7	29	18	47	0	0	0	13	17	30	0	0	0	10	1	11	70	42	112
CHED	0	0	0	0	0	0	2	3	5	0	0	0	0	1	1	0	0	0	0	0	0	2	4	6
CSED	8	0	8	4	0	4	18	4	22	0	0	0	10	3	13	0	0	0	5	0	5	45	7	52
ECED	10	3	13	2	3	5	23	9	32	0	0	0	18	4	22	0	0	0	6	1	7	59	20	79
EED	13	5	18	6	2	8	37	10	47	2	0	2	27	4	31	0	0	0	11	0	11	96	21	117
MED	20	1	21	5	1	6	57	1	58	0	0	0	38	0	38	0	0	0	13	0	13	133	3	136
SMSE	1	0	1	1	0	1	7	0	7	0	0	0	5	0	5	0	0	0	1	0	1	15	0	15
Total	67	13	80	23	9	32	175	52	227	2	0	2	112	32	144	0	0	0	46	2	48	425	108	533
MCA	6	2	8	2	2	4	14	7	21	1	0	1	10	5	15	1	0	1	5	1	6	39	17	56
MBA	6	3	9	2	2	4	12	17	29	0	0	0	11	8	19	0	0	0	1	0	1	32	30	62
M. Sc	5	6	11	1	1	2	19	10	29	1	0	1	10	10	20	0	0	0	3	4	7	39	31	70
Ph.D	3	4	7	0	0	0	25	50	75	0	0	0	15	19	34	0	0	0	1	1	2	44	74	118

4.5 THE HOSTELS

Accommodation

There are eleven hostels for the men and two hostels for the ladies. The total capacity of all hostels currently available is 5050. A new Mega Hostel for Boys with a capacity of 1500 (single seater) is nearing completion. Present strength in the hostels is 632, out of this 455 are boys and 177 are girls (as on 31.03.2021). All the hostels have Common room and Recreational Centre where newspapers, magazines, TV's and indoor sports/games facilities are available. Free twenty-four-hour internet and computational facilities are available in almost all hostels; it is getting extended to other hostels too. Twenty-four-hour water and electricity (with DG power back up) is part of all the hostels. Mini canteen, Milma, Amul kiosks, DTP Centre, co-operative stores, Stitching Centre, text book shop etc. are functioning in Students Amenity Centre. Two power laundry stations are functioning with collection centers at different hostels. The ladies hostel has lady's gym, stitching and tailoring centre, hostel library, fitness parlour, indoor sports centre, DTP centre and extension of co-operative stores. Guest room facilities are available in the hostels for the relatives/guests of hostel inmates on chargeable basis.

Day to day administration and management of the hostels is vested with the Council of Wardens headed by the Chief Warden appointed by the Director. Warden's council is supported by Stewards/Caretakers/hostel staffs.

Chief Warden: Dr. A. Santhiagu, Professor, School of Biotechnology Wardens: (as on 31.03.2021)

Sl.No	Name	Designation	Department
1	Dr. Lineesh M C	Assistant Professor, (Gr. I)	MATHS
2	Dr. K. Sekar	Assistant Professor, (Gr. I)	MED
3	Mr. K. Ratnakumar	Assistant Professor,(Gr. II)	MED
4	Dr. Malladi .V. Pavan Kumar	Assistant Professor, (Gr. I)	CHED
5	Dr. Ashish Awasthi	Assistant Professor, (Gr. I)	MATHS
6	Dr. Aji A. Anappara	Associate Professor	PHYSICS
7	Dr. Jayaraj P. B	Assistant Professor, (Gr. I)	CSED
8	Dr. Baiju G Nair	Assistant Professor, (Gr. I)	SBT
9	Dr. Suresh Kumar N	Assistant Professor, (Gr. I)	MATHS
10	Dr. M.K. Ravi Varma	Professor	PHYSICS
11	Dr. K Krishnamurthy	Professor	CED
12	Dr. Jagadeesha T.	Assistant Professor, (Gr. I)	MED
13	Dr. Gangadhara Kiran Kumar L	Assistant Professor, (Gr. II)	MED
14	Mr. M. Sivakumar	Assistant Professor, (Gr. II)	CED
15	Dr. M Srinivas	Assistant Professor, (Gr. I)	MED
16	Mr. B. Rohinikumar	Assistant Professor, (Gr. I)	MED
17	Dr. Vineesh Ravi	Assistant Professor, (Gr. I)	CHED
18	Dr. R. Arun Kumar	Assistant Professor, (Gr. II)	CED
19	Dr. Haribabu	Assistant Professor, (Gr. I)	CHED
20	Dr. Vari Sivaji Reddy	Assistant Professor, (Gr. I)	PHY
21	Dr. Sathish Kumar D	Assistant Professor, (Gr. I)	CED
22	Dr. S. Bhuvaneshwari	Assistant Professor, (Gr. I)	CHED
23	Dr. P. Preetha	Associate Professor	EEED
24	Dr. Susmitha Das	Assistant Professor, (Gr. II)	CHED
25	Dr. S. Kanagalakshmi	Assistant Professor, (Gr. II)	EED

Hostel Manager (Officiating): Sri. Muraleedharan P Stewards: Sri. Anwar Sadath Peon: Sri. Chandu. K V

4.6 SCHOLARSHIPS/ ASSISTANCE-SHIP

Financial Assistance to M.Tech Students:

Teaching Assistantship/Research Assistantship/Scholarships are awarded to eligible M.Tech students as per rules formulated by the Ministry of Education/Govt. of India and the Institute for such awards from time to time, subject to availability of funds. Currently an amount of Rs.12,400/- per month for 22 months will be given to candidates admitted through GATE score. This facility will not be available to sponsored candidates, foreign nationals and dependants of NRIs

Financial Assistance to Research Scholars:

Teaching Assistantship/Research Assistantship/Scholarships are awarded to eligible full time research scholars as per the rules formulated by the Ministry of Education/Govt. of India and the Institute for such awards from time to time. Currently the scholarships are at the rate of Rs.31,000/- per month for the first two years and Rs.35,000/-per month for another three years. This facility will not be available to UGC/CSIR Fellowship/National Doctoral Fellowship Holders, sponsored candidates, foreign nationals and dependants of NRIs

4.7 GAMES AND SPORTS

As has been the practice, Programs for 2019-20 were planned and executed giving due importance to the new comers to the Institute. More than 100 days during July to November 2019 were spent on fresher orientation program in order to acclimatize them to the NITC environment and to inculcate awareness on the need to pursue activities to keep themselves fit and healthy with in campus and to follow-up in the post-campus life.

The senior-graduate and the post graduate students on their part have thronged the Physical Education activity centers in big numbers on a voluntary basis. The shortage of Playfields continued to haunt and every attempt was made to provide them to meet the student demand. One systematic and successful method adopted was to provide floodlights on small area games like Tennis, Basketball and Volley ball. However, the existing infrastructure has been utilized to the full and equipment purchased has been exhausted due to the overwhelming use.

4.8 AWARDS

Sl. No	Name	Award
1	Surej C Rajan	Best Paper Award in Materials Science and Manufacturing stream,
		ICETEST 2020
2	Dekketi G C Vikram Reddy	Swachhta Saarthi Fellowship (SSF) of the Waste to Wealth
		Mission, Government of India, 2021
3.	Dekketi G C Vikram Reddy	Won second prize in new generation idea contest 2020, HPCL,
	-	India

DEPARTMENT OF CHEMICAL ENGINEERING

DEPARTMENT OF CIVIL ENGINEERING

Sl. No.	Name	Award
1	Dr. S. K. Pramada (along with Mr. Vidavaluru Hemanth Sai Kumar, M Tech (Water Resources Engineering) student	Best paper award for the paper "Least cost design of water distribution network by using simulation- optimization approach" presented at the "International Conference on Challenges and Opportunities In Water And Wastewater Management" organized by Karunya Institute of Technology and Sciences, Coimbatore, in association with NITC and Satyabama University Chennai

DEPARTMENT OF ELECTRICAL ENGINEERING

Sl. No.	Name	Award
1	Subhash K.M.	Best Paper Award for 31 st Annual State Faculty Convention of
		ISTE Kerala Section on "Opportunities and Challenges in Technica
		Education in the Post COVID Scenario"

DEPARTMENT OF ELECTRONICS AND COMMUNICATION

Sl. No.	Name	Award
1	Dr Deepthi P.P.	Best PhD thesis supervisor of GraTE-7 2020.
2	Dr Dhanaraj K. J.	Outstanding Teacher Award 2020 by IEEE Kerala Section
3	Dr Raghu C V	Best Paper award in 31st annual state faculty convention of ISTE Kerala section
4	Dr Chandan Yadav	Golden Reviewers, IEEE Transactions on Electron Devices, 2020
5	Dr Babu A V	Best PhD thesis supervisor of GraTE-7 2021 conducted by IEEE Communication Society
6	Dr Babu A V	Best MTech thesis supervisor of GraTE-7 2021 conducted by IEEE Communication Society

DEPARTMENT OF MECHANICAL ENGINEERING

Sl. No.	Name	Award
1	Dr. Saleel Ismail	4 th best paper in International Exergy, Energy and Environment Symposium (IEEES 12), December 2020

4.9 EXAMINATION DETAILS

B. Tech. / B. Arch. Result

Programme	Total Registered	1st Class with Distinction	1st Class	2nd Class	3rd Class	Total Pass	Percentage
B. Tech - CH	86	16	55	11	0	82	95.35
B. Tech - CE	142	57	59	24	1	141	99.30
B. Tech - CS	156	62	69	19	1	151	96.79
B. Tech - EE	142	56	60	25	0	141	99.30
B. Tech - EC	148	45	69	32	0	146	98.65

B. Tech -							
ME	140	44	71	18	0	133	95.00
B. Tech - PE	35	6	22	6	0	34	97.14
B. Tech - EP	25	10	13	1	0	24	96.00
B. Tech - BT	15	8	6	0	0	14	93.33
TOTAL	889	304	424	136	2	866	97.41
B. Arch. AR	55	5	26	15	0	46	83.64

Details of M. Tech, MCA & Ph.D. Students passed out

Pgm. Code	Total Registered	1st class with Distinction	1st Class	2nd Class	Total Pass	Percentage
CE61	20	13	5	0	18	90.00
CE62	22	16	6	0	22	100.00
CE63	15	6	5	1	12	80.00
CE64	18	16	2	0	18	100.00
CE65	11	3	5	1	9	81.82
CS61	19	11	8	0	19	100.00
CS62	16	11	5	0	16	100.00
EE61	15	10	5	0	15	100.00
EE62	18	11	5	0	16	88.89
EE63	16	12	4	0	16	100.00
EE64	21	17	4	0	21	100.00
EE65	8	5	3	0	8	100.00
EC61	16	10	6	0	16	100.00
EC62	16	11	5	0	16	100.00
EC63	9	5	3	1	9	100.00
EC64	10	8	2	0	10	100.00
ME61	15	9	6	0	15	100.00
ME62	17	11	6	0	17	100.00
ME63	17	12	5	0	17	100.00
ME64	16	12	4	0	16	100.00
ME65	17	15	2	0	17	100.00
ME66	11	6	5	0	11	100.00
NS61	10	10	0	0	10	100.00
CH61	9	7	2	0	9	100.00
Total M.Tech	362	247	103	3	353	97.51
MA62	15	6	9	0	15	100.00
CY62	17	7	8	2	17	100.00
PH62	18	9	9	0	18	100.00
Total M.Sc	50	22	26	2	50	100.00

MBA	35	6	29	0	35	100.00
MCA	42	10	29	3	42	100.00
M.Plan	11	6	3	1	10	90.91
Ph.D					89	
TOTAL	500	291	190	9	490	

4.10 Technology Business Incubator (TBI)

National Institute of Technology Calicut has set up a Technology Business Incubator (TBI-NITC) in 2003-04 with the support of National Science & Technology Entrepreneurship Development Board (NSTEDB) Department of Science and Technology, Govt. of India to incubate startup industries in IT and Electronics. TBI is registered as a society under the society's registration Act XXI of 1860 on 16 Sep 2009. The following table shows what TBI is so far:

1	Total number of units in Technology Business Incubator	23
2	Number of units joined during 2020–2021	14
3	Number of units graduated from TBI during 2020–2021	2
4	Number of units preparing to graduate	12
5	Total number of units so far assisted by TBI	84
6	Total number of ampleyees in the insubstad companies	10
6	Total number of employees in the incubated companies	

Programmes conducted by TBI

• TECHNOLOGY BASED ENTREPRENEURSHIP DEVELOPMENT PROGRAMME IN Applied Electronics conducted during 25 Jan 2021 to 05 Mar 2021

Student Entrepreneurship Initiatives supported by TBI NITC

TBI NITC has been supporting students in terms of technical & business mentorships, acted as an intermediary in connecting the students with industry experts in diverse domains along with other initiatives like arranging talks including both the technical as well as the business aspects. During 2020-21, the activities under student entrepreneurship were coordinated under the Institute Innovation Council (IIC) which is under the guidance of Ministry's (MoE) Innovation Council. At National Institute of Technology, Calicut, IIC serve as a key platform for fostering innovation and entrepreneurship among students. IIC stands for nurturing the creative and innovative ideas of students and help them transform these ideas into feasible products and services. IIC acts as the first launch pad for a student's entrepreneurial journey and provides them with access to cutting-edge technology, world-class infrastructure, high-quality mentorship, early risk capital and global exposure.

Talk On Student Entrepreneurship and TBI Operations to a group of Students	25 April 2020
A Session On Facilities and Opportunities Provided at TBI NIT Calicut held on 27 October 2020	27 Oct 2020
Session on identifying Intellectual Property component at the early stage of Innovation	04 Nov 2020

Panel Discussion on Factors affecting Innovation in India and	29 Nov 2020
how to overcome them	
A session on how to go about with idea evaluation for the	02 Dec 2020
Faculty and Industry Experts	
Shaping Your Innovative Ideas	07 Dec 2020
Session on Problem Solving and Ideation Workshop	13 Dec 2020
My Story - Motivational Session by Successful Innovators	20 Dec 2020
Orientation Session on National Education Policy (with a focus	24 Dec 2020
on Innovation and entrepreneurship	
Orientation Session on National Innovation and Startup Policy	26 Dec 2020
(NISP)	
Workshop on "Entrepreneurship and Innovation as Career	21 Jan 2021
Opportunity"	
Session on Startup Pitfalls: A Technology First Approach - A	25 March
Lean Canvas Model	2021
An Orientation Session on Innovation and Entrepreneurship -	31 March
An Orientation Session by the Innovation Ambassadors who	2021
received their trainings from the Ministry of Education's	
Innovation Cell	
Formation of Innovation Club	30 Mar 2021

NATIONAL INITIATIVE FOR DEVELOPING AND HARNESSING INNOVATIONS (NIDHI)PROMOTING AND ACCELERATING YOUNG AND ASPIRING INNOVATORS &

STARTUPS (PRAYAS)

TBI inducted the first group of 8 innovators under NIDHI PRAYAS in November 2019. Later in May 2020 four more innovators were added to this group. NIDHI PRAYAS is a scheme for addressing the gap in the very early stage idea/proof of concept funding. The funding is given as grant for the selected ideas. The selected innovators would get access to the infrastructure, prototype grant and mentorship. TBI has got approval for a total project cost of Rs.700 Lakhs from the Project Management Unit of PRAYAS for hosting a PRAYAS Centre at NIT Calicut under the NIDHI PRAYAS Scheme of Department of Science and Technology. Out of Rs.700 lakhs, Rs. 100 Lakhs are for Capital for setting up Fab Lab, Rs.500 Lakhs for providing prototype grant to innovator over 5 years. Rs. 20 Lakhs per year for five years can be spent for annual operations, management of Fab lab. The selection of the innovators for the second year beneficiaries of the scheme also was done during the year 2020-21 and eight are selected.

SFURTI

Technology Business Incubator is the Implementing Agency (IA), for the development of Balussery Coir Cluster, under the SFURTI scheme. Coir Board is the Nodal Agency (NA) and Entrepreneurship Development Institute of India (EDI) is the Technical Agency (TA) for this project. Total project cost is 130 lakhs. There are two components in the project – Soft intervention and Hard Intervention. Activities listed under soft intervention is over and a facility measuring 3000 square feet with state of the art machinery is constructed. The production work has been started in this facility. Shri. Nitin Gadkari, Minister of MSME had inaugurated Balussery Coir Cluster Development Society on 22 Feb 2021 through online platform.

4.11 Technical Education Quality Improvement Programme Phase III

Technical Education Quality Improvement Programme(TEQIP) is a centrally sponsored scheme of the Government of India to build a strong higher technical education system for the country. The programme was being implemented in multiple phases and cycles. Institute has completed the Phase I in 2007-2008 and the Phase II in 2016-'17. The TEQIP Phase III was started in 2017-2018 and the Institute got selected under the Sub Component 1.3 for which the twinning with an institution selected under the Sub Component 1.1 was mandatory. Institute has made the twinning arrangements with the Govt. Engineering College Bharatpur, Rajasthan. This College was selected by MHRD under Sub Component 1.1 of TEQIP-III. Phase III was officially started on 1st April 2017 and would be concluded by 30th September 2021. Institute has very effectively utilized the grant in aid, to its full extent, for strengthening the research, training of the faculty and staff, promotion of innovations among students, improvement of graduate employability, and also for creating awareness about entrepreneurship and the need for protection of the intellectual properties. A brief *report* of the activities conducted during the year 2020-21 under this scheme as follows:

There are two major heads of expenditure, namely *procurement* and *academic* activities for which the grant will be released on a quarterly basis subject to the acceptance of the action plan submitted the project institutions; the third component is the *incremental operating cost* for the Institute. Under the head of procurement, Institute has added the high-end equipment, namely Confocal Raman Spectrometer for Rs. 1,41,74,096/- (Rupees One Crore Forty-One Lakh Seventy-Four Thousand and Ninety-Six only) through the mode of international bidding, as per the respective Government guidelines. This equipment will enable advanced research in materials science and engineering. Refurbishment of one of the Central Lecture halls with major support from TEQIP III was initiated and procurement of related facilities worth Rs. 22 Lakhs has been completed. During the year under report, Institute has effectively utilized the grant under the Academic component. 25 members of the faculty were attended online courses of various Institutions.54 faculty members attended online Pedagogy Course on Digital Transformation in Teaching Learning Process. 3 faculties were attended online Professional Development training. 3 International Conference were conducted with major funding from TEQIP III during this year. One online expert lecture programme and two online courses were conducted for the students and faculties of the institute. Two Future Skill trainings were conducted online on Cyber security and Artificial Intelligence and Machine learning for students of the institute. An online Webinar on Reliability and Applied Time Series Analysis and one FDP on Recent Trends in Medical Cybernetics were conducted with major support from TEQIP III.

5 RESEARCH AND DEVELOPMENT ACTIVITIES

5.1 PH.D. PROGRAMMES – EXISTING AND PROPOSED

DEPARTMENT OF ARCHITECTURE

a. Ph. Ds completed under Existing Scheme

Total: 8 Nos

b. On-going Ph. Ds under the Existing Scheme

Total: 37 Nos

c. Proposed Ph.D. Programmes

Total: 10 Nos

DEPARTMENT OF CHEMICAL ENGINGINEERING

a. Ph. Ds completed under Existing Scheme during the period

Total: 2 Nos

b. On-going Ph. Ds under the Existing Scheme

Total: 40 Nos

DEPARTEMENT OF CIVIL ENGINEERING

a. Ph.Ds completed under existing scheme during the period

Total: 4 Nos

b. On-going Ph. Ds under the Existing Scheme

Total: 110 Nos

Ph.D Programmes

- Electrochemical characterization and service life of galvanized steel rebars embedded in cementitious systems exposed to chlorides.
- Electrochemical process for the treatment of industrial wastewater
- Combined electrochemical process for the treatment of emerging pollutants
- Impact of projected climate change on hydrologic processes
- Hydroinformatics for watershed modelling and sustainable development
- Hydro systems risk and resilience assessment
- Intensity-duration-frequency analysis of precipitation under climate change conditions Application of geospatial techniques for flood and drought risk assessment

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

a. Ph. Ds completed under Existing Scheme during the period

Total: 43 Nos

b. On-going Ph. Ds under the Existing Scheme

Total: 68 Nos

DEPARTMENT OF ELECTRICAL ENGINEERING

a. Ph. Ds completed under Existing Scheme during the period

Total: 10 Nos

b. **On-going Ph. Ds under the Existing Scheme** Total: 71 Nos

5.2 Proposed plan for research

Department has identified six major areas for research and development: Power and energy systems, Control and Instrumentation, Power electronics and drives, Industrial Power and Automation, High voltage engineering and biomedical engineering. There are 72 research scholars working presently in the Department.

Power and energy systems research focus on wide area of electrical energy systems which ranges from innovation in energy generation and distribution, grid intelligence and resilience, renewable resources, electric transportation, energy management and efficient devices and buildings. Research projects address application of machines and systems for the conversion, delivery, and use of energy in electrical form. The research emphasis on controls and reliability of large utility systems to microgrids in terms of sustainable energy-harvestment of various available sources.

Control and Instrumentation group is involved in research on areas pertaining to control of multiagent systems and aerodynamic systems, process control systems, biomedical signal processing, power system control etc. Various robust, adaptive, optimal as well as intelligent control strategies are being continuously explored in view of the requirements for product design, plant operation and decision making. The feasibility of real time implementation of the developed controllers is being verified by making use of the various laboratory scale benchmark models.

Power electronics group is actively involved in the research on various state-of-the-art technologies indispensable for both academia and industry. This includes studies related to AC micro grid, DC micro grid, renewable sources like PV, wind, Fuel cell etc, storage systems like batteries, ultra-capacitors etc, motor drive systems, fault detection and fault tolerant operation of various power electronic converters and motors, challenges related to electric vehicle and charging stations.

The research work by **Industrial Power and Automation group** focuses on the advancement in power converters which includes dc-dc converters, dc-ac converters and solid state transformers and their applications to electric vehicle design, energy storage systems and integration of renewable energy systems with dc/ac micro grid. Focus is also on design and development of various advanced level controllers and Internet of Things for automation and robotics applications.

High voltage engineering is doing research in nano-dielectrics, pulsed power for pollution control application, condition monitoring of power equipment, space charge accumulation in dielectrics, dielectric spectroscopy, nanocomposites for electromagnetic shielding and electric and magnetic field computation

In the area of **biomedical engineering**, research focus on medical image and signal processing, computational neurophysiology and rehabilitation engineering. Research also includes development of various novel techniques for bio signal acquisition and processing, ECG/EMG/EEG based control, and circuit design.

In many areas, the department has already signed MoU for research collaboration with industries like BOSCH, ABB, Entuple Technologies.Department has also undertaken sponsored research activities for strengthening the areas of expertise. There are six major sponsored research projects ongoing with faculty members in the department by DRDO, CPRI, DST, KSCSTE, MHRD.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION

a. Ph. Ds completed under Existing Scheme during the period

Total: 11 Nos

b. On-going Ph. Ds under the Existing Scheme

Total: 64 Nos

DEPARTMENT OF MECHANICAL ENGINEERING

a. Ph. Ds completed under Existing Scheme during the period

Total: 12 Nos

b. On-going Ph. Ds under the Existing Scheme

Total: 90 Nos

 $FT \rightarrow PT$: Converted from full time to part time QIP \rightarrow PT: Converted from QIP to part time

c. Proposed Ph.D. programmes

Dr.Jose Mathew—Based on the warm response to the online workshop conducted during July 17-18, 2021 on 3D Printing Solutions for Medical Innovation (3DPSMI-2021) (where about 24 technical experts from India and abroad, including 9 practicing Medical Doctors delivered expert talks and about 350 participants represented almost all states and UTs, IITs, NITs and about 50 medical doctors also participated), it is planned to initiate a joint collaborative research with the medical doctors. The state-of-the-art facilities developed at the Advanced Manufacturing Centre, MED, NIT Calicut can be made available to the nearby institutes. With the help of Research Scholars and M. Tech. students, more active research in the machining of difficult-to-cut materials is also planned.

Dr. P. B. Dhanish- Interested to carry research in the area of manufacturing science and engineering.

Dr. Jinu Paul—His long term research goal is the Development of Materials & Solid State Processing Technologies for Sustainable Manufacturing

Solid state manufacturing technologies have been the center of attention in recent years for scientists and engineers involved with Composites, Hybrid/Dissimilar, Polymers/Fibers, Nano-materials and advanced lightweight structures. The main reason for that is the nature of such processes: since bonding and processing take place in the solid-state, all metallurgical reactions involved in melting and solidification are avoided, resulting in intermetallic-free components with desired microstructure and superior properties. Research would be focused on:

• Materials development: Hybrid Materials, Nanocomposites, Polymers, Fibers, Carbon Nanomaterials.

- Friction Stir Processing/Welding of similar and dissimilar conventional and emerging materials, Surface Engineering Via Solid State Processing
- Ultrasonic, Diffusion, and all other solid-state welding processes
- Solid-state metal shaping processes
- Solid-state additive manufacturing technologies
- Solid-state manufacturing processes for surface engineering including cladding processes
- Microstructural and mechanical properties characterization in solid-state manufacturing processes, Spectroscopic, Raman, X-Ray
- Modelling and simulations in solid-state manufacturing processes

His Short term research Plans are:

- Metal/Polymer matrix nanocomposites: Processing & Characterization
- Friction stir Processing/Joining of Materials
- Nanostructured/Composite Coatings
- Processing of Carbon nanomaterials/ Composites
- Joining of Polymers, composites and other advanced materials

Dr. Sandip R Budhe—He has two proposed plans for research:

1) Numerical study on effective composite repair thickness for part wall loss defect of metallic pipeline for oil and gas pipeline application.

2) The inclusion of nanofillers in polymer matrices to produce a multifunctional natural fiber composite material for extensive applications.

Dr. Jagadeesha T-- He is interested in the following areas:

- 1. MR fluids based systems
- 2. Additive manufacturing
- 3. Vibration control
- 4. Advanced materials

Dr. Sudheer.A.P—He is interested in research guidance from the PhD fellowship grant from IIT Palakkad IHub and also planning for more PhD research grants from outside agency. He has submitted proposals to DST under TIDE Scheme and they called for proposal presentation (results are awaited). Also he has applied for funding to KSCSTE and to Indian Railway. He is planning to submit more proposals combining with other department faculty and to take 2/3 PhD scholars in the area of health care and humanoid Robotics. He is planning to promote collaborative research with other reputed institutes like IITs and also with the Robotics Society –India experts. He wants to work on Search problem is an important step in research and development. He has already done some work on this and developed systems like smart patient adjustable bed, robotic gripper, walking stick, wheel chair, arecanut climbing machine, transferable device etc. He is planning to focus more on agriculture field for search problems.

Dr. K Sekar—His research plans include:

- To help to poor farmers and public people for cost saving and time saving and also increase the profit by developing new innovative automated agriculture machines and new composite making machine.
- He has developed new innovative multiple casting machine for Nano composite material from the funding of faculty research grant in NITC, this machine was success and I got international award and best paper award to this machine. On similar tone, in next five years, he wants to develop new innovative automated /semi-automated machine for coconut multi product making machine through PhD research grant from outside funding agency.
- He wants to introduce this coconut multi product automated machine to poor coconut farmers in Kerala for increasing profit and also wants to apply pattern to coconut multi product making machine and publish the work in the reputed journals.
- He wants to develop low cost new innovative 3D printing machine for additive manufacturing of new composite materials
- He wants to reduce the material wastage in industry and save the manufacturing cost and minimize the machining time and also avoid the dusts in industries. I want to apply pattern to low cost new innovative 3D printing machine and publish more reputed journals
- Already prepared project proposals to different funding agencies like DST, KSCSTE and other funding agencies and now he is planning to submit more project proposals combining with industry institute collaborations projects.
- Planning to take some PhD scholars in the area of hydraulic/ pneumatic automation Manufacturing area, additive manufacturing and powder metallurgy materials area.
- His ultimate aim to develop low cost automated machine to make composite material unite as well as small type of agriculture related machine to help to poor farmers. So he wants to focus my academic research as well as help to public for increase their profit and economy

Dr. Vineesh K P: His research plan is as follows:

1. Phase transformation of material at different temperatures during welding process has an effect in residual stress evolution during the welding process. Majority of the literature reported the evolution of thermal residual stresses due to the linear thermal expansion coefficient of materials only. For getting a more accurate estimation of residual stress evolution during the welding process, phase transformation effects have to be taken into consideration. Currently, one Ph.D student is working in the area.

2. Residual stresses are generated during the additive manufacturing process because of the high thermal gradient. Currently three-dimensional modeling of additive manufacturing is done using finite element analysis. Powder particles movements are being done using discrete element method. This is a collaborative work with the faculties of IIT Patna and IIT Hyderabad.

Dr. Basil Kuriachen—His long-term research objective is to develop a state-of-the-art research lab (Centre of Excellence in Metal Additive Manufacturing as part of the existing Advanced Manufacturing Centre at the department of Mechanical Engineering, NIT Calicut) with 100% external funding and to run the same with consultancy income. In addition to the state-of-the-art research and development, he would like to take initiatives to transfer the knowledge/information gained through research to the students and researchers who work in the similar field (through conducting symposiums, publications, patents, conferences, short term courses, etc.).

Dr. Sumer Dirbude—His Short-term research goals are:

- To initiate energy, combustion, computational fluid dynamics (CFD) and inter-disciplinary research culture.
- To work towards the development of fundamental and research laboratories.
- To initiate research collaborations at local inter-departmental and industrial level.
- To publish in reputed international journals and conferences.

His Long-term research goals are:

- To develop state-of-the-art internationally recognized energy, combustion and CFD research laboratory.
- To collaborate at global (national and international) inter-departmental and industrial level
- To generate patents, and to publish in reputed journals and in the form of research monographs.

Dr Ashesh Saha—His research plans include:

- 1. Synchronization in Coupled Nonlinear Oscillators
- 2. Analysis and Control of Instabilities in Jeffcott Rotor
- 3. Multi-Scale Modelling of Friction
- 4. Magnetorheological (MR) Damper
- 5. Frictional Damping

Dr Jayadeep U B—He interested in the following:

- Develop a computational model for adhesion based on Lumped Parameter Model and implement in commercial finite element software.
- Crystal plasticity modeling of nanocoated surfaces.
- Studies on residual stresses in welding

Dr Ratnakumar K—He has research plans on the following themes:

Theme #1: Dual Channel Supply chain

Guiding Research Questions: What is the relevance of a dual channel supply chain? What are the enablers and barriers to implementation of such a structure? Can a real-time case be implemented in this work?

we want to explore the characteristics of the different channel structures, namely the traditional retail channel and dual channel structure, consisting of both retailer store(s) as well as the online store. We would also like to explore other possible channels. We also wish to analyze which type of channel will be suitable for each product.

Theme # 2: Safe kitchen design for disabled people

Objectives:

a. Identification of the constraints on the activities of daily living (ADL) for the majority of paraplegics

- b. Study of the mechanics behind optimizing the ergonomics of the movements made by paraplegic people
- c. Design a safe, efficient and affordable kitchen layout with full consideration given to potential and actual limitations on the activity of a paraplegic.
- d. Develop a prototype of a modular kitchen with flexible design.
- e. Provide training to paraplegic users
- f. Develop the actual model and implement

A few students are working in this area and I have submitted a project proposal to SERB, which has been accepted for evaluation. I intend to guide Ph.D students in work in this area in the near future.

Theme # 3: Sustainable practices in higher educational institutions.

Guiding Research Questions:

- a. What percentage of students take more than the minimum stipulated time to complete their programs and what are the reasons?
- b. What are the methods that can be adopted to bring these students back into the mainstream?
- c. Framing a real-time action plan to carry out this work?

Dr Vinay V. Panicker – His Research plans include in the domains of Ergonomics and Supply Chain Management as follows:

- Modelling and analysis of disruptions in supply chain operations
- Evaluation of workplace environment adopting a cognitive ergonomics approach
- Assessment of ergonomic interventions associated with natural rubber harvesting
- Application of data science in the research as mentioned above

Dr Madhusudanan Pillai

Currently his focus of the research is on the application of machine learning and blockchain technologies in supply chain management and predictive maintenance. It is proposed to develop artificial intelligence and machine learning based assistance in decision making in the supply chain role play based operation simulation as well as use blockchain technology for supply chain collaboration. A blockchain oriented supply chain operation simulator is in the final stage of development. Research on informed decision making (data driven decision making) is also in progress. It is proposed to apply the concepts developed through research and domain knowledge for the development of products especially useful for enhancing teaching and to provide solutions for the practical problems. The research directions also involve analysis of big data of IoT machines and application of machine learning and artificial intelligence to pre-diagnosis the point of failure for ensuring higher availability of uptime of machines.

Dr R Sridharan-- He is interested in Guiding UG and PG projects involving the application of machine learning techniques in supply chain management and production scheduling. He is interested to Guide Ph.D. research in industrial engineering.

Dr Murali K P—He is interested to carry research in the field of Electronic Materials: Ceramics and composite materials for electronic applications

Dr. Arun P-- Following are the research topics currently being undertaken:

- Studies on fluidized bed gasification with high ash biomass feedstock
- Analysis of agglomeration in fluidized bed gasification of biomass
- Design, analysis and testing of improved solar drying systems
- Simulation and optimization battery thermal management systems

Dr. Muraleedharan C—He has planned to carry out research in renewable energy sources like solar energy, biomass energy, etc.

Dr. Gangadhara Kiran Kumar L

First proposal will be submitted for a research grant in the area of thermal management of batteries for a timeline of two years. Main aim of the proposal is to reduce the weight of the battery by implementing microfluidics technology in thermal management.

A new proposal will be submitted to SERB core research grant in the area of thermal management in a fuel cell for a timeline of two years with the backing of the outcome of the above stated research work.

A proposal will be submitted to DST for the development of a fuel cell stack with an efficient thermal management system for marine propulsion in collaboration with interested faculty from the chemical engineering department.

Basic idea behind the above all proposals is based on development of a novel composite heat sink module by replacing the existing one. Novel composite heat sink module will replace the conventional heat pipe and fins with micro heat pipes. The study investigates the enhancement of thermal performance of a composite heat sink (CHS). The novelty is that instead of embedding a conventional heat pipe in the bottom of the base plate of the heat sink, a series of micro heat pipes are embedded above in such a manner replacing a solid fin arrangement.

Dr. P. V. Manu-- Based on his research experience, he would try to get some good sponsored and consultancy projects which would really benefit the research community at NIT Calicut. After completing his Ph.D., now, he would aim to develop an advanced a combustion research lab, where one can conduct experimental as well as computational works.

Dr. Sujith Kumar C.S.-- As a researcher, he would like to conduct experimental investigations to understand the physical mechanism of two-phase heat transfer has always fascinated me. He has been successful in extending the limits of convective heat transfer in boiling through surface modification. During my doctoral research, he has extensively investigated two-phase heat transfer in both pool boiling & flow boiling and also successfully demonstrated the significance of the nanoporous coating in enhancing the boiling heat transfer coefficient. Effect of surface coatings, heterogeneous wettability, nanofin action, porosity, hydrodynamics on critical heat flux was investigated. High-speed imaging of boiling was also performed to study the ebullition cycle and different regimes of flow patterns. His research at the University of Saskatchewan demonstrated the emphasis of vertically aligned carbon nanotubes in enhancing the critical heat flux. As an international post-doctoral research fellow at National Taiwan University, Taiwan, his research unraveled the potential of the patterned heterogeneous surface on enhancing the boiling heat transfer coefficient. Various aspects like shape, size, pitch distance, and orientation of patterns on heat transfer were investigated. His current research activities mainly focused on extending the limits of boiling heat transfer by using active and passive

techniques. The overarching goal of my research is to adopt an interdisciplinary approach to solve real-world problems like energy generation, desalination, application-based of material, etc. The primary focus will be on the following topics:

1. Patterned solar absorber for freshwater production, Interfacial evaporation is an effective way of producing water vapours from the bulk of water. Selectively patterned solar absorber is an integrated design containing the provision for interfacial heating and escape lines for water vapor. The effect of shape, size, pitch distance, and orientation of patterns on solar to thermal energy conversion rate will be investigated. This study will help in developing the desalination unit and also the energy generation unit based on the Seebeck effect.

2. Effect of confinement of film boiling during quenching on materials properties. It has been observed that confinement of the film boiling regime in quenching will have a significant influence on the microstructural evolution of metals. The present study will focus on investigating the influence of various active and passive techniques in tuning the material properties. This study will have immense application in the development of application-based material by tuning their property. Based on these studies, in a later stage, he would also like to experimentally investigate the effect of patterned surface in solar hybrid systems for power generation and desalination. This would require collaborations with other Research Groups specializing in experimental analysis. He hope that his research and academic training will help in developing solutions to real-world problems. He wants to encourage the student community to use their acquired knowledge for improving society so that they could use their academic and research training for developing devices like portable desalination systems that help in reducing the water problems faced by rural people. This will also be aimed at enhancing the skills of the students and encourage them to be entrepreneurs.

Dr. Srinu Gangolu-- His research plans are as follows:

- 1) Development of Creep Data for Indigenous Alloy 617M for Advanced Ultra Super Critical power plant
- 2) Grain refinement by sever plastic deformation and its effect on superplastic behavior of Mg Alloys.
- 3) Constitutive equation relationship and development of processing maps for Biomedical Materials

The research funding will be acquired to develop thermo-mechanical processing equipment like Gleeble and Collaboration with industries and other R&D centres in the country and abroad. In view of strong interaction in a big research group at IIT Bombay, he had a chance to know closely range of research activities in the area of mechanical metallurgy of various materials which can be taken to their further heights with little efforts. So, he finds himself in a position to be really very busy in research and teaching taking them as complimentary to each other.

Dr. Saleel Ismail--It is proposed to conduct extensive experimental studies on solar Humidification-Dehumidification Distillation (HDD) using a set up that is currently being fabricated. Analytical studies in this area are currently progressing. Furthermore, his planned topic of research is hydrogen fuelled IC engines. A research proposal is being drafted for this and funding will be sought from DST-SERB. Also, an existing engine in the Heat Engines lab is being modified to conduct preliminary studies.

Dr. M Srinivas--He has planned to carry research basically with the help of PG & Ph.D. students. As per his specialization in research, solar energy related topics will be considered for research. Currently two Ph. D and two M. Tech students are under his supervision for their thesis work. Three more Ph.D. students and at least two

M. Tech students per year will be taken for guidance. Research topics for coming five years includes:

- 1: PV/T Solar air heaters.
- 2. Solar cooker integrated with PV panels.
- 3. Solar still integrated with PV panels.

Solar systems integrated with PV panels or any two individual systems, when combined, such systems are called Hybrid systems.

The main objective of Hybrid systems is reduction in space required and increased overall efficiency.

PV/T Solar air heaters

These systems are used for obtaining hot air for drying agricultural products and electrical energy (DC Power) for running fan for circulation of air within the dryer will be carried out.

Different flow patterns will be considered for investigation with respect to overall performance of integrated systems.

PV panels of glass to glass type will be used instead of glass to tedlar type, in order to increase overall performance of the system.

Solar cooker integrated with PV panels.

Performance investigation of solar cookers with flat plate reflectors will be considered. This study includes modelling and simulation of solar cooker with booster mirrors. Booster mirrors made of glass to glass PV panels will be used for both thermal energy and electrical energy production. Investigation of performance of solar cooker with varying pressure that is below atmospheric pressures will be considered. As the boiling point temperature of water decreases with decreasing pressure, this idea is considered for further study. Investigation on food quality with respect to nutrition values both at low pressures and at atmospheric pressures will be carried out. Energy stored in PCM encapsulations for pre heating the food material for further cooking will be studied. If cooking at lower pressure gives good results the same idea will be scaled up for steam generation in steam power plants.

Integrated solar still with solar chimney.

Performance study of ISSSC with wired mesh on the absorber plate will be carried out for its performance analysis. Ansys Fluent analysis for optimum dimensions of both absorber plate and wired mesh will be done. Effect of water level under these conditions on the absorber plate will be analyzed. Project proposals will be submitted to external funding agencies with these topics for further studies and research. Research scholars and busy students will be guided on these topics for their thesis works. The research findings will be communicated to good journals for publications.

Dr. T. J. Sarviththama Jothi--His research objective is to understand the noise emissions during the interactions of the flow over the surface, and to deduce the methods for their mitigation. Some examples of flow-surface interactions are wall jets, flow past cylinder, airfoils, etc. In the recent past, the noise emission norms from the regulatory bodies are very stringent and demands for quieter flow appliances. Presently, he is carrying out research in the field of noise emission characteristics of wall jets, airfoils and other bodies. Further, wall jets are widely investigated to understand the flow turbulence, mixing characteristics, evolution of flow structures that would be helpful in designing numerous practical applications. He has completed one DST project on estimating the aeroacoustics characteristics of airfoils. The other project from KSCSTE is ongoing. He has built an experimental facility for carrying aeroacoustic experiments that includes anechoic chamber, open jet test facility, etc. he has also introduced himself in the research field of combustion and fabricated an experimental setup for flame propagation. He has supervised 2 PhD students (1 completed and 1 submitted), and 5 are ongoing. Therefore, he plans to continue his research in this field for a long term. Based on these research topics, he has applied for project grants to DST, NIWE, and ISRO, and the review is under process. Further, the facility that is being developed for noise studies are unique. This facility can be utilized for the consultancy projects in the years to come.

Dr. Devendra Kumar Yadav--His major area of research includes supply chain management, disaster risk reduction, and Industry 4.0 application in Industrial Engineering domains. Presently he is working on multi-

objective optimization problem for last mile location delivery of relief services in an emergency scenario including natural disasters.

Dr. Simon Peter–Numerical simulations for vortex-induced vibration.

DEPARTMENT OF MATHAMATICS

a. Ph. Ds completed under Existing Scheme during the period

Total: 10 Nos

b. On-going Ph. Ds under the Existing Scheme

Total: 49 Nos

DEPARTMENT OF CHEMISTRY

a. Ph. Ds completed under Existing Scheme during the period

Total: 5 Nos

b. On-going Ph. Ds under the Existing Scheme

Total: 24 Nos

c. Proposed Ph.D. programmes

I have submitted three electives for the PhD students for approval in BoG meeting as follows.

Dr. Chinna ayya Swamy P.

- 1. Main Group Organometallic Chemistry
- 2. Metal Catalysed Asymmetric Synthesis
- 3. Supramolecular Chemistry

DEPARTMENT OF PHYSICS

a. Ph. D completed

Total: 8Nos

b. On-going Ph. D

Total: 35 Nos

c. Proposed plan for research

In addition to the already existing research labs in the areas of Organic and Molecular Electronics, Photonics and Laser Physics, Computational modeling of materials, Soft condensed Matter, Nanotechnology, Solar astrophysics, Diamond related materials, Theoretical high energy physics, organic solar cells, Multifunctional nanostructured materials, Optofludics, Raman spectroscopy, the department is developing an Advanced technological Laboratory with multidisciplinary thrust. This lab will promote and coordinate interdisciplinary among the department faculty in the above areas and also provide access to BTech EP students for their tryst with cutting edge technological skills. This lab will be modeled in tune with MHRD suggestion to train students for Prime Minister Research Fellowships and other employability skills.

SCHOOL OF METERIAL SCIENCE AND ENGINEERING

- a. Ph. Ds completed under Existing Scheme during the period Total: 4 Nos
- **D. On-going Ph. Ds under the Existing Scheme** Total: 32 Nos

SCHOOL OF MANAGEMENT STUDIES

a. Ph. Ds completed under Existing Scheme

Total: 5 Nos

b. On-going Ph. Ds under the Existing Scheme

Total: 19 Nos

c. Proposed plan for research

Sl. No	Name of the Faculty	Proposed Plan for Research	
1	Dr. T K Suresh Babu Professor	Performance analysis of corporate sector	
2	Dr. T Radha Ramanan Associate Professor	Entrepreneurship and Agricultural Supply Chain	
3	Dr. Muhammad Shafi Assoc Professor	Comparative Study of Financial Services with special reference to Insurance Services worldwide under FDI regime. Feasibility study of Thakaful Insurance in India	
4	Dr. Sunitha S Asst. Professor	Financial literacy and financial inclusion	
5	Dr. Preeti Navaneeth Asst. Professor	Theatre	
6	Dr. Althaf S Asst. Professor	Health Econometrics Building an Urban Database for India on the lines of SHRUG dataset Furthering spatial economic research on India by investigating economic and policy questions exploiting the emergence of novel Remote Sensing datasets and open source GIS/python possibilities Entrepreneurship questions	
7	Dr. Sreejith S S Asst. Professor	Scope of Contingency Workers and Gig Economy Skill Obsolescence Developing a Behavioral Science Laboratory	
8	Dr. Reju George Mathew Asst. Professor	Establishing a Humanities Lab	
9	Dr. Nithya M	Exploring the role of branding in the social media	

Asst.	Professor

SCHOOL OF BIOTECHNOLOGY

a.	Ph. D	s completed	under Existing	scheme	during	the	period

Total: 9 Nos

b. On-going Ph. Ds under the Existing Scheme

Total: 23 Nos

c. Proposed Ph.D. Programmes

Research is planned in the following areas

- 1. Gene Regulation
- 2. Molecular Genetics
- 3. Protein Folding
- 4. Protein Engineering
- 5. Genetic Engineering
- 6. Bio modeling and Drug Design
- 7. Plant Molecular Biology
- 8. Neurobiology
- 9. Immuno Technology
- 10. Enzyme Technology
- 11. Cell Biology
- 12. Cancer Research
- 13. Biofuel Research
- 14. Bioprospecting
- 15. Bio-nanotechnology
- 16. Tissue engineering
- 17. Stem cell technology

5.2 DETAILS OF PH. Ds DONE SO FAR

Demontroomt	No. of Ph. D	Scheme		
Department	Completed	QIP	FT	РТ
Architecture	8	1	3	4
Chemical Engineering	38	0	38	0
Civil Engineering	69	20	27	22
Computer Sciece Engineering	43	4	23	16

Electrical engineering	135	25	4 7	63
Electronics and Communication Engineering	82	24	43	15
Mechanical Engineering	101	15	53	33
Mathamatics	62	2	39	21
School of Material Science Engineering	26	0	25	1
School of Management Studies	10	0	7	3
School of Biotechnology	9	0	9	0

5.3 SPONSORED R& D PROJECTS

Sl.	Project Title	Funding	PI and	Project Cost
No.		Agency	Department	(Rs.)
1	 "GaN based High Gain DC/DC Converter fed Multi-level Inverter for UPS Application" under National Mission on Power Electronics Technology Phase-III (NaMPET-III) programme. 	Ministry of Electronics & Information Technology (MeitY) -	Dr. Kumaravel S, Asst. Professor, EED	3848000
2	"Proactive Monitoring of Online Social Network for Prevention of Crime against Women and Children (PMOPCWC)	Govt. of India, Ministy of Home Affairs (CIS Division), Bureau of Police Research & Development	Dr. S.D. Madhu Kumar, Professor, CSED	5000000
3	"To develop a software for linear and nonlinear static analysis of structures using Applied Element Method"	ISRO RESPOND	Dr. Praveen Nagarajan, Professor, Civil Engg.	1388000
4	"Behaviour of Steel Fibre Reinforced Rubberized Concrete deep Beams"	KSCSTE	Dr.Praveen Nagarajan, Professor CED	590000

5	" Development of desalination system using selectively patterned solar absorber".	Directorate of Environment and Climate Change	Dr. Sujith Kumar C.S Assistant Professor MED	1375000
6	"Image based Smart Parking Management for Intelligent Transportation System "	KSCSTE	Dr. M Harikrishna Assistant Professor, CED	945000
7	"Development of an alternative fluid to transformer mineral oil "	KSCSTE	Dr. Preetha P Assoc. Professor EED	570000
8	"Flood forecasting using hybrid wavelet- ANN and wavelet-SVM models" under ETP (Sanctioned by KSCSTE)	KSCSTE	Dr. Chithra N R Assist. Professor CED	590000
9	"Development of a decision support system for multimodal freight transportation planning with a special application	KSCSTE	Shri. Anoop K P Research Scholar MED	300000
10	"Development of Organic Oil based Mangetorheological (MR) Fluid and Experimenting Surface Tempering Effect on the Magnetoheological Break System "	KSCSTE	Shri. Rakesh Erappa Jinaga Ph.D Research Scholar MED	400000
11	"Risk assessment of nanoparticle accumulation in soils: Effects of engineered metal oxide nanoparticles on soil bacterial communities, soil microbial processes and evaluation of phytotoxicity using genomic approaches"	NASF	Dr. V. Sajith Asso. Professor & Head, SMSE	7420888
12	" Investigation of shoreline stability along the Kerala coast using geospatial technologies for sustainable coastal protection measures".	Directorate of Environment and Climate Change Govt. of Kerala	Dr.K V Anand Assistant Professor CED	1320000
13	R&D Project with Aryaka Networks India Pvt Ltd	Aryaka Networks India Pvt Ltd	Dr. S.D. Madhu Kumar, Professor, CSED	826000

14	"Framework for flood mapping and to prepare an early warning system in the occurrence of flood for the northern region of Kerala"	DST	Dr. Chithra K Asst. Professor DAP	3211358
15	"Fabrication and characterization of ZnON based photo sensors"	SERB	Dr. Aswathi R Nair Asst. Professor ECED	2754350
16	DEPARTMENT OF CHEMISTRY-DST-FIST Programme	DST	HOD Chemistry	2000000
17	"Graphene - gold nanocluster conjugate with peptide aptamer as a sensor for early diagnosis of CVDs"	SERB - N-PDF	Ms. Resmi V Nair Post Doctoral Fellow SMSE (Mentor - Dr. Sandhyarani)	2131200
18	"Development of 2D heterostructures based wear and corrosion resistant- coatings"	SERB	Dr. Sajith V Assoc. Professor SMSE	2952400
19	"Development of Aluminum - Cerium - Scandium Alloys for High Temperature Creep Applications and its Experimental Investigations"	SERB	Dr. Srinu Gangolu Asst. Professor MED	3477400
20	"Development of a diagnostic tool for Cold Atmospheric Plasma"	SERB	Dr. Venu Anand, Asst. Professor, ECED	2537070
21	DEPARTMENT OF PHYSICS- DST -FIST Programme	DST	HOD Physics	15500000
22	"Design and Synthesis of novel single-atom catalysts for C-C bond cleavage and C-C bond formation reactions"	SERB	Dr. Raju Dey Asst. professor Chemistry	2746150
23	"Design and development of a deep learning based online-assistance system for psychologists by transforming patient transcripts to speech with emotions using text to speech synthesis"	SERB	Dr. Jay Prakash Asst. Professor CSED	1361800

	TOTAL			7,96,18,612
29	"Non- invasive measurement and monitoring of pulmonary congestion".	DST	Dr. Anup Aprem, Asst. Professor, Department of Electronics and Communication Engineering	3727396
28	"Interface Engineering of Rhenium Based Nano Heterstructures for enhanced hydrogen evolution reaction".	SERB	Dr. N. Sandhyarani, Profesor, SMSE (Principal Investigator)	3810000
27	"Design and Development of Solar PV Fed Efficient Universal Converter for V/F Drivers in smart Irrigation System"	CSIR	Dr. Kumaravel. S, Asst. Professor, EED(PI)	2016000
26	"A self – monitored, Indirect,Mixed – Mode Type Drying Unit Suitable for Agro – Product Drying Applications with Fixed – Temperature – Range"	KSCSTE	Shri. Arun K.Raj, Ph.D Research Scholar, as the PI and Dr. S. Jayaraj, Professor, MED as the Co-Investigator	250000
25	"A Novel Regenerative Drive Train based on Doubly fed Poly Phase Synchronous reluctance motor with active power factor connection capability"	SERB	Dr. Shreelakshmi. M.P, Asst. Professor, Department of Electrical Engineering	1835900
24	"Human Toll-Like Receptor 2-Selective Agonists : Design, Synthesis and Structure-Activity Relationship in Diverse Heterocyclic Scaffolds"	SERB	Dr. Janardhan Banothu Asst. Professor Chemistry	4734700

A total amount of **Rs. 7,96,18,612**/- has been received by the Institute as the external funding for the various R & D projects.

Consultancy and Testing

Following are the details of the amount received under Consultancy and Testing for the year 2020-21.

Sl. No.	Department	No. of Firms	Amount (Rs.)		
Consultancy					
1	DAP	3	6399275		
Testing					
1	CED	236	1285663		
	Total		76,84,938		

The major clients are Indian Railways, NTPC, NHAI, KSEB, PWD, etc.

A total amount of **Rs. 76,84,938** /- has been received as the testing and consultancy charges.

• Following are the details of **the MOU signed** by the Institute during the year 2020-21

Sl. No.	Name of the Organization/Institute	Date of Commencement
1	Sree Chithra Tirunal Institute for Medical Sciences and Technology	15.06.2020
2	Kerala State Drugs and Pharmaceuticals Ltd., Kalavoor	18.06.2020
3	Jawaharlal Institute of Postgraduate Medical29.06.2020Education & Research (JIPMER), Puducherry29.06.2020	
4	Department of Higher Education, Ministry of Human Resource Development Government of India	27.08.2020
5	Indian Institute of Technology Kanpur	26.10.2020
6	Sree Chithra Tirunal Institute for Medical Sciences and Technology, Trivandrum05.03.2021	
7	Aster MIMS, Kottakkal 10.03.2021	
8	Regional Academic Centre for Space, National Institute of Technology Karnataka (NITK), Suratkal	27.03.2021

Innovation

• Patents filed and granted during 2020-21.

16 patent applications were filed and 2 were granted during the year 2020-21.

5.4 INSTITUTE-INDUSTRY COLLABORATION

DEPARTMENT OF ARCHITECTURE

Sl. No.	Name	Firm & Description of the work
1	Dr. Kasthurba A.K.	• Renovation of Kandankulam Jubilee Hall for Kozhikode Corporation
		 Revitalization of Urban Heritage Core – Tali and Kuttichira for District Tourism Promotion Council DTPC Kozhikode

		• Caravan Park in Priyadarsini Tea Estate, Kunjome, Waynad- Feasibility report for State Tourism department.
		• Comprehensive development Plan for Tribal- Agriculture Tourism development at Cheengeri, Ambalavayal, Waynad.
2	Dr. P.P. Anilkumar	• Redevelopment Plan for Medical College Junction, Kozhikode.
		• Architectural Consultancy of a Shopping Mall cum Office building for Koyilandi Municipality.
		• Redesigning Entry Gate and Avenue for CWRDM Campus Kozhikode.
3	Dr. Naseer M.A.	 Architectural Consultancy: Shopping Mall cum Office building for Koyilandi Municipality.
4	Dr. Md. Firoz C.	 Police station at Kunnamangalam, Kozhikkode Nature of Work: Architectural Design. Architect: Dr.Mohammed Firoz.C, Contractor: ULCCS Client: Kerala PWD and Department of Home Affairs, Govt of Kerala Source of Fund: MLA fund of PTA Raheem MLA Total cost of the Project : 1.5 Crore Rupees Total Built up Area: 7000 Sqft
5	Dr. Chithra K	Redesigning Entry Gate and Avenue for CWRDM Campus Kozhikode
		• Master Plan for the Public Health Center for Koodaranji Panchayat
		• iON, Tata Consultancy Services, Subject Matter Expert. Description of work: Extend expertise on the subject for the projects of the company when requested.
6	Dr.Bimal P.	• iON, Tata Consultancy Services, Subject Matter Expert. Description of work: Extend expertise on the subject for the projects of the company when requested.
		• Architectural Consultancy: Shopping Mall cum Office building for Koyilandi Municipality.
		• Architectural Consultancy: Public Health Centre Building for Koodarnahi Panchayat.
7	Dr. Deepthi Bendi	• Consultancy: Kandamkulam Jubilee Hall - Renovation and retrofitting Client: Kozhikode Municipal Corporation, Kozhikode
8	Dr. Anjana Bhagyanathan	• NITCAA- Alumni sponsored project, 'Green Amphitheater' was designed and presentation and working drawings have been prepared. The estimated project cost is Rs. 21 lakhs.

DEPARTMENT OF CIVIL ENGINEERING

Sl. No	Name	Description of the work & firm
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1	Dr. T. M. Madhavan pillai, Dr. A. P. Shasikala, dr. P. V. Indira, Dr. Sajith a.s., dr. Robin davis p.	Third party auditing of railway bridges- phase i, Southern railway, palakkad division	
2	Dr. Robin davis p, Dr. A. P. Shasikala	Design of a building for automated answer script repository system, university of calicut	
3	Dr. S. Chandrakaran	Construction of mambaram bridge – approach and drainage construction, kannur	
4	Dr. S. Chandrakaran	Relocation of affected people from landslide and flood affected areas of wayanad. Inspection of land slide affected areas	
5	Dr. S. Chandrakaran	Soil testing for the proposed bridge	
6	Dr. S. Chandrakaran	Soil investigation for the propsed "pyip rehabitation of damaged main canal and under tunnel" in mattanur municipality	
7	Dr. S. Chandrakaran	Rectification and modification of nadapuram masjid	
8	Dr. S. Chandrakaran, Dr. Kodi rangaswamy	Study on landslide possibility of area located on mist inn resort, devikulam, palli vasal village, idukki district	
9	Dr. S. Chandrakaran	Identification and classification of soil	
10	Dr. Kodi rangaswamy	Testing of soils for filling purpose	
11	Dr. S. Chandrakaran	Construction of stadium at karimbummal panamaram, mananthavady, wayanad	
12	Dr. S. Chandrakaran, Dr. Renjitha mary varghese	Identification and classification of soil	
13	Dr. Santosh g thampi Dr, sathish kumar . D.	Assessment of the quantity of legacy waste at the brahmapuram solid waste dump yard of the Kochi municipal corporation	
14	Dr. Santosh g thampi Dr, sathish kumar . D.	Assessment of the quantity of legacy waste at the kureepuzha solid waste dump yard of the Kollam municipal corporation	
15	Dr. Santosh g thampi, Dr. Chithra. N. R., Dr. Sathish kumar. D.	Sand budgeting in chaliyar river, keri, Dept. Of water resources, govt. Of kerala	

DEPARTMENT OF ELECTRICAL ENGINEERING

Sl. No.	Name	Firm & Description of the work	
	Dr. Mithun M. S.	MyDent Dental Clinic, Kozhikode : Feasibility study for development	
1		of a camera-supported endo-motor system for root-canal procedure.	

DEPARTMENT OF ELECTRONICS AND COMMUNICATION

SI. No.	Name	Firm & Description of the work		
	Dr.P.S.Sathidevi &	FkL akehya Acadamy LIP Pasaarah Collaboration		
1	Dr. Sreelekha G	EkLakshya Academy LLP, Research Collaboration		

DEPARTMENT OF MECHANICAL ENGINEERING

Sl. No.	Name	Firm & Description of the work
1.	CIDAC	3D Printing
2.	MVR Cancer Centre	3D Printing
3.	Baby Memorial Hospital, Calicut	3D Printing
4.	BARC Mysore	Roughness and profile measurement
5.	Govt. Dental College Calicut	Roughness and profile measurement
6.	MES Dental College	Roughness and profile measurement
7.	KMCT Dental College	Roughness and profile measurement
8.	NIFFT	Roughness measurement
9.	King Khalid University (KSA)	King Khalid University (KSA), Roughness and profile measuremen
10.	Corelaed Technologies	Corelaed Technologies, 3D printing
11.	Saintgits College of Engineering Kottayam	Roughness and profile measurement
12.	Combat Vehicles Research & Development Establishment (CVRDE)	Characterization using Four ball tester
13.	Vimal Jyothi Engineering College, Jyothi Nagar, Chemperi, Kannur, Kerala	Hands on training on Supply Chain Management simulation using 'Supply Chain Role Play Game' developed in-house.
14.	HLL Management Academy, Thiruvananthapuram.	Hands on training Supply Chain Operation Simulation conducted for the participants of International Training Programme on "Procurement Management in Healthcare Sector" based on the software package, 'Supply Chain Role Play Game' developed in- house.
15.	CMTI, ARCI, RRCAT	Actively involved in academic collaboration with them and the signing of agreement/MoU is in the final stages
16.	TATA Motors	M Tech Collaborative project work.
17.	PK Steel Industry	Steel material testing

SCHOOL OF MATERIAL SCIENCE ENGINEERING

Sl. No.	Name	Firm & Description of the work	
1	Dr. Sajith V., Shij	National Thermal Power Corporation	
	Thomas and Dr. C.B	"Development of stable nanofluids for heat exchanger for improved	
	Sobhan	cooling in thermal power plants"	
		[56.6 Lakhs]	
2	Dr. Sajith V and	." Development of nano lubricants for diesel engines", Combat Vehicle	
	Dr.Shijo Thomas	Research and Development Establishment, (CVRDE), DRDO	
	-	[42.42 lakhs]	

6 INITIATIVES AGAINST DIFFERENT GOVERNMENT SCHEMES

6.1 EK BHARAT SHRESHTHA BHARAT

Faculty-in-charge: Dr. Jay Prakash

Institute implemented the directives from GoI by setting up Ek Bharat Shreshtha Bharat (EBSB) club. With the collaboration of National Institute of Technology Hamirpur (NITH), EBSB club organized several programmes in order to enhance interaction & promote mutual understanding between people of different states/UTs through the concept of state/UT pairing. Several programmes like webinars, essay writing competition, digital poster making competition, Quiz competition etc. were being jointly organized by NIT Calicut and NIT Hamirpur. Few important programmes, jointly organized by NITC and NITH are highlighted below.

- Webinar on "A Journey through the Socio Cultural Landscape of Kerala" (Speaker: Dr. Mohammed Firoz C, NITC)
- Webinar on "The People and practices of the land of the Gods" (Speaker: Dr. Saroj Thakur, NITH)
- Webinar on "COVID19 impact an NIT perspective" (Speaker: Dr. S. D. Madhukumar, NITC and Dr. Narottam Chand, NITH)
- Webinar on Malayalam Poetry through the ages (Speaker: Dr. V. P. JOY, IAS)
- Essay writing competition in collaboration with Azadi Ka Amrut Mahutsav (theme: India's freedom struggle)
- Digital poster making contest in collaboration with Azadi Ka Amrut Mahutsav (Theme: Freedom fighters and Unsung heroes)

6.2 UNNAT BHARAT ABHIYAN

Faculty-in-charge: Dr. Dr.P N Bala Subramanian

Institute has constituted Unnat Bharat Abhiyan Cell to look after the activities to implement the objectives of Unnat Bharat Abhiyan scheme. UBA cell used to organized several programmes such as webinars, awareness activities, blood donation camps etc. in rural areas. On September and October, Unnat Bharat Abhiyan Cell and NSS unit of NITC jointly organizing a webinar series on National Education Policy 2020.

6.3 SWACHH BHARAT ABHIYAN

NITC belives in the mission and vision of Swachh Bharat Abhiyan launched by the honorable Prime Minister on 2nd October 2014 on the ocassion of Mahatama Gandhi's 145th birth anniversary. NITC community took the pledge for a clean India. Institute conducted several activities to make the entire campus and surroundings cleaned. The activites are getting organized to aware the people about the Swachh Bharat Abhiyan and motivates to keep the surroundings neat and clean.

6.4 OFFICIAL LANGUAGE UNIT

Faculty-in-charge: Dr. Saurav Gupta

National Institute of Technology Calicut implemented the directives regarding official language (Rajbhasa) received from the MoE by setting up the official Language Unit (OLU). The OLU looked after the official transaction in the official language (Rajbhasa). Apart from that, OLU motivates the employees and students to participate in several programmes organized by different other institutes/agencies regarding the same.

6.5 FIT INDIA

The sports and Fitness club organized 'Fit India Freedom Run' during October. As part of Gandhi Jayanti, 2020, NSS NITC organized a Gandhi quiz from September 22nd to 27^t, incorporating students from different schools and colleges around India. The quiz was conducted through different online platforms. Besides, in connection with Fit India Freedom run, NSS also organized 'My TREE FOR THE YEARS TO COME' programme. The event was inaugurated by Dr.P.S.Sathidevi, director in charge, NIT Calicut on 1st October 2020. Sites where cleaned and saplings were planted in front of every department building.

7 THE COUNCIL, BOG AND OTHER COMMITTEES (From Registrar)

Dr. Sathi Devi P S	Deputy Director	Professor
Dr. Ashok S	Dean (R&C)	Professor
Dr. Jeevama Jacob	Dean (AA&IR)	Professor
Dr. M V L R Anjaneyulu	Dean(P&D)	Professor
Dr. Madhu Kumar S D	Dean(SW)	Professor
Dr. Saly George	Dean(Academics)	Professor
Dr. T M Madhavan Pillai	Professor	Professor
Dr. Chandrakaran S	Professor (HAG)	Professor
Dr. Indira P V	Professor (HAG)	Professor
Dr. Santhosh G Thambi	Professor (HAG)	Professor
Dr. Unnikrishnan	Professor (HAG)	Professor
Dr. Lillykutty Jacob	Professor (HAG)	Professor
Dr. Paul Joseph K	Professor (HAG)	Professor
Dr. Jayaraj S	Professor (HAG)	Professor
Dr. Jose Mathew	Professor (HAG)	Professor
Dr. Muraleedharan C	Professor (HAG)	Professor
Dr. R Sridharan	Professor (HAG)	Professor
Dr. Predeep P	Professor (HAG)	Professor
Dr. C B Sobhan	Professor (HAG)	Professor
Dr. J.Sudha Kumar	Professor	Professor
Dr. Krishnamurthy K	Professor	Professor

7.1 Institute's Council

Dr. Mohammed Ameen A M	Professor	Professor
Dr. Praveen Nagarajan	Professor	Professor
Dr. Sankar N	Professor	Professor
Dr. Shashikala A P	Professor	Professor
Dr. Lity Alen Varghese	Professor	Professor
Dr. Shiny Joseph	Professor	Professor
Dr. Sivasubramanian V	Professor	Professor
Dr. Abdul Nazeer K A	Professor	Professor
Dr. Priya Chandran	Professor	Professor
Dr. Vineeth Kumar P	Professor	Professor
Dr. Lakshmi C	Professor	Professor
Dr. Lisa Sreejith	Professor	Professor
Dr. Anil Kumar P P	Professor	Professor
Dr. Kasturba A K	Professor	Professor
Dr. Naseer M A	Professor	Professor
Dr. Ali C.K	Professor	Professor
Dr. Babu A V	Professor	Professor
Dr. Deepthi P P	Professor	Professor
Dr. P C Subramanian	Professor	Professor
Dr. Rijil Ramchand	Professor	Professor
Dr. Sreelekha G	Professor	Professor
Dr. Elizabeth P Cheriyan	Professor	Professor
Dr. Susy Thomas	Professor	Professor
Dr. Jacob M J	Professor	Professor
Dr. Jessy John C	Professor	Professor
Dr. M S Sunitha	Professor	Professor
Dr. Satyananda Panda	Professor	Professor
Dr. Sunil Jacob John	Professor	Professor
Dr. A Shaija	Professor	Professor
Dr. Biju T Kuzhiveli	Professor	Professor
Dr. Joseph M A	Professor	Professor
Dr. Joy M L	Professor	Professor
Dr. Madhusudanan Pillai V	Professor	Professor
Dr. Manu R	Professor	Professor
Dr. P K Rajendra Kumar	Professor	Professor
Dr. Chandrasekharan K	Dean (FW)	Professor
Dr. Raghu Chatanathodi	Professor	Professor
Dr. Ravi Varma Mundakkara Kovilakam	Professor	Professor
Dr. A Santhiagu Dr. M D Anaul Kabir	Professor Professor	Professor Professor
	Professor Professor	Professor
Dr. Rajanikant G Krishnamurthy	Professor	Professor
Dr. N Sandhyarani Dr. T K Suresh Babu		Professor
Dr. 1 K Suresh Babu Dr. Sameer S M	Professor Professor	Professor
		External Member
Prof. Balaji R Jagirdar	IISc Bangalore	
Prof. Nandita Dasgupta	IIT Madras	External Member
Prof. Rowena Robinson	IIT Bombay	External Member
Lt Col Pankajakshan.K (Retd)	Registrar	Secretary

7.2 BOARD OF GOVERNORS

Chairperson	Shri.Gajjala Yoganand		
	Dr. Sivaji Chakravorti Director (up to 18/08/2020)		
Ex. Officio Member	Dr. P.S.Sathidevi, Director (I/c), (from 18/08/2020) National Institute of Technology, Calicut		
Member	Shri. Madan Mohan Special Secretary or Additional Secretary or Joint Secretary dealing with Technical Education, Department of Higher Education, Ministry of Education, Government of India.		
Member	Ms. Darshana Momaya Dabral Financial Advisor, Department of Higher Education, Ministry of Education, Government of India		
Member	NIT Council Nominee (Vacant)		
Member	NIT Council Nominee (Vacant)		
Member	Dr. P.P.Anil Kumar, Professor & Head, Department of Architecture & Planning. NIT Calicut Nominee of Senate		
Member	Dr.Shijo Thomas, Assistant Professor, School of Material Science & Engineering NIT Calicut. Nominee of Senate		
Member	 Shri.Raveendran Kasturi, Group CEO, Uralungal Labour Contract Co-Operative Society & UL Cyber Park & UL Technology Solutions (ULTS), Madappalli College.P.O., Vadakara, Kozhikode Nominee of Government of Kerala (from 29/10/2018) 		
Member	 Shri.V.Naushad, Senior Vice President, Confederation of Indian Footwear Industries & MD, VKC,VKC Group Calicut. Nominee of Government of Kerala (from 29/10/2018) 		
Secretary	Lt Col Pankajakshan.K, (Rtd) Registrar, National Institute of Technology Calicut		

7.3 FINANCE COMMITTEE

Chairperson	Shri.Gajjala Yoganand		
	Dr.Sivaji Chakravorti Director (up to 18/08/2020)		
Ex. Officio Member	Dr.P.S.Sathidevi,		
	Director (I/c), (from 18/08/2020)		
	National Institute of Technology, Calicut		
	Special Secretary or Additional Secretary or Joint Secretary dealing with		
Member	Technical Education, Department of Higher Education, Ministry of		
	Education, Government of India.		
	Financial Advisor, Department of Higher Education, Ministry of		
Member	Education,		
	Government of India		
Member	NIT Council Nominee (Vacant)		
	Dr.Shijo Thomas,		
	Assistant Professor,		
Member	School of Material Science & Engineering		
	NIT Calicut.		
	Nominee of BoG		
	Lt Col Pankajakshan.K, (Rtd)		
Secretary	Registrar,		
	National Institute of Technology Calicut		

7.4 BUILDING AND WORKS COMMITTEE

Ex. Officio Chairman

Dr. Sivaji Chakravorti,

Director, National Institute of Technology Calicut (Kerala) up to 18/08/2020

Dr. P.S.Dathidevi,

Director, National Institute of Technology Calicut (Kerala)From 18.08.2020

Members :

2. Nominated by the Central Government not below the rank of Director /Deputy Secretary

3. Dr. M.A.Naseer , Dean (Planning & Development)

4. Mr.A.Mohammed, (Deputy Superintending Engineer, PWD Roads & Bridges, North Circle, Calicut 5. Mr.Chandrababu.P, (Deputy Chief Engineer, KSEB, Electrical Circle, Calicut) 6. Dr.P.P.Anilkumar, Professor Department of Architecture & Planning, NIT Calicut (Representing Board of Governors) Secretary 7. Lt Col Pankajakshan K (Retd), Registrar, National Institute of Technology Calicut

8 CONCESSIONS FOR SCs, STs, DIFFERENTLY ABLED STUDENTS

8.1 CONCESSIONS PROVIDED FOR STUDENTS

Educational Concession to SC/ST/OEC/SEBC (under KPCR) students: Students from Kerala are eligible for educational concessions from the SC & ST development Departments as per the norms of Government of Kerala. Students from other states can apply for scholarships as per the rules of the respective states. In addition, National scholarships are also offered to persons with disabilities for pursuing technical and professional courses for recognized institutions by the National Handicapped Finance and Development Corporation (NHFDC) Faridabad on behalf of Ministry of Social justice & Empowerment, Govt.of India subject to fulfill the conditions laid out by them. A New Central Sector Scholarship Scheme to the first top 12 SC and 5 ST students of Top Class Education given by the Central Government (Ministry of Social Justice and Empowerment & Ministry of Tribal Affairs, respectively) [i.e. Institute Tuition Fee + Boarding charges + Books & Stationery + Cost of a PC - (P-IV Computer, UPS, Printer, Multimedia)] based on their entrance rank. Family income limit is Rs.4.5 lakhs per annum. Merit cum Means Scholarship for eligible Minority Communities in Kerala and other states given by the Ministry of Minority Affairs, Govt. of India. District Merit Scholarships to eligible students in Kerala by the Directorate of Collegiate Education, Thiruvananthapuram. Central Sector Scholarship Scheme for eligible.

8.2 CONCESSIONS PROVIDED FOR STAFF

Faculty members are given concession in fee for PT

9 FINANCIAL STATUS (From DR (Finance))

9.1 Analysis of Plan and Non-Plan Grants

	Rs. In lakhs			
Particulars	2017-2018	2018-2019	2019-2020	2020-2021

Govt. of India –Grant (Non-Plan)	7388	18256	11640.10	13636.59
State Govt. Grant (Non-Plan)	-	-	-	-
Govt. of India Grant (Plan-General)	5952	376	362.56	500
Govt. of India (Plan-OSC)	-	-	-	-

9.2 Expenditure position for last three years

Particulars	Rs. in lakhs			
Faruculars	2017-2018	2018-2019	2019-2020	2020-2021
Expenditure	3483.81	1266.23	866.13	699.67
Expenditure - Non-Plan	11029.67	13736.20	14693.7	14879.43

10 CENTRAL FACILITIES AND SERVICES

10.1 Computer and IT Services

10.1.1 Central Computer Centre

Central Computer Centre (CCC) is the central facility in NIT Calicut which caters for the computing requirements of the whole community of this institution. The Centre has state of the art infrastructure with three fully operational terminals spanning over two floors of the building. Decision Support System (DSS) of the institute also operate from the Computer Centre building. The Centre has nearly 200 client machines & 30 workstations for usage. CCC hosts some of the high end servers and a parallel computing cluster machine. Servers include four DELL PowerEdge T620 which has a dual Hexa-core processor and HP ProLiant Rack server which has a dual Quad-core processor. Latest server Lenovo Think System SR650 having a V100 GPU card can run Deep Learning tasks. A state of the art Super Computing Facility with 25 Tera FLOPS computing power meet the research needs of the institute. This Hybrid cluster contains 1 master node and 13 compute nodes (out of which 6 nodes are GPU enabled) are interconnected through infiniband. Each GPU compute nodes contains 2 Tesla K20 GPU cards. All Compute nodes carry dual E5-2640 Intel chip as processors. The Facility can be accessible by all the departments and schools anywhere in the campus through networking. All Post graduate, Ph. D scholars and UG students (those who have computationally intensive projects) are using this facility for research activities. Some of the computational software's and packages for the other departments run from the servers maintained in the CCC as well. The centre possesses a bundle of software, packages for diversified applications. Centre is fully air-conditioned and has UPS power backup for the whole setup. The Centre works 16 hours a day (7am - 12am) 7 days a week except national holidays unless instructed otherwise.

10.1.2 Campus Networking Centre

The Campus Networking Centre (CNC) is the Central Facility providing the software, hardware and networking support to the entire student and staff community of NITC Campus, spread around 400 acres. CNC manages the Internet connectivity (both wired and wireless), Institute website, IP Phones and also provide hardware, software and all other IT related solutions for the entire Institute. The campus is interconnected with about 30 kms of fiber optic backbone network with 80 routed internal networks, managed by the Unified Threat Management system. The Centre is equipped with Firewall, Authentication Server, Log Analyser, Routers, Core Distribution switches, Domain Name Server, Web Servers, Proxy Servers, Antivirus central server and IP Phone Server etc. Presently the network is served by 1 Gbps of Internet connectivity provided by BSNL under NKN scheme of MHRD and a 100 Mbps backup by BSNL. All the hostels are served with Internet connectivity through wired mode. The Institute website is managed by CNC. CNC functions on a 24x7 basis 365 days without any holidays. IP Phones are installed in all academic and administrative sections. The IP Phones and IP Phone servers are also implemented, configured and managed by CNC. Hardware maintenance unit of CNC provides quality service support to minimize system downtime in the entire campus. The services include installation, troubleshooting and maintenance of computer and peripheral devices, software packages and operating system installations.

10.2 WORKSHOPS

CENTRAL WORKSHOP - FACILITIES AND WORKS UNDERTAKEN

The Central Workshop under the Department of Mechanical Engineering forms a central facility and it caters to the requirements of all departments. The facilities in Central Workshop are effectively utilized for the conduct of practical class for the students of all first year undergraduate programmes. The primary motive is to impart them with the basic ideas of manufacturing. For the UG students of Mechanical Engineering and Production Engineering programmes, advanced training in various skills during the higher semesters build up their confidence in practical fields of design and manufacturing. Workshop facilities are extended for carrying out UG/PG project works, research works requiring fabrication, assembly & testing, and consultancy related works

from various departments. Apart from the regular practical classes, Institute-wide requirements involving fabrication are carried out in central workshop with the help of experienced technical staff of the workshop. This centre has ample facilities to undertake consultancy and fabrication works in all manufacturing fields. The Workshop is divided into seven sections and the equipment, tools and machines available are as follows:

1. Machine Shop

CNC Lathe -1 CNC Vertical Machine Centre - 1 Lathes - 36 Milling machine - 2 Shaping machine - 7 Vertical Slotting machine - 1 Grinding machine - 3 Tool and Cutter grinder - 1 Drilling machine -2 Band saw cutting machine - 2

2. Carpentry section

Universal cutting machine -1 Wood turning lathe -3 Electric sander -1 Jig saw machine -1

3. Welding section

MIG welding -1 SMAW/TIG - 1 Arc welding set - 4 Gas welding set -2 Grinder -1 Portable flame cutter - 1 Welding rectifier -1 Plasma cutting machine - 1

4. Fitting section

Bench grinder -1 Surface plate -2 Band saw machine -1 Heavy duty drill machine -1 All-purpose saw -1 Multi-purpose mini hand drill grinder -1

5. Sheet metal section

Bending machine -1 Power cutting/shear -1 Spot welding machine -1 Edge folding machine -1 Circle cutting machine -1 Fly press-1 Pipe bending machine -1 Portable electric shear -1 Sander -1 Bench grinder - 1 Hand shear - 1 Nibbling machine -1 **6.** Black smithy Anvil - 14 Forges 6

Forges – 6 Universal cutting machine -1 Power hammer - 1 Blower -2 Pipe bending machine -01 Pneumatic forging power hammer -1

7. Foundry

Facility for sand preparation Diesel fired furnace -1 Hand tools set -15Ladles -2Crucibles -2Aluminum stir casting -1

10.3 EDUCATIONAL TECHNOLOGY & LIBRARY

Educational Technology & Library (ETL) presently comprises Central Library and Digital Library. Both the Library & Digital Library are working from 8 am to 11 pm on all days except Sundays and Public Holidays.

10.3.1 CENTRAL LIBRARY

CENTRAL LIBRARY offers its services to more than 8,350 users comprising undergraduate, postgraduate students, research scholars, faculty and employees from various Departments of the Institute/ Centres/Sections. The Library uses open source software KOHA for its operations. Collection is fully RFID tagged and offers Web OPAC service throughout the internet.

Current Print Holdings:-

(a) Print Books

SI. No.	Category	Books at the end of the year 2019-20	Booksaddedduringtheyear2020-21	Total books as on 31 st March 2021
1.	General books	106870	405	107275
2.	Specialsectionbooks for SC/ST	16086	209	16295
3.	Reference books	8173	6	8179
	Total	131129	620	131749

(b) Online Journals/Print Journals / Magazines/ Dailies

Sl. No.	Category	Magazines/Daili es during the	Journals/	Online & Print Journals/ Magazines/ Dailies as on 31 st
1	National journals/Dailies/Weekly	44	12	12
2.	International Online Journals	3890	4206	4354
	Total	3934	4218	4366

10.3.2 DIGITAL LIBRARY (www.library.nitc.ac.in)

The Digital Library - NALANDA- serves members of the campus in meeting their academic & research needs by providing timely and up-to-date information with value added services in all the areas of Science/Engineering/Technology. Apart from the Digital Library Reading Room, members can access Nalanda from the entire campus.

Other services:

- Web-OPAC: Allowing access from inside as well as outside the campus
- DSpace: For the project / thesis reports of NITC students an ETD server (electronic theses and dissertations) maintained using Dspace (an open-source institutional repository package) has been initiated. All abstracts are visible for everyone within NITC and privileged access is given to the full contents. International standards (BIS and ASTM) could also be accessed from this server; access being restricted to NITC intranet.
- NPTEL (National Program on Technology Enhanced Learning) : A local copy of all NPTEL course materials (provided by IIT Madras, already available in public domain) which could be accessed from within the Digital Library.
- Turnitin online plagiarism checker for the use of researchers of the institute.
- Grammarly- An online grammar checking, spell checking, and plagiarism detection platform for the English language developed by Grammarly. Premium Account facility for all students, faculty.
- Eduserver : An educational server on the open source moodle platform is customized for the faculty of all departments to run their courses. This server will be accessible outside NITC too. This will provide a facility for faculty to offer common and additional online topics/subjects as part of the curriculum including on-line tutorials, evaluation and simulation etc.
- VuFind :E-Book Search Facility

EDUSERVER

This will provide facilities for faculty to offer common and additional online topics/subjects as the part of the curriculum including on-line tutorials, evaluation and simulation etc.

KNIMBUS

A Complete Digital Library Platform for Personalized Learning and Research. Remote access to all the eResources on any device is a personalized and convenient experience for users. Knimbus integrates our institute subscriptions, open access content, library holdings, academic and skill-oriented courses on an "easy-to-find" platform empowering libraries and classroom teaching.

10.3.3 E-Resources-subscription

Category	Total as on March 2020	Total as on 31st March 2021
Online e-Journals (through ESS consortia)	2,144	2,144
E-books	4,432	4,683
E-Journals	2,117	2210
E-Databases/Web based Tool	7	10
Standards (ASTM, BIS)	31,647	31,647
NITC Resources (Faculty reports, Students' thesis, Course notes)	5,467	6852
Total	45,814	47,356
Journal Back Vol.s	14,411	14,411
Grand Total	60,225	61,767

Major Hardware / Facilities of Digital Library

- □ 3 Dell Precision T3610 Workstations
- □ 1 Dell Poweredge T620 Server
- □ 3 Dell Poweredge T320 Server
- □ 36 Dell Optiplex 7010 Client Machines
- □ 14 HP AIO Client machines
- □ 2 Optiplex 5270 Client machines
- □ 3 HP ProOne 400 Client Machines
- 16 IP Camera, Network video recorder,28 port Dlink switch
 1 Canon MF 244DWPrinter
- □ 2 Datamax Barcode Printer
- □ 30 KVA Socomec MASBC UPS
- □ 5 Cisco SRS 2024 switches

10.3.4 Programmes organized by ETL during 2020-21

• Knimbus Orientation 19-06-2020

Staff position

Chairman (ETL)	: Dr. Raghu C
Vice Chairperson (ETL)	: Dr. Pournami P N
Librarian (Gr.I)	: Vacant
Librarian (Gr.II)	: Vacant
Librarian (Gr.III)	: Vacant

Sweety Mathew	Librarian Gr.III (Librarian In-charge, Rtd. on 31.05.2020)
J Sobhana	Librarian Gr IV (Librarian in-charge)
T Jayarajan	Librarian Gr IV

C Latha	Librarian Gr IV (Rtd on Jan. 31st, 2021)
K P shaju	Librarian Gr IV
M K Chandramohan	Graphic Artist
K Jayaraman	Offset Machine Operator

Supporting office staff

Vinod K P	Watchman cum Gardener
Project Digital Library Technical Assistant	2
Project Digital Library Technical Assistant	3
Adhoc Library Assistant	12
Adhoc Library Helper	7
Adhoc Office Assistant	2

10.4 LABORATORIES

DEPARTMENT OF ARCHITECTURE & PLANNING

- 1) Interactive Media Design Lab
- 2) Geo-Informatics Lab
- 3) Material Testing Lab
- 4) Building Science Lab
- 5) CAD Lab
- 6) Creative Arts Lab
- 7) Materials Museum

DEPARTMENT OF CIVIL ENGINEERING

- CAD Lab
- Concrete Lab
- Environmental Engineering Lab
- Geotechnical Engineering Lab.
- Offshore Structures Lab
- Strength of Materials Lab.
- Structural Engineering Lab
- Surveying Lab
- Transportation Engineering Lab
- Water Resources Engineering Lab

DEPARTMENT OF CHEMICAL ENGINEERING

1. Chemical Analysis Laboratory

- 2. Fluid Mechanics Laboratory
- 3. Heat Transfer Laboratory
- 4. Mechanical Operations Lab
- 5. Mass Transfer Laboratory
- 6. Chemical Reaction Engineering Lab
- 7. Process Dynamics and Control Lab
- 8. Instrumentation and Research Lab
- 9. Computer Lab

DEPARTMENT OF CHEMISTRY

- 1. B. Tech Laboratory
- 2. PG Chemistry Laboratory
- 3. PG Instrumentation Laboratory
- 4. Sophisticated Instrumentation Laboratory
- 5. Thermal Analysis Laboratory
- 6. Computational laboratory
- 7. Polymer Science & Technology Research Laboratory
- 8. Soft Materials Research Laboratory
- 9. Materials Research Laboratory
- 10. Bio-Organic Research Laboratory
- 11. Bio-Inorganic Materials Research Laboratory
- 12. Inorganic and Bioinorganic Research Laboratory
- 13. Theoretical and Computational Chemistry Research Laboratory
- 14. Heterocyclic Chemistry Laboratory
- 15. Organic Synthesis and Catalysis Laboratory
- 16. Laboratory for Energetic and Energy Materials Research
- 17. Laboratory for Advanced Materials and Applied Research

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SOFTWARE SYSTEMS LABORATORY

This lab was established in 2006. The objective of this laboratory is to provide the infrastructure for conducting the regular labs (Data Structures Lab, DBMS Lab, Network Lab, Compiler Lab, OS Lab and Programming Languages Lab) and project works for the BTech. Program. The lab is equipped with state of the art servers, desktops and software (Linux and compilers for C, C++, Perl, TCL, PHP, Java, Python, etc.)

Location : ITL 302, IT Laboratory Complex

Faculty Incharge : Dr. Hiran V Nath, Dr. Jimmy Jose Assistant Professor, CSED

Staff Incharge : Ajayachandran V R, Computer Operator, CSED

Facilities

SERVERS

1. ATHENA SERVER

Dell EMC PowerEdge R740 server Processor : 2 x SKYLAKE 16 Cores Intel Xeon Gold 6130 @ 2.60GHz RAM : 64 GB DDR4 Storage : 6TB

2. ARTEMIS SERVER

Dell PowerEdge2900Series rack server Processor : Intel® Xeon® CPU E5-2697 V2@ 2.70GHz RAM : 8GB DDR4 HDD : 1 TB

3.EDU SERVER

FUJITSU Primergy PY RX300S8 8X2.5 Dual system board for Xeon DP processor Processor : Intel Xeon E52697v2 12C/24T 2.7GHz 30MB RAM : 64GB DDR3 RAM HDD : 5x500GB SAS HDD RAID Ctrl SAS 6G 5/6 512MB (D2616)

Dell PowerEdge2950Series rack server Processor : Intel® Xeon® CPU E5430@ 2.66GHz RAM : 8GB, HDD : 292.3GB(Present)

4.MIRROR SERVER

FUJITSU Primergy PY RX300S8 Server Processor :Intel® Xeon® CPU E53-2697 V2@2.70GHz RAM : 64 GB DDR4 HDD : 2.5 TB

5. MEDIA SERVER

Dell EMC Poweredge R740 server Processor : 2 x SKYLAKE 16 Cores Intel Xeon Gold 6130 @ 2.1GHz RAM : 64 GB Graphics : Quadro NVS 290/pci/SSE2 HDD : 4 TB

WORKSTATION

FUJITSU CELSIUS M740power Processor : Xeon E52630v3 2.40GHz 20MB Turbo Boost Chipset: Intel C612 RAM : 16GB DDR4 RAM Graphics : NVIDIA Tesla K20 and NVIDIA Quadro K620 2GB HDD :2x1 TB SATA HDD

SYSTEMS

1. NODE SYSTEMS (75 Nos)

Dell Optiplex 7010 Processor : Intel Core i53470 CPU@3.20GHz RAM : 4 GB HDD : 500 GB

2. SYSTEMS FOR OFFICE USE (7 Nos)

Dell Optiplex 755 Processor : Intelcore2DouCPUE4500@2.2GHz x2 RAM : 512 MB HDD : 80 GB

Lenovo A10 Thinkcentre M73z Processor : Intel Core i3 3 GHz RAM : 4 GB DDR3 HDD : 500 GB SATA

PRINTER

1. Laserjet M1136 Multifunction Printer 2. Canon LBP 2900B

Wi-Fi ROUTERS (2 Nos)

1. NETGEAR N600 Wireless Dual Band Gigabit Router 2. Mi Router 3C

NETWORK SYSTEMS LABORATORY

The lab was established in 2006. The objective of this laboratory is to provide the infrastructure for conducting the regular labs (Data Structures Lab, DBMS Lab, Network Lab, Hardware Lab and Programming Languages Lab) and project works for the MCA and B Tech Lab sessions. The lab is equipped with state of the art servers, desktops and software (Linux and compilers for C, C++, Schema, TCL, PHP, Java etc). The lab is equipped with state of the art computing facilities with wired and wireless Internet connectivity.

Location: ITL 304, IT Laboratory Complex Faculty In charge: Dr. Jayaraj P.B Assistant Professor, CSED Staff In charge: Biju Francis Senior Mechanic, CSED

Facilities

SERVERS

1. ANDROMEDA SERVER

FUJITSU Primergy PY RX300S8 8*2.5 CPU : INTEL Xeon E5-2697v2 12c/24T 2.7 GHz 30 MB RAM : 8GB 1*8 DDR3-1600 HDD : 2.5 TB RAID : 5+1

2. ANDROMEDA BACKUP SERVER

Dell PowerEdge 2950 Series Server CPU : Intel(R) Xeon CPU E5430@2.66GHz RAM : 8GB HDD : 292.3 GB (Present) RAID : 2+1

3. SERVER 3

Dell PowerEdge 2950 Series server CPU : Intel Xeon CPU E5430@2.66GHz RAM : 8GB HDD : 438.5GB (Present)

WORKSTATIONS

1.FUJITSU CELSIUS M740power

CPU : INTEL C612, board D3348 RAM : 4GB DDR4 HDD : 1000 GB Graphics card NVIDIA Quadro K620 2 GB

2. DELL PRECISION T3610 (2 Nos.)

CPU : Intel(R) Xeon(R) CPU E5-1620 v2 @ 3.70GHz RAM : 8GB HDD : 1TB Graphics Card : NVIDIA Quadrok200 (2GB)

SYSTEMS

- 1. NODE SYSTEMS (72 Nos) Dell OptiPlex 7010 Processor : Intel Core i53470 CPU@3.20GHz RAM : 4 GB HDD : 500 GB
- 2. SYSTEMS FOR OFFICE USE(4)
 - i. HP ProDesk G2 600 (Faculty machine) Processor : Intel[®] Core[™] i5-6500 <u>CPU@3.20GHz</u> RAM : 8 GB
 - ii. Dell OptiPlex 7010(2 Nos)Processor : Intel Intel Core i5-3470 CPU-3.20GHz*4RAM : 4 GB
 - iii. Lenovo A10 ThinkCentre M73z

Processor : Intel Core i3 3 GHz RAM : 4 GB DDR3 HDD : 500 GB SATA

3. PRINTER

i. Brother Mono Laser Multifunction Printer Dcp-7065Dn

HARDWARE & EMBEDDED SYSTEMS LABORATORY

This lab was established in 2006. The objective of this laboratory is to provide the infrastructure for conducting the regular labs (Hardware Lab) and project works for the B Tech and MCA Programs. The lab is equipped with the desktops, IC Tester, Trainer Kits, ARM processor and power supply. The lab is equipped with state of the art computing facilities with wired and wireless Internet connectivity.

Location: ITL 301, IT Laboratory Complex

Faculty in charge: Dr. Saidalavi Kalady, Associate Professor, CSED, T M Srinivasa, Assistant Professor, CSED

Staff in charge: Sreeja V, Senior Mechanic, CSED

FACILITIES

- 1. DESKTOP COMPUTER (28 Nos)
 - i. Dell HW-OptiPlex-7010 (26 Nos) Memory: 3.8 GiB Processor: Intel® CoreTM i5-3470 CPU @ 3.20GHz × 4 Disk:480.4 GB
 - ii. Device name- Dell OptiPlex 7010
 Processor: Intel® Core TM i5-6500 CPU @ 3.20GHz
 RAM: 7.7 GiB
 Disk: 968.6 GB
 - iii. Lenovo A10 ThinkCentre M73z Processor: Intel Core i3 3 GHz RAM : 4 GB DDR3 HDD : 500 GB SATA
- 2. DIGITAL IC TRAINER (45 Nos.)
 7 segment LED display (2 nos.)
 Logic input switches (10 nos.)
 Logic status indicators (10 nos.)
 Bounce less Pulsar 1 Hz to 100 KHz TTL clocks.
 Breadboard 1 Nos.
- 3. ARM CORTEX M4 EMBEDDED DEVELOPMENT KIT (5 Nos)
- 4. IC TESTER (3 Nos) i. Digital IC Tester ii. Linear IC Tester
- 5. REGULATED DC POWER SUPPLY(MODEL LQ6324) (10 Nos.)

6. 3MHZ FUNCTION GENERATOR (10 Nos.)
i. 0.003Hz to 3MHz frequency range.
ii. 2mV to 20V pk-pk from 50 ohm or 600 ohm .
iii. Auxiliary TTL/CMOS output.

7. LAN-T TRAINER

8. LASER PRINTER:

HP JetPro MFP M521du

9. OSCILLOSCOPE (10 Nos.)

BIG DATA AND BIOCOMPUTING LABORATORY

This laboratory was established in 2009 with an objective of fostering research in the emerging area of Bioinformatics, Computational Biology and to provide the infrastructure for conducting the regular labs and project works for the M Tech. Program. The department has a long term objective of developing this into a 'Centre of Excellence in Big Data and Biocomputing' with collaboration from institutes of national and international repute. The lab is equipped with state of the art computing facilities with wired and wireless Internet connectivity.

Location: Second Floor, Central Computer Centre

Faculty in charge: Dr. Madhukumar S D, Dr. K A Abdul Nazeer, Dr.Gopakumar G

Staff in charge: Biju Francis, Senior Mechanic, CSED

FACILITIES

SERVER: 1 No.

HP ProLiant ML150 Gen9 Server CPU : Intel(R) Xeon CPU E5-2630 V3@ 2.40GHZ * 16 RAM : 62.8 GB HDD : 3.4 TB

SYSTEMS

1. NODE SYSTEMS (72 Nos.)

- HP 406 G1MT (50 Nos.)
 Processor: Intel Core i5-4590 CPU @3.30GHz * 4
 Disk : 500GB
 RAM : 4GB
- HP Prodesk 600 G2 SFF (12 Nos.)
 Processor: Intel Core i5-6500 CPU @3.20GHz * 4
 Disk : 1 TB
 RAM : 8GB
- HP Prodesk 600 G1 SFF (10 Nos.)
 Processor: Intel Core i5-4570 CPU @3.20GHz * 4
 Disk : 196.7GB
 RAM : 8GB

2. SYSTEMS FOR OFFICE USE (4 Nos.)

- HP Prodesk 600 G1 SFF (2 Nos.)
 Processor: Intel Core i5-4570 CPU @3.20GHz * 4
 Disk : 196.7GB
 RAM : 8GB
- DELL Optiplex 7010
 Processor: Intel Core i5-3470 CPU @3.20GHz * 4
 Disk : 381.5GB
 RAM : 4GB
- Acer Veriton
 Processor: Intel Pentium CPU @3.0GHz * 2
 Disk : 395.1GB
 RAM : 4GB

PRINTER

Laserjet Printer Brother HL-L2321D

Wi-Fi ROUTER

NETGEAR ProSAFE Wireless N Access Point

CLOUD COMPUTING LABORATORY

Established in 2010 as part of research projects in the field of Cloud Computing. This lab is currently being utilized by the first year MTech students and PhD students working in the area of Cloud Computing. At present the cloud computing research group is focusing on areas like Resource allocation in clouds, Cloud Security, Big Data Analytics, Software Defined Networks, Cloud Storage and Cloud for Telecom sector.

The laboratory is equipped with 25 desktop systems. The lab is equipped with state of the art computing facilities with wired and wireless Internet connectivity.

FACILITIES

Dell OptiPlex 3040 (24 Nos)
Processor: Intel® Core™ i5
Quad Core CPU@ 3.2 GHz
RAM : 8 GB
HDD : 500 GB
OS : Ubuntu 16.04

FUJITSU CELSIUS M740 Power (1No)

Processor: Intel Xeon E5-2630v3 2.40GHz 20MB Turbo Boost
RAM: 16GB
HDD: 2*1 TB
OS: Cent OS 6.6
HIGH-END PC

DELL PRECISION T3610 (1 Nos) Processor: Intel Xeon E51620v2 Quad Core HT3.76GHz Turbo RAM : 8 GB HDD : 1 TB OS: Ubuntu 16.04

DELL OPTIPLEX 7010 (2Nos) Processor: Intel Core i73770 Quad Core CPU@3.4GHz RAM : 16 GB HDD : 1TB OS : Ubuntu 16.04

DELL OPTIPLEX 755 (1 Nos) Processor: Intelcore2DouCPUE4500@2.2GHz x2 RAM : 2 GB OS : Ubuntu 16.04 Faculty in charge: Dr. Madhukumar S D, Associate Professor, CSED Staff in charge: Abdul Sathar V M , Senior Mechanic, CSED Location: MB 210, Main Building

MACHINE LEARNING LABORATORY

Established in 2003 as part of a project "Centre for Speech and Natural Language Processing", with a view to promote research activities in areas like Artificial Intelligence, Bioinformatics, Natural Language Processing, Knowledge based Systems and Information Retrieval. This lab is currently being utilized by the MTech students of the Department for their project and research activities. The lab is equipped with state of the art computing facilities with seamless wired and wireless Internet connectivity, and is functioning round-the-clock with students' assistance.

The laboratory is equipped with 3 servers, 35 desktops, a printer and a scanner. The lab is equipped with state of the art computing facilities with wired and wireless Internet connectivity.

Faculty In-charge: Dr. K A Abdul Nazeer, Professor, CSED

Staff In-charge: Abdul Sathar, Senior Mechanic, CSED

Location: MB 202, Main Building

SERVERS

Dell PowerEdge2950Series rack server(2 Nos.)

Processor: Intel® Xeon® CPU E5430@ 2.66GHz RAM : 8GB CPU Cores : 4 HDD : 292.3GB(Present) OS : Ubuntu 14.04(LTS)

1. Fujitsu Primergy RX 300 S8 1 No

Processor: Intel Xeon E5-2697v2 12C/24T 2.7GHz 30MB RAM : 64GB DDR3 HDD : 5*500GB OS : Cent OS 6.6

SYSTEMS (35 Nos)

1. DELL OPTIPLEX 7010 Desktop(30 Nos.)

Processor: Intel Core i5-3470 CPU@3.20GHz RAM : 4 GB HDD : 500 GB OS : Ubuntu 14.04(LTS)

2. DELL PRECISION T3610 Workstation (1 No)

Processor: Intel Xeon E51620Vz Quad core HT 3.7 GHz TURBO RAM: 8 GB HDD: 1 TB OS: Ubuntu 14.04(LTS)

3. DELL OPTIPLEX 7010 MT Desktop (High End) -2 Nos.

Processor: Intel Core i7-3770 Quad core CPU@3.4GHz RAM: 16 GB HDD: 1TB OS: Ubuntu 14.04(LTS)

4. DELL PRECISION T3400 (1 No)

Processor: Intelcore2.ExtremeCPUX9650@3.00GHzx4 RAM: 4 GB Graphics: Quadro NVS 290/pci/SSE2 HDD: 500 GB OS: Windows XP

IMAGE PROCESSING AND MULTIMEDIA LABORATORY

This lab was established in 2006. This lab is currently being utilized by the first year M Tech students of the Department for their project and course activities. The laboratory is equipped with 1 Cluster, 31 desktop, 2 Workstations, 2 High-End PCs, a Printer and a Scanner. The lab is equipped with state of the art computing facilities with wired and wireless Internet connectivity.

Faculty-In- Charge: Pournami P N, Assistant Professor, CSED

Staff-In- Charge: Abdul Sathar VM, Senior Mechanic, CSED

Location: Main Building (1 st Floor) Room No :MB 211

FACILITIES

Cloud Computing Server

Dell PowerEdge T620 Processor: Intel Xeon 65 2690v2 @ 3.0GHz RAM : 256 GB HDD : 6TB OS : Cent OS

SYSTEMS - 31 Nos

DELL OPTIPLEX 7010 - 30 Nos.

Processor: Intel Core i53470 CPU@3.20GHz

RAM: 4 GB HDD: 500 GB OS: Ubuntu 14.04(LTS)

DELL OPTIPLEX 755(1 No)

Processor: Intelcore2DouCPUE4500@2.2GHz x2 RAM: 2 GB

WORK STATIONS (1No.s)

Dell Precision T3610 -1 No

Processor: Intel Xeon E51620v2 Quad Core HT3.76GHz Turbo RAM : 8GB HDD : 1TB OS : Ubuntu 14.04(LTS)

DELL OPTIPLEX 7010(2 Nos.)

Processor: Intel Core i73770 Quad Core CPU@3.4GHz RAM : 16 GB HDD : 1TB OS : Ubuntu 14.04(LTS)

LENOVO THINK CENTRE All-In- Ones M Series

Processor: Intel Core i3 RAM : 4 GB HDD : 500 GB OS : Windows 8.1

SECURE COMPUTING LABORATORY

This lab was established in 2005. The objective of this laboratory is to provide the infrastructure for research in various aspects of security in computing. The research scholars are the main users of this lab. The lab is equipped with state of the art machines and software.

Location: ITL 303, IT Laboratory Complex Faculty-in-Charge Dr. Priya Chandran, Professor, CSED Staff-in-Charge Ajayachandran V R, Computer Operator, CSED

FACILITIES

Server Rack

- 1. HP ProLiant DL 360 4p Server
- 2. Cisco 2800 Series Router
- 3. Cisco Catalyst 3560 G Series 24 port Switch
- 4. Master View plus KVM Switch CS 9138
- 5. Procurve Networking 24 Port Switch
- 6. HP L1766 Monitor

Servers

1. Sun Blade 1500 (2 Nos)

- 2. Dell PowerEdge SC1420 (1 No)
- 3. IBM System x3100 M4, Intel Xeon E31120 V2, 16GB ECC-SER RAM, 1TB HDD
- 4. Dell PowerEdge T620, Intel Xeon E5-2690 V2, 3 GHz HT, 256 GB RAM, 6TB HDD

Work Stations

- 1. Dell Precision T 3400
- 2. Dell Precision T 3610, Intel Xeon E5 1620 V2, 8GB DDR3, 1 TB HDD (3 Nos)

High End PC

1. Dell Optiplex 7010MT, Intel Core *i*7, 16GB DDR3 RAM, 1 TB HDD (7 Nos)

Desktops

- 1. Dell Optiplex GX 520 (6 Nos)
- 2. HP Compaq (1 No)
- 3. Apple M8570 (1 No)
- 4. Dell Optiplex 7010 Intel Core *i*5, 4GB DDR3 RAM, 500 GB HDD (7 Nos)
- 5. ACER Veriton, 4GB DDR3 RAM, 500 GB HDD (1 No)

Laptop

HP Compaq nx6130 (1 No)

Printer

1. Brother DCP 7065DN (1 No)

Wireless Access Point D-Link DWL 2100 AP (1 No)

Camera

CANON SLR EOS 100D 18-55mm (1 No)

Software

- 1. MATLAB Server Version
- 2. MATLAB Desktop Version

Direct Internet connectivity through campus network

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

- 1. Electronics Circuits Lab
- 2. Communication Lab
- 3. Integrated Circuits Lab
- 4. Digital Signal Processing Lab
- 5. Embedded Systems Lab
- 6. Electronics Workshop
- 7. Microelectronics and VLSI Lab
- 8. Telecommunication Lab
- 9. Research Lab I & II
- 10. Signal Processing and Communication (SPCom) Lab
- 11. R& D Lab

- 12. Project Lab
- 13. PSoC Lab

DEPARTMENT OF ELECTRICAL ENGINEERING

UG Laboratories

- 1. Electrical Workshop
- 2. Electronics Workshop
- 3. Electronics Laboratory
- 4. Electrical Measurements Laboratory
- 5. Electrical Machines Laboratory
- 6. Control Systems Laboratory
- 7. UG Power Electronics Laboratory

PG/Research Laboratories

- 1. Electrical Simulation Laboratory
- 2. Power Systems Laboratory
- 3. Power Electronics Laboratory
- 4. DCS Applications Laboratory
- 5. Process Automation Laboratory
- 6. Embedded Systems Applications Laboratory
- 7. Power Electronics Research Laboratory
- 8. Advanced Control Systems Laboratory
- 9. Power Systems & Power electronics Real-Time Simulation Laboratory
- 10. High Voltage Engineering Laboratory
- 11. Bio-Signal Processing Laboratory
- 12. Non-destructive testing Laboratory
- 13. Instrumentation Systems Laboratory
- 14. Centre for Testing and Consultancy

Sponsored Research Laboratories

- 1. LVDC Microgrid Laboratory (CDAC)
- 2. Distributed Energy Research Laboratory (DST-FIST)

Following new laboratory is proposed:

1. Industrial Drives Laboratory

DEPARTMENT OF MECHANICAL ENGINEERING

Laboratories under Department of Mechanical Engineering associated with the Curriculum

- Central Workshop
- Fluid Mechanics Laboratory
- Fluid Machinery Laboratory
- Heat Engines Laboratory
- CAD/CAM Centre
- Metrology Laboratory
- Production Engineering Laboratory
- Industrial Engineering Laboratory
- Heat Transfer Laboratory

Other Laboratories under Department of Mechanical Engineering associated with Research/Consultancy/Testing

- Advanced Manufacturing Centre
- Centre for Precision Measurements & Nano-mechanical Testing
- Sophisticated Instruments Centre
- Materials Science Laboratory
- Mechatronics / Robotics Laboratory
- Supply Chain and Systems Simulation Laboratory
- Tribology and Vibration Laboratory
- Solar Energy Centre
- Thermal Science Laboratory
- Centre for Advanced Studies in Cryogenics
- Fuel Cell Laboratory
- Green Energy Laboratory
- Design Innovation Centre

DEPARTMENT OF PHYSICS

- 1) First Year B.Tech Lab
- 2) Computer Lab
- 3) Electronics Lab
- 4) Optics Lab
- 5) Solid State Physics Lab
- 6) Wet chemistry lab
- 7) General Physics Lab
- 8) Laboratory for Molecular Photonics and Electronics
- 9) Applied Optics and Instrumentation Lab
- 10) Organic and Nano Electronics Lab

- 11) Laser and Nonlinear Optics Lab
- 12) Critical Point Phenomena and Polymer Dynamic lab
- 13) Computational Material Science Lab
- 14) Photonic Materials and Devices Lab

SCHOOL OF BIOTECHNOLOGY

- 1. Biochemistry Laboratory
- 2. Microbiology Laboratory
- 3. Bioprocess Laboratory
- 4. Molecular Biology Laboratory
- 5. Immunology Laboratory
- 6. Bioinformatics Laboratory
- 7. Plant Biotechnology and Enzyme Kinetics Laboratory
- 8. Downstream Processing Laboratory

SCHOOL OF METERIALS SCIENCE AND ENGINEERING

• Microscopy centre, SMSE

10.5 HOSPITAL

Institute has a Health Care providing the medical needs of students, staff and their families. Following are the staff details:

- 1. Dr. Celine A A RMO
- 2. Dr. Balasubramanyan (Physician Visiting Doctor)
- 3. Dr. Akhil Raj M P RMO (Adhoc)
- 4. Dr. Midhun A R RMO (Adhoc)
- 5. Dr. Anju B Nair RMO (Adhoc) (Covid Help Desk)

Faculty in Charge Dr. Anu Mary Chacko

Paramedical Staff Smt. Sasikala. L – Sanitation Worker

Adhoc Staff a. Staff Nurse-2+2 (Covid Helpdesk) b. Lab-Technician-1

NITC Health Centre has been actively working with student community proactively to improve the welfare of NITC. NITC Health Centre is equipped with AED (Automated external Defibrillator) to handle cardiac arrest emergency and provide 24 X 7 Ambulance support for any emergencies. NITC Health Centre is also equipped with a Laboratory facility and in patient facility and caters to students, faculty, staff and their families.

This annual year was quite challenging for NITC Health Centre due to COVID. NITC Health Centre worked actively during COVID times to ensure that spread of COVID was contained in the campus by

formulating the policies needed for smooth run. The doctors conducted screening for employees and students so that they can work in the department. Health Centre also coordinated with the local authorities to ensure the all necessary precaution was taken for the smooth functioning of the institute. The isolation and quarantine facility within the campus was coordinated by the COVID Helpdesk.

Bank, Post Office and Telephone Exchange

There is a branch of State Bank of India, an India Post Office, Telegraph Office and a BSNL Telephone exchange functioning in the Institute Campus

SHOPPING CENTRE

There is also a shopping centre run by the co-operative society of the employees of the institute staff functioning in the Campus.

10.6 PHYSICAL FACILITIES (GAMES & SPORTS)

Sl. No.	Name of the Facility	Remarks	Quantity	
1	Swimming pool	25 M Non-standard	01	
2	Multi Gymnasium	25 Station	01	
3	Hockey field	Outdoor Clay Field	01	
4	Cricket Field	Turf match & practice wickets	01	
5	Cricket Net Practicing Cage	Turf-1, Clay-1, Concrete-1	03	
6	Football field	Outdoor Clay Field	01	
7	Basketball	Concrete Outdoor Floodlit court	02	
8	Volleyball -	Outdoor Floodlit Clay Court	01	
9	Tennis	Outdoor Floodlit Clay Court	03	
10	Tennis	Outdoor Floodlit Synthetic Court	01	
11	Handball	Standard Outdoor Clay Court	01	
12	Multi-purpose Auditorium	Floodlit Concrete Court	01	
13	Kho-Kho	Outdoor Floodlit Clay Court	01	
14	Kabaddi	Outdoor Floodlit Clay Court	02	
15	Badminton	Indoor Floodlit Synthetic Court	01	
16	Badminton	Indoor Floodlit Cement Court 02		
17	Table Tennis	Indoor Floodlit Cement Court 04		
18	Athletic Track	400M (Clay Track & Field)	01	
19	Chess Hall	10 Tables 01		

10.7 OTHER FACILITIES

10.7.1 CENTRE FOR BIO-MECHANICS

The Centre for Biomechanics, inaugurated on September 10, 1998, is a unique centre in which active and useful academic interactions take place between doctors and engineers. Such centres, although essential for the benefit of society, unfortunately is not common in our country. R & D work of an interdisciplinary nature is carried out here, with Faculty drawn from various departments of this Institute and Adjunct Faculty from other institutions.

10.7.2 CENTRE FOR TESTING & CERTIFICATION – CTC

The centre for testing and certification was established in 1999 with financial assistance from Ministry of Industries & Commerce, Government of Kerala. The centre was established in mainly to help small scale entrepreneurs of the State of Kerala. Variety of testing equipments has been acquired for facilitating testing of electronic components, systems and gadgets.

Faculty in Charge : Dr. Sindhu T K

10.7.3 Advanced Manufacturing Centre & Sophisticated Instruments Centre

Advanced Manufacturing Centre set up in the Department of Mechanical Engineering is one of the finest facilities available in manufacturing. Major equipment available include the following:

- Five axis CNC Coordinate Measuring Machine
- Three axis Integrated Multipurpose Micro-Machining Centre
- Four axis CNC Machining Centre
- Rapid Prototyping Machine/ 3D Printers
- CNC turning centres
- CNC Surface Roughness Tester
- Six component and Mini Cutting Tool Dynamometers.

The fully fledged CAD/CAM Centre opens round the clock conducts free training programmes to NITC students. Popular CAD/CAM software available includes: SOLIDWORKS, Creo, CATIA, Siemens NX, MSC Adams, Mastercam, Ansys, and Abaqus. Further details are available at *http://www.amc.nitc.ac.in/*

The Sophisticated Instrument Centre uses state-of-the art technology in measurements and metrology and has facilities for carrying out the measurements of industrial products. Most of the instruments like CNC Coordinate Measuring Machine (CMM), CNC surface roughness tester and measuring software have been imported from Japan with the financial assistance of the Ministry of Human Resources Development, Govt. of India. It aims to enable small industrialist to obtain certification of quality for their products at a reasonable cost. This centre also offers various training, testing and consultancy services to industries and academic institutions. The DST-FIST Centre for Precision Measurements and Nanomechanical Testing is one of the latest additions set up at the cost of **Rs 2.51 Crores** under the FIST scheme. This centre has sophisticated facilities like 3D Profilometer, Nanoindenter, High Speed Camera, Thermal imager, etc. to help the research in design and manufacturing.

10.7.4 MICROSCOPY CENTRE

Microscopic Centre established in 2009 and managed by school of Nano Science and Technology. Centre is equipped with advanced microscopic equipment's like Scanning Electron Microscope (SEM) and Scanning Probe microscope (SPM). Centre is actively contributing to the research and consultancy of the institute.

Centre is equipped with Hitachi make SU 6600 Variable Pressure Field Scanning Electron Microscope having Secondary Electron Imaging (SE), Backscattered Electron Imaging (BSE) and Energy dispersive spectroscopy (Horiba EMAX.137 ev) for elemental analysis.Scanning probe microscopy includes a Park XE-100 Atomic Force Microscope (AFM) having capability of performing various analysis like Electrostatic microscopy, Magnetic force microscopy, Lateral Force microscopy, Conductive AFM, Nanolithography, Nanoindentation etc.

Centre is analyzing variety of samples from different department of the institute as well as the facility is open for consultancy service. Different academic, Industrial and R&D organizations from all over the country was using the facility under consultancy basis. Centre is always promoting the industry, R&D interactions with our institute

	Civil works					
Sl No.	Name of Work	Status				
1	Providing GP net to cafeteria at eastern campus for preventing entry of Birds and Animals inside	Completed				
2	Providing aluminium partition and false ceiling for High Performance Computing Facility in the existing Digital Library	Completed				
3	Maintenance works to roads including filling pot holes in various places and re-carpeting from D20 staff quarters to Ladies Hostel and repair works to sink holes near FD apartment	Completed				
4	Providing Aluminium partition in NANO Material Research Laboratory, in room no. 301, SMSE	Completed				
5	Providing partition and Ceiling in Electronics workshop for converting it to DST-FIST lab with faculty rooms in ECE block-II	Completed				
6	Construction of building for Central Library SH:- Providing Partition Table, Counter etc	Completed				

10.7.5 ENGINEERING UNIT FOR CIVIL AND ELECTRICAL WORKS

7	Renovation works in physical education building consists of	Completed		
	gymnasium, chess hall, carom space and storage spaces near main canteen			
8	Various maintenance work to filter house and Sedimentation tank including providing fencing and repair work of compound wall at east side and various painting works	Completed		
9	Construction of building for Central Library SH:- Additional works such as repair painting and cleaning works	Completed		
10	Providing Aluminium partition in room no. 307 of Biotechnology lab - Phase II	Completed		
11	Leak proofing work of inner surface of the tank near substation of MLH	Completed		
12	Leak proofing work of overhead tank near Guest House	Completed		
13	Construction of overhead water tank near substation of Mega Ladies Hostel at NIT Campus	Completed		
14	Providing Sheet roofing work for leak proofing over flat roof of Production Engineering Block	Completed		
15	Maintenance and special repairs of old Ladies Hostel	Completed		
16	Construction of 500 rooms Ladies Hostel for NIT Calicut Sh:	Completed		
	Diverting Storm Water drain and waste water line from the existing line			
17	Construction of building for Central Library SH:- Additional works such as Sheet roofing and structural glazing	Completed		
	Electrical works			
Sl No.	Name of Work	Status		
1	Electrification of High performance Computing facility at existing digital Library.	Completed		
2	Providing Power plug points and UPS points at room No. 101, 108, 109, 301 and 302, Dept of Chemistry.	Completed		
3	Providing power plug points for Vending Machine & Incinerator at various locations of institute buildings.	Completed		
4	Modification of Electrical wiring at New Central Library.	Completed		
5	Replacing the existing Main switch boards and Distribution Boards of E- Hostel.	Completed		
6	Replacing the existing Main switch boards including providing Three phase AC supply, UPS supply and DC supply in each	Completed		

	work table at	
7	Renovation of Electrical fittings at Machines Lab, EED.	Completed
8	Providing Exhaust fans at PG Laboratory in Nanoscience & Technology.	Completed
9	Electrification work of Cafeteria at East Campus.	Completed
10	Electrification of Cafeteria at Open Air Theatre	Completed
11	Maintenance of existing street light poles including replacing the damaged metallic junction boxes, plinth and painting of poles towards residential areas.	Completed
12	Providing Exhaust fans at Nano Science Research Lab.	Completed
13	Providing LED Street lights at rear side of New Administrative Block to NLHC.	Completed
14	Providing additional power plug points to newly purchased Machines at Transportation lab, CED.	Completed
15	Providing electric connection to newly purchased XRD machine at School of Material Science and Technology.	Completed
16	Cable trenching of existing cable to Creative zone.	Completed
17	Renovation of Electrical installation at first floor of High voltage Laboratory, EED	Completed

10.7.6 CAMPUS SCHOOL

Spring Valley School

Spring Valley School is a Senior Secondary Co-educational English Medium School, functioning in the institute campus as one of the staff welfare measures. The school is affiliated to the Central Board of Secondary Education, New Delhi with code No.930100. School is being managed by REC SPECTRA (Society for Promotion of Educational, Cultural and Training Activities), a charitable society registered under the Societies' Act (1860), the members of which are the faculty members of the institute. Most of the infrastructure facilities of the school like land, buildings, laboratories, playgrounds, etc. have been made available by the institute. The School has always excelled in academics since its inception and could achieve 100% pass both in Class X and XII CBSE Examinations. Digitally enabled classroom facilities and the School Band have been provided to strengthen the academic and co-scholastic abilities of the students. The School celebrated its Silver Jubilee during the academic year 2017-18.

The activities of the academic year 2020-21 was held amidst the world wide pandemic situation of Covid 19. The school has done advanced planning with the help of teachers, parents and the management and conducted the whole academic session online for all the classes from I to XII. All possible means of online education including Google class rooms, WhatsApp video and audio lectures, online study materials were used successfully to run the academics. The effort of the school was well appreciated by all stakeholders. A notable achievement of the school happened during December 2020. Spring Valley School was ranked the 4th Best Co-Ed Day School in Kozhikode by the Education World India Ranking. Also it came in the 38th position at the state level and 206th position at all India level in the Co-Ed day school category. The school scored a total score of 1017 out of 1500.

Due to the pandemic CBSE has cancelled both class X and XII board examinations of the year 2020-21 and the results were declared on the basis of a credible, reliable, flexible and valid alternative policy. Out of 22 students in class X ,12 students got 90% and above in which 5 students had got 95% and above, 9 got distinction and one child had got 50% and above. (The Toppers of X: Mariyam Ameen 97.6%, Sourav .M 97.4%, Diya Adle 96.8% and Angith S 96.4).Out of 23 students in class XII, 10 students got 90% above and 13 students got distinction. The Toppers are Sangamithra Manoj 95%, Goutham S 95%, Dwithi B 95% and Arya B Nath 95%.

Due to the pandemic no kalotsav was conducted, but our kids has participated in many activities like Quiz, scholarship examinations, and painting competitions at district, state and national levels, they had also won many prizes and certificates.

The school has always tried to keep and has been projecting high academic standards and discipline right from its inception.

Office Bearers as on 31.03.2021:

- Dr. P.S. Sathidevi, Director(i/c) NITC, Chairman, REC SPECTRA NIT Calicut
- Dr. R. Manu, Vice Chairman, REC SPECTRA & President, School Managing Committee.
- Dr. Sajith A.S., Secretary, REC SPECTRA & Manager cum Correspondent, Spring Valley School.
- Dr. George K Varghese, Vice President, School Managing Committee.
- Dr. Ashish Awasthi, Joint Secretary cum Treasurer, REC SPECTRA
- Sri. Jayaprakasan, Senior Principal
- Smt. Shiny A., Principal

11 NOTABLE ACHIEVEMENTS

11.1 Institute Publications During the Year 2020-2021

SL NO	DEPARTMENT	JOURNAL	INTERNATIONAL CONFERENCE	NATIONAL CONFERENCE	PATENT
1	Architecture	37	50	Nil	Nil
2	Chemical Engineering	48	18	Nil	1
3	Civil Engineering	84	82	18	5
4	Mechanical	109	90	Nil	12
5	Computer science and Engineering	41	23	4	Nil
6	School of Management Studies	16	5	Nil	Nil

7	School of Biotechnology	41	8	3	1
8	Electrical Engineering	46	54	2	Nil
9	Electronics and Communication Engineering	69	47	1	8
10	Physics	25	5	Nil	Nil
11	Mathematics	29	14	Nil	Nil
12	Chemistry	23	3	Nil	1
13	School of Material Science and Engineering	24	4	Nil	Nil

For Institute Publications in detail: visit the following link

http://www.nitc.ac.in/nitcpublications/publications_4-2-22.pdf

11.2 ACHIEVEMENTS TOOK PLACE DURING THE YEAR 2020-2021

DEPARTMENT OF ARCHITECTURE

a. Community Services

Name of Project	Faculty Involved	
1. Landscape design for Kozhikode /District	Anjana Bhagyanathan	
2. Rifle Association	Anjana Bhagyanathan	

b. Other Academic and Administrative Services

Name of the Staff	Academic and Administrative Services
Dr. Anil Kumar P.P.	Heading the Department of Architecture and Planning
	from June 2019 to July 2021
	Member, Board of Governors, NIT Calicut from
	November 2019
	PG Coordinator
Dr. Naseer M.A	Faculty Functionary (Civil Works)
	Senate Member
	BoAC Member
	BS Lab in Charge
	Purchase Coordinator
	M Plan Coordinator
	B Arch Academic Coordinator
Dr Chithra K	Dept Timetable in charge

Dr. Mohammed Firoz C.	 Faculty advisor 2016 Admn B Arch Library advisor committee member Consultancy Coordinator DSS in charge CAAD Lab in charge PhD Coordinator Associate Dean Students Welfare Coordinator of Annual Sports Day 2020 (January
	2020)Inter NIT Sports Coordinator
Dr. Bimal P.	 Faculty Advisor 2015 Batch PTA Coordinator for Department Lab In Charge for IMDL Sports Council Member NSS Coordinator
Dr. Shyni Anilkumar	• Faculty Advisor- 2017, Admission B. Arch.
Dr. Anjana Bhagyanathan	 Examination Coordinator Council of Architecture Coordinator Creative Arts Lab in Charge Faculty advisor 2018 batch In charge, seminar and exhibition hall In charge, student counselling
Dr. Deepthi Bendi	 Faculty Advisor 2019 batch Secretary To DCC NODAL OFFICER of the International Yoga week celebrations (June 2020) Member of the Sports Council NITC Coordinator of Annual Sports Day 2020 (January 2020) Coordinator of Student Affairs – ASA, Tathva, NASA, Students Symposium/ Workshops, Adiziya
Dr. Amritha P K	 Faculty Advisor- B.Arch. 2020 admission Academic coordinator- Academic Records & Results CoA Report, Inspection Annual Report and other centralized compilation of data for various events/reports
Ar. Ritesh Ranjan All faculty have academic and ac	 Annual Report and other centralized compilation of data for various events/reports Coordinator of Student Affairs – ASA, Tathva, NASA, Students Symposium/ Workshops, Adiziya Department Information for Annual Report, Website, NIRF Inputs. Iministrative services entrusted such as FA, Lab in charges,
UG/PG/PhD coordination, Exam	-

c. Expert lectures delivered in Conferences/Seminar/workshops

Name of Staff	Title of the Programme	Duration and Period	Organization
Dr.Anilkumar	Smart Cities: Economy,	14th July, 2020.	Pearson India
P.P.	Governance & Health as		(#LetsConnectWebinar Series)

	Critical Pillars in Pandemic Management		
Dr.Anilkumar P.P.	Smart City-its Challenges and Opportunity	3 rd November 2020	Vellore Institute of Technology (VIT)
Dr. Anilkumar P.P.	Sustainable Architecture for Kerala's Urban Area	21 st January 2020	KIIFB and Indian Institute of Infrastructure and Construction(IIIC)
Dr. Mohammed Firoz C	 Webinar on methods and Methodologies for Undertaking Urban Projects at Tyagaraja College of Engineering, Madurai on 	13 th March 2021	TCE Madurai
Dr. Mohammed Firoz C	• A Journey through the socio cultural landscape of Kerala.An initiative of the Ek Bharath Shresht Bharath, Govt of India on	24 th September 2020	NIT Calicut and NIT Hamirpur
Dr. Mohammed Firoz C	Architetcure as a Profession	October 2020	Vismaya College of Arts, Kozhikkode
Dr. Mohammed Firoz C	IEEE Seminar on Roadmap to success in Engineering studies	14-16 August 2020	IEEE
Dr. Mohammed Firoz C	Higher studies options in Engineering: Disha 2020	7-12-2020	Deoartment of Higher Education, Government of Kerala
Dr. Deepthi Bendi	Prefabrication – Innovation and the way forward	90 Minutes, 10 th July 2020	Kumaraguru College of Technology – Coimbatore, Tamil Nadu

d. Consultancy and testing

Nature of Service	Organizatio n	Revenue earned	Status
Redesigning Entry Gate and	CWRDM	3.5 lakhs	Completed
Avenue for CWRDM Campus	Kozhikode		
Kozhikode			
Master Plan for the Public Health	Koodaranji	3.5 lakhs	Completed
Center for Koodaranji Panchayat	Panchayat		
Design Consultancy	Kozhikode	10,62,000	On-going
	Municipal		
	Corporation		

DEPARTMENT OF CHEMICAL ENGINEERING

a. Other Academic and Administrative Services

Name of Staff	Academic and Administrative Services
Dr. Teja Reddy Vakamalla	NBA General arrangements committee member, Department NBA committee member, Faculty Advisor B20, M.Tech project Evaluation Committee 20-21, Department Web Management Coordinator
Dr Lity Alen Varghese	Head of the Dept till August 2020, PG Coordinator, FIST department member, CA Lab in charge
Praveen kumar	Deaprtment Library incharge 2020-21
Praveen kumar	Active NBA member
Praveen kumar	Faculty advisor of Class 2017-2021 for B2-Batch.
Noel Jacob Kaleekkal	Department Purchase Cordinator, NBA Team, PG project evaluation committee, FA B18 batch
Malladi V Pavan Kumar NIRF cordinator, Faculty Advisor	
Prasanna Kumar S Mural	Faculty Advisor, PTA co-ordinator, Research Lab incharge
Panneerselvam Ranganathan	NBA Co-cordinator, Faculty Advisor, Computer lab in charge, in-charge of Class Room, Seminar hall, and Conference hall Facilities
susmita das	Mechanical lab incahrge, examination incharge, faculty advisor, UG project evaluation committee
Haribabu K	Warden, Deparment STudent Activities Coordinator, Chemical Reaction Engineering Lab Incharge
P Swapna Reddy	Liason with main Library

b. Conferences/Summer/Winter School/Short term Courses/ Workshops conducted

Title	Coordinators	Duration & Period
Sustainable Technologies in Water Treatment and Desalination (STWTD – 2020)	Dr. Prasanna Kumar S Mural & Dr. Noel J K	10th – 12th Dec 2020
INTERNATIONAL CONFERENCE ON GREEN ENERGY FOR ENVIRONMENTAL SUSTAINABILITY - ICGEES 2020	Dr Haribabu K, Dr. Sivasubramanian V, Dr.Lity Alen Vargheese	05 - 06 August 2020

c. Expert lecturers delivered in Conferences/Seminar/workshops

Name of Staff	Title of the Programme	Duration and Period	Organization
Dr. Prasanna Kumar S Mural	Technical Programme of Seminar on Membrane Research: Today & Tomorrow	19th-20th March 2021	National Institute of Foundry and Forge Technology Ranchi, Jharkhand

Dr. V. Sivasubramanian	Advanced Oxidation Technology – A Futuristic Way Forward for Treatment of Recalcitrant Pollutants	February 24-26, 2021	Center for Environmental Studies, Anna University, Chennai.
Dr. V. Sivasubramanian	Green Engineering Concepts and Treatment Methods for Farmers in Rural Area	November 23- 28, 2020	Department of Chemical Engineering, Paavai Engineering College, Namakkal
Dr. V. Sivasubramanian	Expanding Horizons of Nanotechnology in Engineering, Medicine and Biotechnology	September 21- 26, 2020	Department of Chemical Engineering, CIT, Coimbatore- 641014, Tamil Nadu.
Dr. V. Sivasubramanian	Fostering an Effective Research Environment and Industrial Collaborations in Engineering Education - Phase III	September 21- 26, 2020	St. Joseph's College of Engineering, Chennai – 600 119
Dr. V. Sivasubramanian	Biochemical Engineering: Basics and Beyond	June 1-6, 2020	Department of Biotechnology, School of Bio and Chemical Engineering, Kalasalingam Academy of Research and Education (Deemed to be University), Krishnankoil-626 126, Tamilnadu, India.
Praveen kumar G	FDP on Recent Trends in Clean Energy	08th to 12th March 2021.	MANIT Bhopal
Praveen kumar G	Webinar-Biotechinar	5 June 2021	Department of Biotechnology, Dayananda Sagar College of Engineering, Bangalore-78,
Praveen kumar G	ATAL sponsored FDP on "Redemption from plastic pollution (Indian Railways)	5 th to 9th July 2021.	NRTI-Vadodara, Gujarat,
Noel Jacob Kaleekkal	Technical Programme of Seminar on Membrane Research: Today & Tomorrow	19th-20th March 2021	National Institute of Foundry and Forge Technology Ranchi, Jharkhand
Noel Jacob	4th Japan-India YNU Symposium 2020 on "Science, Technology and Innovations for SDGs in	27-28th	Yokohama National University,
Kaleekkal	India and Japan AICTE sponsored FDP-	December 2020	Japan
Noel Jacob	Environmental and Sustainable Chemical	15th December	Department of Chemical Engineering, Pondicherry
Kaleekkal	Engineering	2020	Engineering College
Noel Jacob Kaleekkal	Membrane Society Australasia- Annual Meeting AGM 2020	23-24th November 2020	Australasian Membrane Society

Noel Jacob Kaleekkal	AICTE sponsored STTP- Recent Advances in Separation Processes (RASP)	17th November 2020	Department of Chemical Engineering, Pondicherry Engineering College
M V Pavan Kumar	Opportunities and Challenges in Academic Research	15-20 March 2021	Department of Chemical Engineering, Government Engineering College Kozhikode
Panneerselvam Ranganathan	AICTE sponsored STTP- Recent Advances in Separation Processes (RASP)-I	29th October - Noverber 4, 2020	Department of Chemical Engineering, Pondicherry Engineering College
Panneerselvam Ranganathan	AICTE sponsored STTP- Recent Advances in Separation Processes (RASP)-II	12-17th November 2020	Department of Chemical Engineering, Pondicherry Engineering College
Panneerselvam Ranganathan	AICTE SPONSORED FACULTY DEVELOPMENT PROGRAMME On ENVIRONMENTAL AND SUSTAINABLE CHEMICAL ENGINEERING - REG	10-23th December 2020	Department of Chemical Engineering, Pondicherry Engineering College
Panneerselvam Ranganathan	Faculty Development Program on Computer Aided Software for Process Intensification	24-29th May 2021	Gharda Institute of Technology, Lavel
Haribabu K	An Awareness Programme Green Engineering Concepts and Treatment Methods for Farmers in Rural Area	14/12/2020	Department of Chemical Engineering, Paavai Engineering College, Namakkal
Haribabu K	The Era of Digital Bioprocessing	17 -18, June 2020	Kalasalingam University

d. Patents acquired and filed

Name of Staff	Title	Year
Praveen kumar a	A catalyst for pyrolysis of mixed plastic waste and a method of pyrolysis thereof	2020

DEPARTMENT OF CIVIL ENGINEERING

a. Community Services

Dr. S. Chandrakaran

• Involved in investigations related to landslides in different landslide prone areas in Kerala

Dr. Santosh G Thampi

- Member, Technical Committee on Sewerage Management, Cochin Smart Mission Limited
- Invitee, Technical Committee, Dam Rehabilitation Improvement Project (DRIP), CWC
- Member, Technical Committee for Approval of Sewerage System Designs of the STP at Govt. Medical College Hospital, Kozhikode
- Member, Regional Technical Expert Committee (Northern Region) on Storm Water Drainage for Evaluation of DPRs under AMRUT, constituted by the Govt. of Kerala.
- Working with KERI, Peechi, Dept. of Water Resources, Govt. of Kerala on Development of a Framework for Sand Auditing of Rivers
- **Chairperson of a Technical Session** at the International Conference on Hydraulics, Water Resources, and Coastal Engineering (HYDRO 2020-International Conference) organised by the Indian Society for Hydraulics and NIT Rourkela during March 26-28, 2021
- Involved in field invsestigations and preparation of a report on "Abatement of Pollution in the Kuttiyadi River" for the Department of Water Resources, Govt. of Kerala in connection with a directive from the National Green Tribunal
- Reviewer for many peer reviewed journals including International Journal of Water Resources Development, Journal of Hydrology, Journal of Hydrology Regional Studies, International Journal of Climatology, Hydrologic Processes, Transport in Porous Media, Journal of Porous Media, International Journal for Numerical Methods in Fluids, Environmental Processes, Special Topics and Reviews in Porous Media, International Research Journal of Agricultural Science and Soil Science, Agricultural Research and Reviews, Journal of the Geological Society of India, Natural Hazards, ISH Journal of Hydraulic Engineering, KSCE Journal of Civil Engineering, Theoretical and Applied Climatology, Science of the Total Environmental Technology etc

Mr. K. Saseendran

- Involved in investigations related to landslides in different landslide prone areas in Kerala
- Member of a Technical Committee constituted by the District Collector, Kozhikode, to study an issue related to quarrying

Dr. Pramada. S. K.

• Involved in field investigations and co-ordinated the preparation of a report on "Abatement of Pollution in the Kuttiyadi River" for the Department of Water Resources, Govt. of Kerala in connection with a directive from the National Green Tribunal.

Dr. Aswathy. E. V.

• Involved in field investigations and co-ordinated the preparation of a report on "Abatement of Pollution in the Kuttiyadi River" for the Department of Water Resources, Govt. of Kerala in connection with a directive from the National Green Tribunal.

Dr. Agilan V.

 Reviewer of Scientific Reports; Journal of Hydrology; Advances in Water Resources; Journal of Hydrologic Engineering, ASCE; Water Resources Management; International Journal of Climatology; Ecological Indicators; Stochastic Environmental Research and Risk Assessment; Ecological Engineering; Sustainable Cities and Society; International Journal of River Basin Management; Current Science; ISH Journal of Hydraulic Engineering; Journal of Flood Risk Management, Journal of Earth System Science; Hydrological Sciences Journal; Water Science and Engineering.

Name of Faculty	Academic and Administrative Services	
Dr. P V Indira	 Head, Department of Civil Engineering Coordinator of Departmental Examination Cell Coordinator of Consultancy – Other Areas 	

b. Other Academic and Administrative Services

	 Coordinator of R&D Proposals, Laboratory Development and Modernization, Planning of Courses, Continuing Education Programs, Workshops, Seminars, Revision of Curriculum etc. Member in many Doctoral Committees Member of the Senate of NITC Chairman, S7 Class Committee Faculty in charge, Offshore Engineering Laboratory Programme Co ordinator M. Tash Civil Offshore Structures (2020)
Dr A P Shashikala	 Programme Co-ordinator, M. Tech. Civil Offshore Structures – (2020 admission) Member, R&D Proposals, Laboratory Development and Modernization, Planning of Courses, Continuing Education Programs, Workshops, Seminars, Revision of Curriculum etc. Member in many Doctoral Committees
Dr. J Sudhakumar	 Member of the Senate of NITC Departmental PhD Programme Co-ordinator Co-ordinator, Departmental Timetable Committee Member of the Departmental Purchase Committee
	 Member in many Doctoral Committees Member of the Senate of NITC Programme Coordinator, M.Tech Traffic and Transportation Planning – 2020 Admissions Faculty Advisor, B.Tech Civil Engineering – 2018 Admissions
Dr. K. Krishnamurthy	 Faculty i/c, Transportation Engineering Laboratory Coordinator, Department Web Page Management Committee Member of the Departmental Purchase Committee Member, R&D Proposals, Laboratory Development and Modernization, Planning of Courses, Continuing Education Programs, Workshops, Seminars, Revision of Curriculum etc. Member of Vigilance Committee Placement and Training Related Activities
Dr. M V L R Anjaneyulu	 Member in many Doctoral Committees Member of the Senate of NITC Programme Coordinator – M. Tech Traffic and Transportation Planning – 2019 Admissions Chairman, S5 Class Committee Member in many Doctoral Committees Member of the Senate of NITC
Dr. M Ameen	 President, Civil Engineering Association Member of R&D Proposals, Laboratory Development and Modernisation, Planning of Courses, Continuing Education Programs, Workshops, Seminars, Revision of Curriculum etc. Books & Periodicals for College Library Member in many Doctoral Committees Member of the Senate of NITC
Dr. N Sankar	 Chairman, Department AQMC Co-ordinator, Department Vigilance Committee Member of the Departmental Purchase Committee

	 Member in many Doctoral Committees Member of the Senate of NITC
Dr. Praveen Nagarajan	 Programme Cordinator, M.Tech. Structural Engineering – 2019 Admissions Co-ordinator, Departmental Data Management Faculty Advisor, B.Tech. (Civil Engineering) – 2020 Admissions Member of the Departmental Purchase Committee President of ICI Member in many Doctoral Committees Member of the Senate of NITC
Dr. S. Chandrakaran	 Program Co-ordinator, M Tech Environmental Geotechnology - 2019 Admissions Member of R&D Proposals, Laboratory Development and Modernisation, Planning of Courses, Continuing Education Programs, Workshops, Seminars, Revision of Curriculum etc Faculty i/c, Environmental Geotechnology Laboratory Co-ordinator, Consultancy – Geotechnical Engg. Member in many Doctoral Committees Member of the Senate of NITC
Dr. Santosh G Thampi	 Program Co-ordinator, M Tech (Water Resources Engineering) – 2019 and 2020 Admissions Faculty i/c, Water Resources Engineering Laboratory Member in many Doctoral Committees Member of the Senate of NITC
Dr. T M Madhavan Pillai	 Chairman, S3 Class Committee Member of R&D Proposals, Laboratory Development and Modernisation, Planning of Courses, Continuing Education Programs, Workshops, Seminars, Revision of Curriculum etc. Co-ordinator of Student Counselling Co-ordinator , Consultancy –Structures Member in many Doctoral Committees Member of the Senate of NITC Member Departmental Vigilance Committee
Sri K Saseendran	 Member, Departmental Vigilance Committee Faculty i/c, Geology Lab Secretary to the Department Member, Committee for Student Counselling PTA Coordinator, Department of Civil Engineering Program Co-ordinator, M Tech (Environmental Geotechnology - 2020)
Dr. Rangaswamy K	 Admissions Faculty i/c, Geotechnical Engineering Laboratory Faculty Advisor, B.Tech (Civil Engineering) – 2018 Admissions Data Collection and Management (Details pertaining to the faculty including publications, courses, training programs, Conference etc.) Member, Departmental Vigilance Committee Member, Committee for Student Counselling Member in many Doctoral Committees
Dr. Sajith A.S.	 TEQIP Co-ordinator Member, Departmental Vigilance Committee

	• Member, Data collection and management (Data pertaining to the M.Tech program)
	Member in many Doctoral Committees
	Member, Departmental Vigilance Committee
Dr. K Sasikumar	Books & Periodicals for College Library
	Member, Committee for Student Counselling
	Member in many Doctoral Committees
	 Member, Departmental Vigilance Committee Faculty Advisor, B.Tech.(Civil Engineering) – 2017 Admissions Data collection and management (Data pertaining to the M.Tech program)
Dr. Chitra N R	Member, Departmental Web Page Management Committee
	Faculty i/c, Seminar Library
	• Member, Committee for Student Counselling
	Member in many Doctoral Committees
	 Faculty in charge, Environmental Engineering Lab Faculty Advisor, B.Tech.(Civil Engineering) – 2019 Admissions Member of R&D Proposals, Laboratory Development and Modernisation,
George K. Varghese	Planning of Courses, Continuing Education Programs, Workshops, Seminars, Revision of Curriculum etc
	 Data collection and management (Data pertaining to the B.Tech program) Faculty i/c, Departmental Timetable Committee Member, Committee for consolidation of database of department alumni
	Member in many Doctoral Committees
Dr. M. Harikrishna	 Faculty Advisor, B.Tech.(Civil Engineering) – 2020 Admissions Data collection and management (Data pertaining to the B.Tech program and deatails pertaining to the faculty including publications, courses, training programs, conferances etc) Member, Committee for consolidation of database of department alumni
	Member, Department Web Page Management Committee
	Member in many Doctoral Committees
	 Faculty Advisor, B.Tech.(Civil Engineering) – 2019 Admissions Program co-ordinator PhD and M Tech programs
	• Data collection and management (Data pertaining to the M.Tech program)
Dr. M Sivakumar	• Faculty i/c, Transportation Engg. Lab
	Departmental Co-ordinator, GATE coaching under TEQIP
	• Secretary to the Department
	Member in many Doctoral Committees
	Programme Cordinator, M.Tech. Structural Engineering – 2020 Admissions
	• Data collection and management (Details pertaining to the faculty
Dr. Mini Remanan	including publications, courses, training programs, conferances etc)
	• Faculty i/c, Departmental Timetable Committee
	• Vice President of ICI
	Faculty i/c, S.M. Lab & Concrete Lab
	Member in many Doctoral Committees

Dr. Pramada S. K	 Faculty Advisor, B.Tech.(Civil Engineering) – 2020 Admissions Data collection and management (Details pertaining to PhD Member of R&D Proposals, Laboratory Development and Modernisation, Planning of Courses, Continuing Education Programs, Workshops, Seminars, Revision of Curriculum etc Faculty i/c, Departmental Timetable Committee Faculty i/c, CED Seminar Hall & Conference Room Faculty i/c ,Water Resources Engineering Lab Member, Committee for Student Counselling Member in many Doctoral Committees
Mrs. Reesha Bharat K	 Faculty Advisor, B. Tech.(Civil Engineering) – 2019Admissions Faculty i/c, Basic Engineering Workshop Member, Departmental Web Page Management Committee Data collection and management (Details pertaining to the B. Tech programme and deatails pertaining to the faculty including publications, courses, training programs, conferances etc) Member of R&D Proposals, Laboratory Development and Modernisation, Planning of Courses, Continuing Education Programs, Workshops, Seminars, Revision of Curriculum etc
Dr. Sathish Kumar D.	 Faculty Advisor, B.Tech.(Civil Engineering) – 2019 Admissions Data collection and management (Data pertaining to the B.Tech program) Member of R&D Proposals, Laboratory Development and Modernisation, Planning of Courses, Continuing Education Programs, Workshops, Seminars, Revision of Curriculum etc Faculty i/c, Surveying Laboratory Vice President, Civil Engineering Association Member in many Doctoral Committees
Dr Robin Davis P	 Member, Committee for consolidation of database of department alumni Member, Departmental Web Page Management Committee Faculty Advisor, B.Tech (Civil Engineering) – 2017 Admissions Co-ordinator, Research Scholars' Forum Data collection and management (Data pertaining to the B.Tech program) PTA Coordinator, Department of Civil Engineering Member in many Doctoral Committees Faculty Advisor, B.Tech (Civil Engineering) – 2018 Admissions
Dr. Anjana Bhasi	 Data collection and management (Data pertaining to the B.Tech program) Member, Committee for consolidation of database of department alumni Faculty i/c, Classrooms in NLHC Faculty i/c, Examination Cell (including preparation of time table, arrangement of halls, exam cell etc) Member, Committee for Student Counselling Member in many Doctoral Committees Faculty Advisor, B.Tech (Civil Engineering) – 2017 Admissions
Dr. R. Arunkumar	 Faculty Advisor, B. Tech (Civil Engineering) – 2017 Admissions Data collection and management (deatails pertaining to the faculty including publications, courses, training programs, conferances etc) Faculty i/c, Placement and Training related Activities Faculty i/c, CAD Lab Faculty i/c for consolidation of proposals related to departmental purchase Member in many Doctoral Committees
Dr. Renjitha Mary Varghese	 Faculty Advisor, B.Tech (Civil Engineering) – 2018 Admissions Data collection and management (Data pertaining to the M.Tech program)

	Member, Departmental Vigilance Committee
	 Member, Departmental Vignance Committee Member, Department Web Page Management Committee
	 Books & Periodicals for College Library
	 Faculty i/c, Geotechnical Engg. Lab
	 Member in many Doctoral Committees
	 Faculty Advisor, B.Tech (Civil Engineering) – 2018 Admissions
	•
	 Programme Coordinator, MTech. Civil (Offshore Structures) - 2019 Admissions
	• Data collection and management (Data pertaining to the M.Tech program)
Dr. K. V Anand	 Member, Departmental Vigilance Committee
	• Faculty i/c, Classrooms in DB and PG Block
	 Faculty i/c, Offshore Engineering Laboratory
	Member, Department Web Page Management Committee
	Member in many Doctoral Committees
	• Faculty Advisor, B.Tech (Civil Engineering) – 2018 Admissions
	• Data collection and management (Data pertaining to the B.Tech program)
	• Data collection and management (details pertaining to the faculty including
Dr. Agilan V	publications, courses, training programs, conferences etc.)
	• Faculty i/c, Survey Lab
	 Member, Departmental Web Page Management Committee
	• Member, Committee for consolidation of database of Department alumni
	Member in many Doctoral Committees
	• Faculty Advisor, B.Tech (Civil Engineering) – 2017 Admissions
	• Data collection and management (deatails pertaining to the faculty
	including publications, courses, training programs, conferances etc)
	 Faculty i/c, Environmental Engg. Lab
Dr. Aswathy E. V	Departmental Purchase Committee Member
DI. ASwathy L. V	Member, Departmental Vigilance Committee
	 Member, Departmental Vignance Committee Member, Departmental Web Page Management Committee
	Member in many Doctoral Committees
	Convener, Department AQMC
Dr. Yogeshwar	• Faculty Advisor, B.Tech (Civil Engineering) – 2017Admissions
Vijaykumar Navandar	Member in many Doctoral Committees
Dr. Seethalakshmi. P.	 Faculty Advisor, B.Tech (Civil Engineering) – 2020 Admissions
D1. Seethalaksiinii. 1.	Member in many Doctoral Committees
Dr. Jawashandran, K	• Faculty Advisor, B.Tech (Civil Engineering) – 2019 Admissions
Dr. Jayachandran. K	Member in many Doctoral Committees
Dr. Muhammed Safeer	• Faculty Advisor, B.Tech (Civil Engineering) – 2019 Admissions
Pandikadavath	Member in many Doctoral Committees
	 Faculty Advisor, B.Tech (Civil Engineering) – 2020 Admissions
Dr. Anantha Singh T. S.	 Nember in many Doctoral Committees
	•
Dr. Aril Verseen Dest	• Faculty Advisor, B.Tech (Civil Engineering) – 2017Admissions
Dr. Anil Kumar Dash	• Faculty i/c, CAD Lab
	Member in many Doctoral Committees
	 Faculty Advisor, B.Tech (Civil Engineering) – 2020 Admissions
	• Tueury Marison, D. Teen (ervir Engineering) 2020 Manussions
Dr. Suman Saha	 Faculty i/c, S.M. Lab & Concrete Lab

c. Cd. conferences/ Summer/ Winter School/ Short term Courses/ Workshops Conducted

Title	Coordinators	Duration & Period
International Conference on Materials,	Dr Sajith A.S.,	14 15 July 2020
Mechanics and Structures 2020 (ICMMS 2020)	Dr Robin Davis P.	14-15 July 2020

d. Expert Lecturers Delivered in Conferences/ Seminar/ Workshops

Name of Faculty	Title of the Programme	Duration and Period	Organization
Dr. S. Chandrakaran	Disaster Management Techniques –August 2020	7 Days FDP	N G P Institute of Technology Coimbatore
Dr. S. Chandrakaran	Ground Improvement for Infrastructure Development	15-19 March 2021	GEC Kannur
Dr. S. Chandrakaran	Pile Foundation Design Problems and Solutions	10th Feb 2021	Vedavyasa Engineering College, Calicut
Dr. S. Chandrakaran	Ground Improvement with Geosynthetics, KTU Sponsored FDP	19-24 May 2021	SCMS Kochi
Dr. S. Chandrakaran	Delivered Keynote address on Pile Foundation Design and Practice National Conference on Infrastructure Development and Innovations	5-6 May 2021	College of Engineering Vadakara
Dr. Muahmed Safeer Pandikkadavath	National Conference on Infrastructural Innovations and Environment (NCIIE 2021)	05-06 May 2021	College of Engineering Vadakara
Dr. Seethalakshmi P.	Presented virtually through zoom platform on the topic "A Numerical Study on the Behaviour of Disconnected Composite Piled Raft, Composite Piled Raft and Unpiled Raft under Axial Load" in the International Foundations Conference and Equipment Expo	May 10-14, 2021,	IFCEE Expo 2021, ASCE Dellas, Texas, USA
Dr. Jayachandran K	The Kerala Highway Research Institute (KHRI) in association with IIT Madras – Technical webinar series	April 2020 to August 2020-	The Kerala Highway Research Institute (KHRI)
Dr. Jayachandran K Dr. Jayachandran K	KPRIET Civil Tech Webinar Series 2One-week webinar series amid	May 11, 2020 May 12-16,	KPR Institute of Engineering and Technology P.S.R Engineering College,
Dr. Jayachandran K	Covid-19 Pandamic ACC Limited and Association of Consulting Civil Engineers (India), Coimbatore centre – Webinar series	2020 May 20, 2020	Sivakasi ACCE (India) Coimbatore Centre
Dr. Jayachandran K	ICI Student chapter Webinar series on corrosion and other deterioration mechanism in buildings	May 27, 2020	SRM Eswari Engineering College, Chennai
Dr. Jayachandran K	One-week online FDP on recent advancements in concrete technology (RACT-2020)	June 22-26, 2020	B.M.S College of Engineering, Bangalore

	AICTE Sponsored and mast	Inter 07	
Dr. Jayachandran K	AICTE Sponsored one-week online STTP (Phase-II) on low carbon energy buildings	July 27- August 01, 2020	Mahendra Engineering College
Dr. Jayachandran K	CSIR - Summer Research Training Program 2020 (CSIR NEIST-SRTP) Online Project 14 - Role of Civil Engineering in Infrastructure Development		CSIR-North East Institute of Science and Technology, Jorhat, Assam
Dr. Jayachandran K	AICTE Sponsored Phase-II online STTP on Disaster Management and Mitigation	7-12, September 2020	Dr.N.G.P. Institute of Technology, Coimbatore
Dr. Jayachandran K	One-week short term training program (STTP) on Challenges and remedies in various fields of Civil Engineering Construction	21-26, September 2020	Vellore Institute of Technology Chennai
Dr. Jayachandran K	AICTE Sponsored Phase-I online STTP on Non- Destructive Test methods	December 07-12, 2020	Thiyagaraja Polytechnic College, Salem
Dr. Jayachandran K	AICTE Sponsored Phase-II online STTP on Non- Destructive Test methods	December 14-19, 2020	Thiyagaraja Polytechnic College, Salem
Dr. Jayachandran K	Faculty Development Programme on Advances in Construction Technology	February 02- 06, 2021	College of Engineering Vadakara
Dr. Jayachandran K	Faculty development programme on state-of-the-art experimental and numerical techniques in civil engineering	March 01-19, 2021	Saintgits College of Engineering (Autonomous), Kottayam
Dr. Jayachandran K	Training program on novel materials and technologies for sustainable construction	March 22-27, 2021	Government Engineering College Kozhikode
Dr. Anantha Singh T S	GATE 2021 Opportunities & How to crack GATE	03-08-2020	Rohini College of Engineering & Technology, Anjugramam, Kanyakumari
Dr. Anantha Singh T S	DST-SERB sponsored STTP on Electrochemical technology for environmental treatment and Clean Energy Conversion- ECTCEC 2020	17-11-2020	Department of Chemical Engineering, National Institute of Technology Calicut
Dr. Agilan V	GIS and its Applications in Civil Engineering	22nd to 27th February 2021	Rajiv Gandhi Institute of Technology, Kottayam
R. Arunkumar	Short Term Training Programme on "Conservation of Energy and Environment through Sustainable Engineering"	January 4, 2021, to January 9, 2021	Department of Civil Engineering, Mepco Schlenk Engineering College, Sivakasi
R. Arunkumar	Short Term Training Programme on "Conservation of Energy and Environment through Sustainable Engineering"	1 - 6 February 2021	Department of Civil Engineering, Mepco Schlenk Engineering College, Sivakasi
Dr. Anjana Bhasi	State-Of-The-Art Experimental and Numerical Techniques in Civil Engineering	1 March - 22 March 2021	Saintgits College of Engineering

Dr. S. K. Pramada	National Level Faculty Development Program on Groundwater Assessment Modeling and Management	4-6 PM 19.08.2020	Centre For Remote Sensing and Geoinformatics, Satyabama University Chennai in Association with NITC and ISRS Chennai Chapter
Dr. S. K. Pramada	Faculty Development Program on Software Applications in Water Resources Management	4-6PM 18-11-2020	Centre For Remote Sensing and Geoinformatics, Satyabama University Chennai in Association with NITC and ISRS Chennai Chapter
Dr. S. K. Pramada	Chaired a session in Groundwater and Quality Models in the National Conference on Advanced Modelling and Innovations in Water Resources Engineering AMIWRE-2021, NIT Jamshedpur	11.AM TO 12.30 PM 21.02.2021	NIT Jamshedpur
Dr. Santosh G Thampi	HYDRO 2020-International	26.03.2021 to 28.03.2021 Chaired a Technical Session on 27.03.2021	NIT, Rourkela & Indian Society for Hydraulics
Dr. Santosh G Thampi	Research Week 2020-2021 Delivered a talk on "Environmental Flows"	29.01.2021	Gujarat Technological University
Dr. Santosh G Thampi	Five-day online FDP "Overview of Multidisciplinary Approaches in Civil Engineering" - Delivered a talk on" Prediction of the Impact of Projected Climate Change on Streamflow" on 08.09.2020	07.09.2021 to 11.09.2021	Department of Civil Engineering, Rajeev Institute of Technology, Hassan, Karnataka
Dr. Santosh G Thampi	National Level FDP on Groundwater Assessment, Modelling and Management - Delivered a special address on 17.08.2020 and a talk on "Groundwater Resource Assessment in the Indian Context" on 18.08.2020	17.08.2020 to 22.08.2020	Centre for Remote Sensing and Geoinformatics & Department of Civil Engineering, Sathyabhama Institute of Science and Technology, Chennai, and Indian Society for Remote Sensing, Chennai Chapter
Dr. Santosh G Thampi	FDP on Climate Change and Hydrologic Extremes - Delivered a talk on "Climate Change and Peak Flows" on 23.07.2020	20.07.2020 to 24.07.2020	Department of Civil Engineering and Water Institute, Karunya University of Technology and Sciences, Coimbatore
Dr. Harikrishna M.	Tools for Transportation Data Analysis & Modelling	March 18-23, 2021	National Institute of Technology Calicut
Dr. M.V.L.R. Anjaneyulu	7th Conference on Transportation Systems Engineering and Management (CTSEM 2020)	December 29-30, 2020, KSCSTE- NATPAC	NATPAC

Dr. M.V.L.R. Anjaneyulu	STTP (Online) – Tools for Transportation Data Analysis and Modelling	March 18-23, 2021	NITC
Dr. M.V.L.R. Anjaneyulu	Transportation Technology – the way forward	14-18 December, 2020	RIT Kottayam
Dr. M.V.L.R. Anjaneyulu	Civil Tech Talks 19	2 February, 2021	Telangana Academy for Skill and Knowledge
Dr. M.V.L.R. Anjaneyulu	Road Safety Certification Course	15 day, December, 2020	KSCSTE-NATPAC
Dr. George K Varghese	Online Faculty Development Programme Topic: The journey towards being a good researcher	24/07/2020	Ilahia College of Engineering and Technology
Dr. George K Varghese	5-day FDP on Sustainable Environmental Geotechniques Topic: Environmental Forensic Application in Land and Groundwater Pollution	09/10/2020	SRKR Bhimavaram (AP)
Dr. George K Varghese	Faculty Development Programme on Research Career		Vimala College Thrissur, Kerala
Dr. George K Varghese	Webinar Topic: Environmental Forensics	05/02/2021	Thejus Engineering College
Dr. George K Varghese	3 days FacultyDevelopment Program on "Sustainable Solid Waste Management" Topic: "Pollution from Solid Waste Processing and Disposal Facilities"	05/03/2021	MEA Engineering College Perinthalmanna
Dr. George K Varghese	Sustainable Wastewater Management- Challenges and Opportunities in Environmental Engineering Topic: "Environmental Forensics-The way forward in wastewater management"	30/03/21	CWRDM
Dr. George K Varghese	ISTE sponsored FDP on Environmental Impact Assessment Topic: "Waste Management & Impact of Pollutants"	20/04/ 2021	M Dasan Institute of Technology Ulliyeri
Dr. George K Varghese	Webinar Topic: "Restore our Earth"	22/04/2021	Govt. Degree College Pampore, Jammu and Kashmir
Dr. George K Varghese	Webinar session organized by the Joint Action Council of Kerala State Pollution Control Board Engineers for the future engineers of PCB Topic: "Environmental Forensics"	07/05/2021.	Kerala State Pollution Control Board

Dr. Praveen Nagarajan	International Conference on Materials, Mechanics and Structures 2020, Key note lecture on "Truss Models for Analysis and Design of Concrete	14 July 2020	NIT Calicut
Dr. A P Shashikala	Structures" AICTE Sponsored STTP on Structural Health Monitoring and Seismic Protection of Structures and Infrastructural Systems – Phase IV	5-10 October 2020	Bannari Amman Institute of Technology Sathyamangalam, Erode
Dr.Robin Davis P	Recent Advancements in Structures and Materials	15th to 17th December 2020	Muthoot Institute of Technology and Science

d. Consultancy and testing

Nature of Service	Organization	Revenue earned (` Lakhs)	Status
Testing of materials	Central and State Govt. Departments and Organisations, Private Companies and Individuals	0.49	Ongoing
Safety Audit of Railway Bridges	Southern Railway Palghat Division	60.78	Ongoing
Structural Design of Warehouse Building, University of Calicut	University of Calicut	5.45	Ongoing
Construction of Mambaram Bridge – Approach and Drainage Construction, Kannur	Executive engineer, PWD Bridges Division, Kannur	0.35	Completed
Relocation Of Affected People From Landslide And Flood Affected Areas Of Wayanad. Inspection Of Land Slide Affected Areas	District Collector Wayanad	3.24	Completed
Soil Testing For The Proposed Bridge	The Secretary,Enghapuzha Grama Panchayath, Enghapuzha	4.68	Completed
Soil Investigation For The Proposed "PyIP Rehabitation Of Damaged Main Canal And Under Tunnel" In Mattanur Municipality	Assistant Engineer Pazhassi Irrigation Project (m) Section II,Mattannur	0.25	Completed
Rectification And Modification Of Nadapuram Masjid	The Secretary, Nadapuram Juma-ath Palli Paripalana Committee,Nadapuram	0.14	Completed
Study On Landslide Possibility Of Area Located On Mist Inn Resort, Devikulam, Palli Vasal Village, Idukki District	MIST INN Resort, Devikulam, Idukki District	0.35	Completed
Identification And Classification Of Soil	Chairman and Managing Director, Superb Infra	0.68	Completed

	Developers (India) Private Limited, City Square, Near Shopprix Super Centre, Taliparamba, Kannur- 670141		
Testing Of Soils For Filling Purpose	Hindustan Petroleum Corporation Ltd, Kozhikode IRD, Elathur -673 303	0.13	Completed
Construction Of Stadium At Karimbummal Panamaram, Mananthavady, Wayanad	KPWD, Building Section No.2, Mananthavady -670 645	0.25	Completed
Identification And Classification Of Soil	Superb Infra Developers (India) Private Limited, NH Taliparamba, Kannur (Identification and classification of 7 soil samples)	0.68	Completed
Assessment of the Quantity of Legacy Waste at the Brahmapuram Solid Waste Dump Yard of the Kochi Municipal Corporation	Kochi Municipal Corporation	7.778	Completed
Assessment of the Quantity of Legacy Waste at the Kureepuzha Solid Waste Dump Yard of the Kollam Municipal Corporation	Kollam Municipal Corporation	3.776	Completed

e. Patents acquired and filed

Name of Staff	Title	Year
Dr. V. Sathish Kumar, Dr. N. Ganesan and Dr. P.V. Indira	Engineered Hybrid Fibre Reinforced Ternary Blend Geopolymer Concrete Composite	October 2020 Patent (Australia) (Acquired)
Dr. Praveen Nagarajan and Dr. A P Shashikala	Steel Fibre Reinforced Rubcrete Fencing Post	2020 (filed)
Dr. Praveen Nagarajan and Dr. A P Shashikala	Steel Fibre Reinforced Rubcrete Crash Barriers	2020 (filed)
Dr. Praveen Nagarajan and Dr. A P Shashikala	Steel Fiber Reinforced Rubcrete Prestressed Concrete Railway Sleepers	2020 (filed)
Dr. Praveen Nagarajan and Dr. A P Shashikala Ground Granulated Blast Furnace Slag-Dolomite Geopolymer Concrete Blocks		2020 (filed)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

a. Community Services

[1], Jay Prakash, Member of Organizing Committee in the Congress on Intelligent Systems held online during September 05-06, 2020 in India.

b. Other Academic and Administrative Services

Name of Staff	Academic and Administrative Services	
Dr. K A Abdul Nazeer	Served as Member, Interview Board for the selection of Ph.D candidates to the APJ Abdul Kalam Technological University, Kerala.	
	Served as Member, Selection Committee for Faculty Recruitment at Sahrdaya College of Engineering, Thrissur, Kerala.	
	Serving as Member, Governing Body, Ilahia College of Engineering, Muvattupuzha, Kerala.	
	Serving as Member, Board of Studies in CSE, Saintgits College of Engineering, Kottayam, Kerala.	
	Served as Member, Doctoral Committee at Dept. of CSE, VIT Vellore	
	Served as Faculty Functionary (Purchase), Office of the Dean (P&D), NITC (Jan-March 2021)	
Dr. Saleena N	Advisory Committee Member, International Conference on Systems, Energy and Environment, GEC Kannur	
	22 -23 January 2021	

c. Conferences/Summer/Winter School/Short term Courses/ Workshops conducted

Title	Coordinators	Duration & Period
GANart - 3 Days workshop on	Dr.Jayaraj P B &	May 20 -22
introduction to Generative Adversarial	Dr.Pournami	
Networks		

d. Expert lecturers delivered in Conferences/Seminar/workshops

Name of Staff	Title of the Programme	Duration and Period	Organization
Dr. K A Abdul	AICTE Sponsored Short	August 2020	Amal Jyothi College of
Nazeer	Term Training Programme on 'Data Analytics and		Engineering, Kanjirapplly, Kerala.
	Machine Learning'.		
Dr. Arun Raj	Online Technical Talk on	21 February	SASTRA University, Tanjore.
Kumar P	"Privacy and Security	2021	
	solutions for Internet of Things", AICTE-Training		
	and Learning Academy		
	sponsored e-FDP on		
	"Internet of Things",		
Dr. Arun Raj	Webinar on "Secure	6 December	MVJ college of Engineering,
Kumar P	Communication in	2020	Bangalore.
	VANET"		
Dr. Arun Raj	Online Technical Talk on	November 16-	Saintgits College of Engineering,
Kumar P	"Network Traffic	20, 2020	Kottayam.
	Analysis" for five days		
	online FDP on "Cyber Security Analytics and		
	Cyber Forensics"		

	GANart - 3 Days		
Dr. Jayaraj P B	workshop on introduction	May 21, 22 (90	NIT Calicut
Di. Jayataj I D	to Generative Adversarial	minutes each)	NII Calleut
	Networks	minutes each)	
Dr. Lijiya A	Five day FDP on" Recent	May 17-21,2021	LBS Technology for
DI. LIJIYa M	Advancement Image	Widy 17-21,2021	Women,Poojappura, Kerala
	Processing and Computer		Wollen, 1 Oojuppulu, Ixelulu
	Vision"		
	Handled a 3 Hour Session		
	on "Computer Vision and		
	Deep Learning for		
	Assistive Technologies"		
Dr. Lijiya A	KTU Sponsored 5 day	February 8-11	Rajagiri School of Engineering &
	FDP on		Technology, Kerala
	"Data Science & Artificial		
	Intelligence"		
	3 Hour Lecture on the		
	topic		
	"Introduction to AI &		
	Role of AI in Gaming"		
Dr. S.	Research Documentation –	March 6, 2021	SSN College of Engg., Chennai
Sheerazuddin	LaTeX	(60 minutes)	
Dr. S.	An insight into	March 27, 2021	SSN College of Engg., Chennai
Sheerazuddin	mathematical modelling	(90 minutes)	
	in information and		
	communication		
	engineering		
Dr. Jay Prakash	ADVANCES IN	4th - 8th May	AMITY
	COMPUTATIONAL	2020	UNIVERSITY UTTAR
	INTELLIGENCE &		PRADESH, NOIDA.
	MACHINE LEARNING		
	APPLICATIONS"		
D. I D 1 1.	EDD On Designed Anglasia	15 10 Manul	MEA Ence Cellere Kerele
Dr. Jay Prakash	FDP On Business Analysis	15-19 March- 2021	MEA Engg College, Kerala
Dr. Lou Drolroch	and Data science		Dejecthon Technical University
Dr. Jay Prakash	TEQIP-III Sponsored 3	19-21 Sep-2020	Rajasthan Technical University, Kota
	Days FDP on MACHINE		Nota
	LEARNING & ITS		
	APPLICATION IN		
	HEALTHCARE SECTOR		
Dr. Jay Prakash	ATAL Faculty	26-8-2020	COLLEGE OF ENGINEERING
	Development Program on		KIDANGOOR
	Machine learning and		
	applications		
	**		
Dr. Jay Prakash	AICTE sponsored Short	28th Sept - 3rd	Manav Rachna International
DI. Jay I lakash		Oct 2020	Institute of Research & Studies
D1. Jay I lakash	Term Training Programme	001 2020	
Di. Jay I lakash	on "Artificial Intelligence	000 2020	Deemed to be University,
Di. Jay I lakasii	on "Artificial Intelligence & Machine	0012020	Deemed to be University, Faridabad, Haryana
Di. Jay I lakasii	on "Artificial Intelligence	0002020	-
Di. Jay I lakasii	on "Artificial Intelligence & Machine	0002020	-

Dr. Pranesh Das	KTU Sponsored 5 days FDP on "Data Science & Artificial Intelligence" 3 Hour Lecture on the topic "Introduction Data Science and Machine learning".	Feb 08 -12, 2021	Rajagiri School of Engineering & Technology, Kerala
Dr. Pranesh Das	AICTE sponsored 6 days Online STTP on "High Performance Computing and Deep Learning for Image, Text Analysis", 3 Hour Lecture on the topic "Optimization algorithms for deep learning"	Feb 22- 27, 2021	Mar Baselios College of Engineering and Technology, Trivandrum, Kerala
Dr. Anil Pinapati	 FDP on "Current Research Trends in Computer Science (CRTCS)". 4 Hours lecture on the topic "Information Security and ECC" 	29July-02 Aug, 2020	Kakatiya Institute of Technology and Science Warangal, Telangana.
Dr. Anil Pinapati	E&ICT NIT warangal sponsored FDP on "Cyber Security" 3 Hours Lecture on the topic " Elliptic Curve Cryptography"	2nd - 11th Jan, 2021	Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai

DEPARTMENT OF ELECTRICAL ENGINEERING

a. Community Services

Dr. Mithun M. S. Issued a report to District Panchayath, Kozhikode for purchase of automatic hand-sanitizer dispenser and infrared thermometer for schools in the district.

b. Other Academic and Administrative Services

Name of faculty	Academic and Administrative Services
Dr. Jeevamma Jacob	Chairperson ETL Dean: Alumni Affairs and International Relations
Dr. Abraham T Mathew	TEQIP Coordinator

Dr. S Ashok	Dean :Research & Consultancy		
Dr. Saly George	Dean Academic		
Dr. Paul K Joseph	 i. Associate editor of Journal of Health Management and Informatics (JHMI) ii. Dean: Alumni Affairs and International Relations Member of the academic council of Sahrdaya College of 		
Dr. Susy Thomas	Engineering and Technology Trissur. i. Expert Member for Ph. D selection in APJ Abdul Kalam Technological University.		
Dr Sindhu T K	Associate Dean (Academic)		
Dr. Preetha P	Warden LH		
Subha D.P.	 1.Member of the NITC constituted disciplinary committee , NITC 2.Member of the Project Monitoring Committee, NITC 3.Member of the comprehensive viva committee of NSS College of Engineering, Palakkad 4.Member of PG, Board Of Studies at APJAK KTU, Kerala 		
	Advisory Committee member of the National Conference on "Advances in Computing Communication Signals Energy and Technology ACCSET-21", to be conducted on 26th & 27th May 2021		
Dr. Sunitha R	Execom Committee member (Treasurer), IEEE Malabar subsection for the year 2020		
	Doctoral Committee member of APJ Abdul Kalam Technological University (GCE Kannur), 2019 onwards		
K Sunil Kumar	Deputy Chairperson, UG admissions		
	Department AQMC Convener		
Dr. Nikhil Sasidharan	NBA Power Electronics Coordinator		
Di. Tukini Sasidharan	Institute TEQIP MIS Nodel officer		
	Institute UPS Purchase committee convener		
Dr. S.Kanagalakshmi	Ladies Hostel warden		
Dr. Gopakumar P	Secretary, IEEE Malabar Sub-section Kerala		

c. Conferences/Summer/Winter School/Short term Courses/ Workshops conducted

Title	Coordinators	Duration & Period
Recent Advances in Conditioning Monitoring	Dr. Preetha P & Dr.	25/01/2021-30/01/2021
of Power Equipment, NIT Calicut,	Nasirul Haque	
Online Faculty Development Programme on	Dr. Jagadanand G, Dr.	from 24 th -28 th August,2020.
Practical Challenges in the Design and	Nikhil Sasidharan	
Development of Electric Vehicles-2020		
sponsored by SPARC		
Faculty development Programme on	Dr. Nikhil Sasidharan,	March 10 th -14 th 2020
Renewable Powered EV Charging Station-	Dr. Jagadanand G.,	
Challenges in Converter Design and Storage	Dr. Shreelakshmi M. P	
(RPECS – 2020) sponsored by NaMPET Phase		
III, Ministry of Electronics & Information		
Technology, (MeitY) Govt. of India		
5 Days online FDP on Practical Challenges in	Dr. Nikhil Sasidharan,	
the Design and Development of Electric	Dr. Jagadanand G.,	August 24 th - 28 th , 2020
Vehicles - 2020 (PCEV-2020)	Dr. Shreelakshmi M. P	
Five day workshop on Recent Advances in	Dr. Sunitha K and Dr.	15th to 19th March 2021
Computational Electromagnetics and Signal	Nasirul Haque	
Processing Tools for High voltage applications	1	
Recent Trends in Medical Cybernetics (RTMC	Dr. Subha DP, Mr.	22nd – 26th , February 2021
2021)	Subhash KM	
Recent advances in Intelligent System &	Dr.Shihabudheen K V,	12 – 16 October, 2020
Nonlinear Control (RISNC-2020)	Dr. Arun Neelimegham	
	КМ	
AICTE Training and Learning (ATAL)		
Academy Sponsored on online Faculty	Dr.S. Kanagalakshmi	1 – 5, FEB 2021
Development Programme on 'Advanced	Dr.Dhanya Ram	AICTE ATAL
Process Control APC-2021.		
Online Faculty Development Programme on	Dr.S. Kanagalakshmi	
'Modern Control Techniques for Power and	Dr.S. Kumaravel	7 -11, SEP 2020
Energy systems" MCTPE-2020.		
National Workshop on Electrical	Dr. Mithun M. S.	5 days,
Measurements and Signal Conditioning.	Dr. Sanjay M.	14 th to 18 th Dec. 2020.
Application of Artificial Intelligence in Power	Dr. Sunitha R, Dr.	09-13, November 2020
System Operation and Control	Deepak M, Dr.	
	Gopakumar P	

d. Expert lecturers delivered in Conferences/Seminar/workshops

Name of Staff	Title of the Programme	Duration and Period	Organization
	"Recent trends in medical		
Dr. Paul.K.Joseph	cybernetics", faculty	22-25 February 2021	NIT, Calicut
	development program		

	Introduction to Life		
	Estimation of Polymer	25-01-2021 to 30-	
Dr. Preetha P	Nanocomposites, FDP-	01-2021	NIT Calicut
	RACMPE 2021	01 2021	
	Partial Discharge	15/03/2021-	NIT Calicut,
Dr. Preetha P	Measurements', FDP on	19/03/2021	Tur Cancal,
Di. i loculu i	Recent Advances in	17/03/2021	
	Computational		
	Electromagnetics and Signal		
	Processing Tools for High		
	Voltage Applications		
Dr. Rijil	Session on "Converter	5th to 9th February	Department of Electrical and
Ramchand	Topologies for EV System",	2021	Electronics Engineering, College of
Rumenand	Online Faculty Development		Engineering Vadakara
	Program on "Electric		
	Vehicles: Charging &		
	Challenges"		
Dr. Rijil	Session on "Multilevel	23rd to 27th	Department of Electrical and
Ramchand	Inverters", SITTTR	November 2020	Electronics Engineering, Govt.
Rumenund	Kalamassery sponsored		Polytechnic College, Westhill,
	Online Faculty Development		Kozhikode
	Program on "Recent Trends		Rozinkoue
	in Electrical and Electronics		
	Engineering"		
Dr. Jeevamma		22nd to 26th	Muthoot Institute of Technology and
Jacob	Systems and Control: An	February 2021	Science
	introduction", Faculty	•	
	Development Program on		
	'Research Initiatives in		
	Advanced Control Systems'		
Dr. Jeevamma	Session on "Introduction to	12th to 16th October	NITC
Jacob	Nonlinear Control", Faculty	2020	NIIC .
Jacob			
	· •	2020	
	Development Program on	2020	
	Development Program on 'Recent Advances in	2020	
	Development Program on 'Recent Advances in Intelligent System and	2020	
Dr. Joguanna	Development Program on 'Recent Advances in Intelligent System and Nonlinear Control'		Dejectri School of Engineering and
Dr. Jeevamma	Development Program on 'Recent Advances in Intelligent System and Nonlinear Control' Session on "An Introduction	27th to 31st July	Rajagiri School of Engineering and
Dr. Jeevamma Jacob	Development Program on 'Recent Advances in Intelligent System and Nonlinear Control' Session on "An Introduction to Nonlinear Systems &		Rajagiri School of Engineering and Technology
	Development Program on 'Recent Advances in Intelligent System and Nonlinear Control' Session on "An Introduction to Nonlinear Systems & Control", Faculty	27th to 31st July	
	Development Program on 'Recent Advances in Intelligent System and Nonlinear Control' Session on "An Introduction to Nonlinear Systems & Control", Faculty Development Program on	27th to 31st July	
	Development Program on 'Recent Advances in Intelligent System and Nonlinear Control' Session on "An Introduction to Nonlinear Systems & Control", Faculty Development Program on 'Control System applications	27th to 31st July	
Jacob	Development Program on 'Recent Advances in Intelligent System and Nonlinear Control' Session on "An Introduction to Nonlinear Systems & Control", Faculty Development Program on 'Control System applications with Matlab Sessions'	27th to 31st July 2020	Technology
Jacob	Development Program on 'Recent Advances in Intelligent System and Nonlinear Control' Session on "An Introduction to Nonlinear Systems & Control", Faculty Development Program on 'Control System applications with Matlab Sessions' Delivered an expert talk in a	27th to 31st July 2020 6th to 9th January	Technology Department of electrical
Jacob	Development Program on 'Recent Advances in Intelligent System and Nonlinear Control' Session on "An Introduction to Nonlinear Systems & Control", Faculty Development Program on 'Control System applications with Matlab Sessions' Delivered an expert talk in a technical session on 07-01-	27th to 31st July 2020	Technology Department of electrical engineering, Govt. College of
Jacob	Development Program on 'Recent Advances in Intelligent System and Nonlinear Control' Session on "An Introduction to Nonlinear Systems & Control", Faculty Development Program on 'Control System applications with Matlab Sessions' Delivered an expert talk in a technical session on 07-01- 2020 as part of DTE	27th to 31st July 2020 6th to 9th January	Technology Department of electrical
Jacob	Development Program on 'Recent Advances in Intelligent System and Nonlinear Control' Session on "An Introduction to Nonlinear Systems & Control", Faculty Development Program on 'Control System applications with Matlab Sessions' Delivered an expert talk in a technical session on 07-01-	27th to 31st July 2020 6th to 9th January	Technology Department of electrical engineering, Govt. College of

	programme on "Recent Trends in Electric Drives"		
Dr. Jagadanand G	Delivered an expert talk in a technical session on 06/01/2020 as part of the seven day short term training programme on "Electric vehicle scope, Challenges and developments"	3-10 January 2020	Division of Electrical engineering, school of Engineering, CUSAT, kochi-22
Dr. Jagadanand G	Expert lecture on "Fault Detection Techniques in EV drives"	28 th August 2020	online FDP on Practical Challenges in the Design and Development of Electric Vehicles-2020
Dr. Sunitha K	Resource Person for session titled "Introduction to Electromagnetic Computation"	15th to 19th March 2021	workshop on Recent Advances in Computational Electromagnetics and Signal Processing Tools for High voltage applications
Dr. Sunitha K	Resource Person for session titled "Application of Electromagnetic Computation"	15th to 19th March 2021	workshop on Recent Advances in Computational Electromagnetics and Signal Processing Tools for High voltage applications
Dr. Sunitha K	Resource Person for session titled "Condition Monitoring of GIS/GIL Electromagnetic Computation"	25th to 30th January 2021	FDP on Recent Advances in Condition Monitoring of Power Equipment
Dr. Sunitha K	Keynote speaker for International Conference on Systems, Energy & Environment (ICSEE) 2021	22-23 January 2021.	Government Engineering College Kannur
Dr. Sindhu TK	Session on "Development of Condition Assessment Methodologies for UG cables based on measurement of Partial Discharge Signals" Online Faculty Development Programme on Recent Advances in Condition Monitoring of Power Equipment	25-30 January 2021	NIT Calicut
Sindhu T K	Condition monitoring of underground cables	On 13.02.2021; period: 08.02.2021 to 13.02.2021	Sona College of Technology, Salem-5, Tamilnadu, India

Subha D.P.	ML Approaches and its Applcations	12-10-2020 to 17- 10-2021	RMK College of Engineering,Chennai
Subha D.P.	Trends in EEG signal analysis	22-26 February 2021	NITC
Subha D.P.	Recent Trends in Biosignal analysis for mental health	4-3-2021	IEEE Malabar sub section
Subha D.P.	Renewable Energy Technology:Facts & Innovative Solutions	11-12 June 2021	NATIONAL CONFERENCE ON INNOVATIONS IN RENEWABLE ENERGY TECHNOLOGIES
Dr. Mija S J	Lecture on "Advancement in Sliding Mode Control", for the Online FDP Recent advances in Intelligent Systems and Nonlinear Control (RISNC-2020)	12-16 October 2020	EED, NIT Calicut
Dr. V. Karthikeyan	an expert talk in a technical session as part of national level Five day online faculty development programme on "real time applications of power electronics research scope and challenges"	27-07-2020	Adi Shankara institute of engineering and technology, kalady, Kerala
Dr. V. Karthikeyan	an expert talk in a technical session as part of 'ATAL Sponsored Five days' faculty development programme on "Challenges And	08-10-2020	Department of electrical engineering, NIT Puducherry , karaikal

	Opportunities In Electric Vehicle Technology"		
Dr. V. Karthikeyan	Delivered an expert talk in a technical session as part of 'AICTE sponsored one week online short term training programme on "Recent Advancements In Internet Of Things For Healthcare Applications "		Department of electrical engineering, MOUNT ZION College of Engineering and technology, Pudukkottai
Dr. V. Karthikeyan		02-12-2020	Department of electrical engineering, IFET College of Engineering, gangarampalayam
Dr. V. Karthikeyan	Delivered an expert talk in a technical session as part of ATAL Academy Sponsored 5 days Faculty Development Programme on "SUSTAINABILITY ENGINEERING"	14-12-2020	Department of electrical engineering, St. Joseph's College of Engineering, Chennai
Dr. V. Karthikeyan	Internet of things and its Applications to Transportation and Agriculture sectors	07-01-2021	IEEE Malabar Subsection' 32nd talk of the Webinar Series
Dr. V. Karthikeyan	critical aspects that will enable the development of EV ecosystem in India	30-05-2020	industry institution summit 3.0
Dr. V. Karthikeyan	Delivered an expert talk in a technical session as part of national level online FDP on Research Initiatives in Renewable Energy Systems "Recent Trends in Electric Drives"	22-07-2020	Department of electrical engineering, Muthoot institute of technology and science
Dr. V. Karthikeyan	Delivered an expert talk in a technical session as part of AICTE sponsored two weeks online Faculty Development Programme on " High Power Conversion Electronics for Green Energy Based Smart Grid"		Department of electrical engineering, S.A College of Engineering ,Chennai

Dr. V. Karthikeyan	Delivered an expert talk in a technical session faculty development programme on "Integration on Renewable Energy Systems with Micro grid"	01-07-2020	Department of electrical engineering, PVP Siddhartha Institute of Technology, Vijayawada
Dr. V. Karthikeyan	Delivered an expert talk in a technical session as part of seven days Faculty Development Programme (FDP) on "Recent Advancements in Electric Vehicle Technologies"	09-12-2020	Department of electrical engineering, SRM Institute of Science and Technology,SRM Nagar,Kattankulathur, 603203, Kanchipuram, Chennai, TN, India
Dr. Nikhil Sasidharan	Expert lecture delivered during online STTP on "Emerging Trends in Power Systems"	14-18 September 2020	Division of Electrical Engineering School of Engineering, Cochin University of Science & Technology Kochi, Kerala, a along with THDC Institute of Hydropower Engineering and Technology, Tehri, Uttarakhand, under TEQIP phase III
Dr. Nikhil Sasidharan	Expert lecture delivered during Five day Faculty Development Programme on "Modern Trends in Power Electronics"	08.03.2021. to 12.03.2021	Department of Electrical and Electronics Engineering, College of Engineering Perumon
Dr. Nikhil Sasidharan	Expert lecture delivered during TEQIP III sponsored 5 days' workshop on "Advancements in Electrical Engineering: An Academic & Industrial Approach"	3 rd August to 7 th August 2020	Department of Electrical Engineering , NIT Silchar
Dr. Nikhil Sasidharan	Expert lecture delivered during 5-Day online Faculty Development Program on "Electric Vehicles"	18 th -22 nd January 2021	College of Engineering, Cherthala, Kerala in association with AICTE Training and Learning (ATAL) Academy
Dr.S.Kanagalaksh mi	Sensors for Industrial Applications.	24 th May 2021.	Alumni Association of Government college of Engineering, Tirunelveli
Dr.S.Kanagalaksh mi	Strain and Force sensor – Industry applications.	Dec 26 , 2020 - Jan 02, 2021	AICTE Sponsored Online STTP on Emerging Trends in Micro/Nano Sensor and actuators for industrial Application
Dr.S.Kanagalaksh mi	Strain and Force sensor – Industry applications.	Feb 08, 2021 to Feb 13, 2021.	AICTE Sponsored Online STTP on Emerging Trends in Micro/Nano Sensor and actuators for industrial Application

Dr.S.Kanagalaksh mi	Strain and Force sensor – Industry applications,	Nov 23- Nov 28, 2020 Oct 26- Oct 31, 2020	AICTE Sponsored Online STTP on Emerging Trends in Micro/Nano Sensor and actuators for industrial Application
Dr. Gopakumar P	Delivered an expert talk in a technical session onResearch Opportunities in Smart Grid Technologies_	24.03.2021	College of Engineering Perumon_
Dr. Mithun M. S.	Key-Note Lecture in National Conference on Advanced Scenarios in Electrical Engineering and its Allied Technologies	10 th to 11 th June 2021	Sree Buddha College of Engineering, Pattoor
Dr. KM Arun Neelimegham	Nonlinear Fuzzy PID Controllers	1 session of 2 hrs on 25.2.2021	Muthoot Institute of Technology and science Cochin, Kerala
Dr. Nasirul Haque	Frequency Domain Spectroscopy Measurements for Condition Monitoring of Power Equipment	Jan 30, 2021, 2:30 pm to 4:00 pm.	NIT CALICUT, EED
Dr. Nasirul Haque	Charge Trapping and de- trapping in dielectrics	March 19, 10:00 am to 11:30 am	NIT CALICUT, EED

e. Consultancy and testing

Nature of Service	Organization	Revenue earned	Status
Feasibility study	MyDent Dental Clinic, Kozhikode	0.1 Lakhs	completed

f. Participation in Conferences/Seminars/Workshops/Other training Programmes

Name of faculty	Programme
Dr. Preetha P	Attended QIP Short Term Training on "Challenges, Opportunities, and Emerging Trend in the Field of High Voltage and Electrical Insulation" from 1-6th February 2021 IITBHU
	Attended the Short Term Training on "Diagnostics of High Voltage insulation" Conducted by IIT Kanpur online from1-6 March 2021
Dr. Sunitha R	1. Third edition of 2020 International Conference on Power Instrumentation, Control and Computing (PICC 2020), 17th-19th December 2020, Thrissur.
	2. 3-day Online National Workshop on "Beyond Glass Barriers (BGB-202020)" organized by IEEE Malabar Subsection from 27th -29th of November 2020.

Dr. Subha D.P.	International Conferences
	 1.Fourth International Conference on Trends in Electronics and Informatics (ICOEI 2020), 15-17 June 2020, Tirunelveli, India 2.10th International Conference ON Soft Computing for Problem Solving - SocProS 2020,18-20 December 2020, IIT Indore, India 3.IEEE international conference on Artificial Intelligence and Smart Systems (ICAIS 2021), 25-27 March, 2021, JCT College of Engineering and Technology, Coimbatore, India 4.IEEE international conference on Artificial Intelligence and Smart Systems (ICAIS 2021), 25-27 March, 2021, JCT College of Engineering and Technology, Coimbatore, India 5.Second International conference on Data Science and Applications, ICDSA 2021, Soft Computing Research Society,10-11 April 2021, Jadavpur University, Kolkota, India
Dr. Mija S J	The 46th Annual Conference of the IEEE Industrial Electronics Society (IECON), 18 21 October 2020, Singapore (Online)
Dr. S. Kanagalakshmi	FDP on Teaching and learning of Advanced control systems, NIT Warangal, 10-16th August, 2020. International conference on Interdisciplinary Research in Technology & Managemer
	IRTM 2021, Feb 26-28, 2021, India.
Subhash K.M.	31st Annual State Faculty Convention of ISTE Kerala Section on "Opportunities and Challenges in Technical Education in the Post COVID Scenario"
Dr. Mithun M. S.	 Five-day national workshop on 'Electrical Measurements and Signal Conditioning' conducted by NIT Calicut between 14th & 18th Dec. 2020. Five-day FDP on 'Recent Advancement on Condition Monitoring of Power Equipment' conducted by NIT Calicut between 25th & 30th Jan. 2021.
Dr. KM Arun Neelimegham	2nd IEEE Conference on Applied Signal Processing , ASPCON 2020 IEEE Conference Record: # 49795

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

a. Community Services

Name of Staff	Service
Dr Sameer SM	 Secretary, IEEE Region-10 (Asia-Pacific) Chair, Strategic Initiatives for Academic Engagement, IEEE Kerala Section Member, Board of Governors, APJ Abdul Kalam Technological University, Kerala

Dr Deepthi PP	 External Member, Department Advisory Committee, Department of ECE, NSS College of Engg, Palakkad, Kerala External Member, Board of Studies, Department of ECE, Mar Baselios College of Engineering and Technology, Thiruvananthapuram External Member, Board of Studies, M Tech in Biomedical Engg, Amrita School of Engineering, Coimbatore Chairperson, Doctoral Committee for 5 research scholars at APJ Abdul Kalam Technological University, Thiruvananthapuram Reviewer for IEEE Signal Processing Letters, IEEE Transactions on Vehicular Technology, IEEE Access, Elsevier Journal of Information Security and Applications, Elsevier Computers & Security, Electronics Letters
Dr Sreelekha G	 Member, Board of Studies (BoS), Electronics & Communication Engineering, Kerala Technological University (KTU). Session Chair, International Conference on Communication, Control, and Information Sciences (ICCISC2021) TPC Member for various conferences - ICCISC 2021, ICMSS 2021, ACCESS 2021
Dr G Abhilash	 Reviewer to Journals: Elsevier (EURASIP) Signal Processing, Springer (Sadhana), IET Signal Processing, IET Image Processing, IET Science, Measurement and Technology, IET Radar, Electronics Letters. Faculty Advisor to IEEE Signal Processing Society (SB) Chapter NIT Calicut Member of the Research Advisory Committee, Presidency University, Bangalore. Green Volunteer
Dr V. Sakthivel	 Appointed as Examiner for the PhD Thesis Evaluation by the Anna University, Centre for Research, Chennai. Appointed as Observer for the JEE Main Exam, Sep 2020 conducted by NTA, MHRD, India. Appointed as Observer for the NEET UG Exam, Sep 2020 conducted by NTA, CBSE, MHRD, India. Appointed as Observer for the ICAR Exam, Sep 2020 conducted by NTA, MHRD, India. Appointed as Observer for the online HSEE -2020 conducted by IIT Madras. Appointed as Observer for the IAT-2020 conducted by IISER Thiruvananthapuram. Appointed as Observer for the UGC NET Exam, Sep 2020 conducted by NTA, MHRD, India.
Dr Sudeep PV	 Election duty and counting duty - General Election to the Kerala Legislative Assembly 2021 Technical evaluation for Installation of CCTV installation camera in Kozhikode at Office of ACP, Kozhikode AIML faculty coordinator, Advanced Skill Development Centre Kozhikode TPC Member/ reviewer for various international conferences - AICECS 21, AITA 21, ICMSS 21 Reviewer to Journals: Elsevier Microprocessors and microsystems

	Content contribution for Indian adaptation of the textbook "An Introduction to Analog & Digital Communications 2ed by Simon Haykin, Michael Moher, John Wiley"
Dr M Surya Prakash	 Worked as a reviewer for VLSI Design and Test (VDAT-2020) conference held at IIT Bhubaneswar from 24th June, 2020 to 29th June, 2020. Worked as a reviewer for 7th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON 2020) held at MNIT Allahabad from 27th November, 2020 to 29th November, 2020.
Mr B Bhuvan	 Reviewer – Swadeshi Microprocessor challenge IEEE EDS student branch counselor
Dr Raghu CV	NSS Program Coordinator
Dr Lalit Kumar	 Expert as Session Chair at S12- RF / Microwave Antenna and Filter. Review the manuscripts conference- 6th Student conference on Engineering & system
Dr Chandan Yadav	• Reviewer for IEEE Transactions on Electron Devices, IEEE Sensors Journal, IEEE Electron Device Letters, IEEE UPCON conference 2020.

b. Other Academic and Administrative Services

Name of Staff	Academic and Administrative Services
Dr Sameer SM	 Professor & Head, Centre for Training and Placement, NIT Calicut Faculty Advisor, 2018-2022 Batch B.Tech
Dr Deepthi P.P.	HOD, ECED
Dr Sreelekha G	PG Admission ChairpersonPh D coordinator, ECED
Dr G Abhilash	 Teaching 7 credits (PG), Member of M.Tech (SP) Project evaluation Panel Research Guidance (1) PG Project Guidance (1) Guidance for Internship Projects of UG students (other Institutions) (1) Doctoral Committee Member in CSE(2), EEE(2), MED (4), Maths (1) External examiner/subject specialist for Comprehensive Exam in the MED (1), CSE(2) and ECE(2) Departments Prepared learning materials for Theory and Laboratory work in Signal Processing (Compressed Sensing and Recovery). Served as Member of Library Advisory Committee, Served as Member of Design Innovation Center NITC.
	 Organized External Lectures (2 nos.) under IEEE SP (SB) Society, NIT Calicut Served as the representative from ECE for restructuring the syllabi for Mathematics courses of the B.Tech programs.

Mr Suresh Rangan Dr Dhanaraj K. J.	 Served as a member of the committee for studying the possibilities of introducing Honors (Major) and Minor programs to the B. Tech Programs. Served as a member of the interview-panels for selecting Research Students under regular and QIP schemes. Faculty Advisor (final year UG) Department Purchase Committee Member GEM Consignee of the department. Programme Coordinator – Mtech Microelectronics and VLSI Design Lab In Charge – R&D Lab LMS Coordinator, ECED Member of purchase committees in EED, MED and T&P Chairman: PG project evaluation committee (Microelectronics
Dr Sudhish N George	and VLSI Design)Institute Examination Coordinator,
Dr V. Sakthivel	 CREC PTA Joint Secretary cum Treasurer Official for the online admission process of JoSSA/CSAB at NIT Calicut for 2020-21 (UG Admissions) SPCOM Lab Faculty-in-charge Faculty Advisor for B.Tech ECE 2017 batch Member in ECED Exam Vigilance committee Department Sports Coordinator Coordinator of B.Tech Major Project Evaluation Committee (Communication/SP) DC member in EED and CSED.
Dr Bindiya T S	 ECED Time Table in Charge ECED Purchase Coordinator Faculty advisor of 2017-2021 ECE B. Tech Batch B.Tech Major Project Evaluation Panel Member
Dr Jayakumar E. P.	 Faculty in Charge – Integrated Circuits Lab Member, M.Tech EDT Project Evaluation Panel Faculty in charge – Staff and Department amenities
Dr Sudeep PV	 Coordinator for dept. website development and website- in- charge Dept. Library-in-charge Faculty Advisor for B.Tech 2017-2021 batch and FA coordinator IIC member and Innovation Ambassador Member of the committee for setting up Centre for Computational Modelling and Simulation (CCMS) Research Guidance PG Project Guidance Doctoral Committee member CSE, EEE, Architecture External examiner for Comprehensive viva/Doctoral Committee member in CSE, EEE, Architecture Dept. External examiner for MTech thesis evaluation in CSE, EEE
Dr M. Surya Prakash	 Time-table In-Charge for ECED (jointly with Dr. Bindiya T. S.). Member of the Exam Vigilance Committee of ECED. Member of the B. Tech Project Evaluation Committee for Embedded & VLSI specializations.

	 Faculty Advisor for the 2019-23 batch of ECE students. Member of the Announcements Committee for Annual Sports Day. Mentor Faculty from ECED for students internship under TEQIP Twinning program (jointly with Dr. Venu Anand). Application Scrutinization Committee member for Ad-hoc Faculty Interviews held during Monsoon-2019. Time-table In-Charge for ECED (jointly with Dr. Bindiya T. S.). Faculty Incharge for Electronic Circuits Lab of ECED. Faculty Advisor for the 2019-23 batch of ECE students. Committee Member for Disposal/Write-Off of unserviceable items. Committee Member for preparation of Self-Assessment Report (SAR) for MTech Telecommunications specialization. Member of the General Arrangements Committee for National Board of Accreditation Work for Telecommunications specialization.
Dr Waquar Ahmad	Faculty AdviserDepartment Information officer
Mr B. Bhuvan	 Faculty in charge – VLSI Lab Member, M.Tech project evaluation committee (VLSI) Faculty in charge – Department amenities Cocoordinator-SMDP (C2SD)
Dr Raghu C V	 Associate Dean (Academic) NSS Programme Coordinator of the Institute M.Tech EDT Programme Coordinator
Dr Aswathi R Nair	• Content contribution for Indian adaptation of the textbook "Semiconductor Physics and Devices, S.M.Sze and M.K.Lee, Wiley"
Dr Lalit Kumar	FA for the B. Tech. batch 2020-24Member of Exam vigilance committee
Dr Chandan Yadav	 Faculty Advisor, ECED 2020 – 2024 batch, NIT Calicut Final Year ECED B.Tech Project Evaluation Committee, 2020 – 2021, NIT Calicut
Dr P.S.Sathidevi	Deputy Director and Director in Charge, NIT Calicut Since August 19, 2020
Dr Ameer P M	 In charge – Communication Lab Faculty advisor to 2018-22 BTech batch Department Information Officer

c. Conferences/Summer/Winter School/Short term Courses/ Workshops conducted

Title	Coordinators	Duration & Period
DST SERB sponsored Faculty Development Programme On	Dr Sreelekha G	11th – 15th January
Biomedical Signal Analysis and Machine Learning (BSAML)	Dr Sathidevi P S	2021

Online Internship Training Program On VLSI Design Covering Analog and Digital Design Flow, (Joint Event with NIELIT Calicut)	Dr Dhanaraj K. J.	August 17-28, 2020
Online Internship Training Program On VLSI Design Covering Analog and Digital Design Flow, (Joint Event with NIELIT Calicut)	Dr Dhanaraj K. J.	September 14-25, 2020
Online FDP on Modeling, Simulation and Fabrication of Future Nano -electronic Devices and Sensors (MSFNS'20)	Dr Lintu Rajan, Dr Gopikrishna Saramekala	5 days, August 24- 28,2020
Modeling, Simulation and Fabrication of Future Nano- electronic Devices and Sensors (MSFNS'20)	Dr Gopi Krishna S., Dr Lintu Rajan	24 th to 28 th August 2020
Online foundational course in communication skills "FLUENCE".	Dr Gopi Krishna S.	20 th Feb to 15 th March, 2021

d. Expert lecturers delivered in Conferences/Seminar/workshops

Name of Staff	Title of the Programme	Duration and Period	Organization
Dr Sameer S. M.	AICTE Sponsored ONE WEEK STTP on "Hands on Project Based Approach for 5G Design and Development Using MATLAB"),	14- 19 December 2020	Kakatiya Institute of Technology and Science Warangal, Telangana
Dr A V Babu	Five Day FDP on Recent Trends in Communication Engineering (Online- Mode)	9 Sept. 2020	NIT Puducherry
Dr A V Babu	Faculty Development Program on Recent Advances in Communications and Networking	Sept. 2020	Department of ECE, Govt. Engineering College, Idukki
Dr A V Babu	AICTE sponsored Online One Week Short Term Training Program (STTP) "Energy Efficient Techniques for 5G Wireless Communications"	9 Dec 2020	Pune Institute of Computer Technology, Pune
Dr Deepthi P P	2nd Police Science Congress – Emerging Technology in Policing	1.5 hours, 22-10- 2020	NITC
Dr. Deepthi P P	Expert Lecture on Information Security	1 hour on 14-01- 2021	NSS College of Engg, Palakkad
Dr. Dhanaraj K. J,	Online Internship Training Program On VLSI Design Covering Analog and Digital Design Flow	August 17-28, 2020	NIT Calicut and NIELIT Calicut
Dr. Dhanaraj K. J,	Online Internship Training Program On VLSI Design Covering Analog and Digital Design Flow	September 14- 25, 2020	NIT Calicut and NIELIT Calicut
Dr. Dhanaraj K. J.	Back to Basics – Solid State Devices	August 11-5, 2020	IEEE CASS Kerala Section and TKM Engineering College Kollam
Dr. Dhanaraj K. J.	Big Picture of Electronics and Communication Engineering – Academia Industry Perspective	February 12-13, 2021	NIE Mysuru

Dr. V. Sakthivel	Webinar on Research Trends in Multirate Signal Processing	27-05-2020 (11.00 AM to 1.00 PM)	Kings College of Engineering, Pudukkottai District, Tamilnadu.
Dr. Jayakumar E. P.	TEQIP II sponsored Online Training on Verilog Design and Simulations of Logic Circuits	16-19 February 2021	GEC Kozhikode
Dr.Lintu Rajan	Modeling, Simulation and Fabrication of Future Nano -electronic Devices and Sensors (MSFNS'20)	5 days	NIT Calicut
Dr.Lintu Rajan	Seminar on Bio-sensors	1 day	TKMIT
Dr.Lintu Rajan	Seminar on semiconductor based sensors	1 day	UNIVERSITY COLLEGE OF ENGINEERING KARIAVATTOM
Dr.Lintu Rajan	Emerging research trends in VLSI,MEMS and Signal Processing	5 day	Saintgits College of Engg
Dr.Lintu Rajan	MOSFET Scaling	1 day	Government Engg College, Kozhikode
Dr Venu Anand	Exploring DST funding schemes	1 hour lecture, 2 nd February, 2021	Directorate of Technical Education & State Project Facilitation Unit Kerala
Dr. Sudeep PV	ATAL FDP on Machine Learning Algorithms and Applications	4 th -8 th Nov 2020	IIIT Kottayam
Dr. Gopi Krishna S.	"Multidisciplinary Research Innovation in Engineering, Science and Technology for Sustainable Development"	26 th October - 7 th November 2020	Bipin Tripathi Kumaon Institute of Technology Dwarahat Almora, Uttarakhand
Dr. M. Surya Prakash	Introduction to VHDL/Verilog Design for Logic Circuits	2 Hours (13th December, 2020)	Government Engineering College, Kozhikode
Mr B. Bhuvan	Online Internship program on VLSI Design covering Analog and Digital design flow	3 weeks (17-08- 2020 to 06-09- 2020)	NIT Calicut and NIELIT Calicut
Mr B. Bhuvan	Online Internship program on VLSI Design covering Analog and Digital design flow	3 weeks (14-09- 2020 to 03-10- 2020)	NIT Calicut and NIELIT Calicut
Dr. Raghu CV	Handled three sessions in AICTE sponsored two weeks online FDP "Electronic System Design using ARM-Cortex" System on Chip Design – Basics to Development of Chips	$1^{st} - 12^{th}$ November 2020 $16^{th} - 28^{th}$ Novermber 2020 $7^{th} - 9^{th}$ December 2020	MATURI VENKATA SUBBA RAO ENGINEERING COLLEGE, HYDERABAD DEPARTMENT OF ECE
Dr. Raghu CV	Handled one session on "Sensors &Actuators" In AICTE funded FDP on Robotics	11th to 15 th of January 2021	Dept. of EEE, Vidya Academy of Science and Technology, Kerala
Dr. Raghu CV	Handled one session on "Internet of Things (IoT) – From Hardware point of view" In ATAL FDP on Internet of Things	Feb 02-06, 2021	Department of Computer Science, Cochin University of Science and Technology,

Dr. Aswathi R Nair Dr. Aswathi R Nair	Workshop on "Exploring DST funding schemes" Webinar on Flexible Electronics	5 days, 27/01/2021 to 02/02/2021 1 day, 17/9/2020	TEQIP State Project Facilitation Unit Kerala and Directorate of Technical Education Kerala IEEE Electron Devices Society, NITC
Dr. Aswathi R Nair	FDP on "Modeling, Simulation and Fabrication of Future Nano electronic devices and sensors"	5 days, 24/08/2020 to 28/08/2020	ECED, NITC
Dr Lalit Kumar	FDP on Communication system and Simulations	Five day (August 17-21) 2020	NIT Puducherry Karaikal
Dr. Chandan Yadav	Modeling, Simulation and Fabrication of Future Nanoelectronic Devices and Sensors	5 days, August 24-28, 2020	ECED NIT Calicut
Dr. Chandan Yadav	Short Course on Nano-Transistors	15 days, Feb 20 – March 05, 2020	IIT Kanpur
Dr. Chandan Yadav	Mixed Signal Design Approaches for Artificial Intelligence Processors	05 days, 01 March 2021 to 06 March 2021	AICTE Sponsored STTP, Lakireddy Bali Reddy College of Engineering, Mylavaram, Krishna (Dt), Andhra Pradesh
Dr. Ashutosh Mishra	FDP on Biomedical Engineering and its Applications	11-16 Jan 2021	Mar Baselios College of Engineering and Technology
Dr. Ashutosh Mishra	Multidisciplinary Research Innovation in Engineering, Science and Technology for Sustainable Development	October 26- November 7, 2020	BIPIN TRIPATHI KUMAON INSTITUTE of TECHNOLOGY DWARAHAT ALMORA-263653, INDIA

e. Patents acquired and filed

Name of Staff	Title	Year
Dr Vinay Joseph (co-inventor)	Techniques and apparatuses for network access via a hybrid cell associated with a shared public land mobile network identity	2020
Dr Vinay Joseph (co-inventor)	Techniques and apparatuses for managing communications in a private wireless network	2020
Dr Vinay Joseph (co-inventor)	General authorized access (GAA) primary channel assignment for multiple operators	2020
Dr Vinay Joseph (co-inventor)	Resource allocation for reserved resources	2020
Dr Vinay Joseph (co-inventor)	Multiple connectivity for high reliability	2020
Dr Vinay Joseph (co-inventor)	Wireless communication enhancements for transparent and boundary clocks	2020
Dr Vinay Joseph (co-inventor)	Control elements to configure and trigger sounding reference signals	2020
Dr Vinay Joseph (co-inventor)	Variable packet delay budgets for wireless communications	2021

f. Student achievements

• Best Paper award for Mr. Praveen S of MTech Telecommunication 2019-21 batch, in the 8th International Conference on Smart Computing and Communication (ICSCC-2021).

- Best MTech Thesis award for Ms. Reshma K of MTech Telecommunication 2018-20 batch, in the 3rd IEEE Communication Society India GRADUATE CONGRESS: GraTE'7 2021.
- Best PhD Thesis award for Dr. Poornima S, in the 3rd IEEE Communication Society India GRADUATE CONGRESS: GraTE'7' 2021.
- A team from ECE Department won the Winners of NXP Artificial Intelligence in Mobility Online Design Challenge 2021. Team members are Joseph George, Hemanth S, Emmanuel Thomas Devasia, and Govind JS
- Best presenter award for Vinay Kumar of 8th Semester BTech ECE for a research paper in the Field of mathematics in National Mathematics Conference and International Mathematics Conference
- First prize for Vinay Kumar of 8th Semester BTech ECE in quiz conducted at International Mathematics Conference (AIMER) & National Mathematics Conference (AMTI)
- ECE Department BTech students scored high ranks in national exams GATE and CAT

DEPARTMENT OF MECHANICAL ENGINEERING

Dr V Madhusudanan Pillai--Developed a software package, "Simulated Annealing Algorithm-based Layout Planning" for the use in the labs related with M.Tech. Industrial Engineering & Management and B.Tech. Production Engineering.

Dr. S Jayaraj—(i) Listed (along with two of the former PhD students) among the Top 2% scientists in the world ("Energy" stream) prepared by a study of Stanford University, USA. (2020). (ii) Qualified to carry out outcome based ABET (USA) accreditation of Engineering and Technology (ETAC) programs (2021).

Name of the Author	Title of Paper	Name of Conference and organizing Institute	Vol, Year, p.p.
George J, Ravi Chandan G, Manu R, Mathew J	Modelling of Areal Surface Roughness Using Soft- Computing-Based ANN and GA to Estimate Optimal Process Parameters During Wire Electrical Discharge Turning of Inconel 825.	Shunmugam M., Kanthababu M. (eds) Advances in Unconventional Machining and Composites. Lecture Notes on Multidisciplinary Industrial Engineering. Springer, Singapore	2020, 621–630
Elias J V, Asams S, Mathew J	Finite Element Simulation and Experimental Investigations to Predict Tool Flank Wear Rate During Microturning of Ti– 6Al–4V Alloy	In: Shunmugam M., Kanthababu M. (eds) Advances in Simulation, Product Design and Development. Lecture Notes on Multidisciplinary Industrial Engineering. Springer, Singapore	2020, 489–498

Book chapters

Philip J T, Kumar D, Mathew J, Kuriachen B	Sliding Behavior of Secondary Phase SiC Embedded Alloyed Layer Doped Ti6Al4V Surfaces Ensuing Electro Discharge Machining	In: Itoh S., Shukla S. (eds) Advanced Surface Enhancement. INCASE 2019. Lecture Notes in Mechanical Engineering. Springer, Singapore In: Shunmugam M.,	2020, 163–172
Philip J T, Kuriachen B, Mathew J	Numerical Modelling and Simulation of Single and Multi-spark Impacts in Electrical Discharge Machining	 M. Shuhhugahi M., Kanthababu M. (eds) Advances in Simulation, Product Design and Development. Lecture Notes on Multidisciplinary Industrial Engineering. Springer, Singapore 	2020, 479–488
Philip J T, Kuriachen B, Mathew J	Factor Effect on Crater Shapes in Electrical Discharge Machining	In: Biswal B., Sarkar B., Mahanta P. (eds) Advances in Mechanical Engineering. Lecture Notes in Mechanical Engineering. Springer, Singapore.	2020, 575–587
Kuriachen B, Mathew J	Effect of µEDM Milling Process Parameters on Surface Roughness During Machining Ti–6Al–4V	In: Biswal B., Sarkar B., Mahanta P. (eds) Advances in Mechanical Engineering. Lecture Notes in Mechanical Engineering. Springer, Singapore	2020, 419–427
Rakesh, Jagadeesha T	Magnetorheological fluids application	Springer	2019
Praveen O V S, Dileep B, Gayatri S, Deepak Lawrence K, Manu R, Chakrabarti A, Arora M	Automated Tolerance Analysis of Mechanical Assembly Using STEP AP 242 Managed Model-Based 3D Engineering	International Conference on Industry 4.0 and Advanced Manufacturing) organized by Indian Institute of Science (IISc), Bangalore	2021, 149-157
Ram P S, Deepak Lawrence K,	Implementation of Quality Information Framework (QIF): Towards Automatic Generation of Inspection Plan	International Conference on Industry 4.0 and Advanced	2021, 127-13

Chakrabarti A, Arora M	from Model-Based Definition (MBD) of Parts.	Manufacturing organized by Indian Institute of Science (IISc), Bangalore	
Mohamed Shameer, K Sekar, P Mohamed, Nishath	Comparative Analysis Of Experimental And Simulated Performance And Emissions Of Compression Ignition Engine Using Biodiesel Blends, Energy Recovery Processes from Waste, Chapter- 7	Springer Nature Singapore	2020
Mohamed Nishath P, Sekar K, Mohamed Shameer P	Influence Of Pyrogallol (Py) Antioxidant In The Fuel Stability Of Alexandrian Laurel Biodiesel, Energy Recovery Processes from Waste	Springer Nature Singapore	2020
K.Sekar, Vasanthakumar P	Friction Stir Welding of Al– Cu Alloy Metal Matrix Composites Reinforced with B4C and Graphite Particle Fabricated by Stir Casting and Thixoforming Method, Advances in Additive Manufacturing and Joining	Springer Nature Singapore	2020
M J Thomas, M Gaurav, A P Sudheer, M L Joy	"Modelling and Analysis of 3- PSS Parallel Kinematic Mechanism," in Mechanism and Machine Science. Lecture Notes in Mechanical Engineering,	Springer, Singapore	2021, 639–655
Joby George, V Madhusudanan Pillai	Chapter 9: Bullwhip Effect Performance of Supply Chains Under Statistical Process Control-based Policy	Leadership Strategies for Global Supply Chain Management in Emerging Markets. Editor: Ashish Dwivedi, IGI Global - an international publisher of progressive academic research, Hershey PA, USA 17033	2020, 195–223
Manu Mathew, Justin sunny, V Madhusudanan Pillai	Review on Perspectives in Supply Chain Trust Evaluation	H. Vasudevan et al. (eds.) Proceedings of International Conference in Intelligent Manufacturing and	2020, 285–298

		Automation, Lecture Notes on in Mechanical Engineering, Springer Nature Singapore Pte Ltd.	
Ranjith A M, V Madhusudanan Pillai	Determination of safety stock in divergent supply chains with non-stationary demand process	P.M. Pandey et al. (eds.), Advances in Production and Industrial Engineering, Lecture Notes on in Mechanical Engineering, Springer Nature Singapore Pte Ltd.	2021, 63–73
Irappa Basappa Hunagund, V Madhusudanan Pillai, U N Kempaiah	Solving Unequal Area Facility Layout Problems with Flexible Bay Structure by Simulated Annealing Algorithm.	P.M. Pandey et al. (eds.), Advances in Production and Industrial Engineering, Lecture Notes on in Mechanical Engineering, Springer Nature Singapore Pte Ltd.	2021, 75–101
Kiran Mohan, V Madhusudanan Pillai, Abhinav S, Amal Sunny, Vishnu V Kumar, Rohith Raj O R, Abishek S, Vahid Mohammad	User-Oriented Subjective Ergonomic Evaluation for Work-related Disorders: A Review.	M. Muzammil et al. (eds.), Ergonomics for Improved Productivity, Design Science and Innovation, Springer Nature Singapore Pte Ltd.	2021, 555–565
Rachit Kumar, Richard Johnson, Ritvik Mohandas, Pranav Pramod, Dony S Kurian, V Madhusudanan Pillai	Chapter 42: Determination of optimal ordering policy using genetic algorithm for a multi- stage serial supply chain	B.B.V.L. Deepak et al. (eds.): Advanced Manufacturing Systems and Innovative Product Design,	2021, 507–514
Gurrala Srinivasa Rao, Andavan Shaija	Computational studies on combustion instabilities for various configurations of afterburner	Advances in IC engine and Combustion Technology, NCICEC2019, Lecture notes in Mechanical	Chapter 47, 2021, 599-611

		Engineering, Springer, Singapore Gupta A., Mongia H., Chandna p., Sachdeva G.,	
Gurrala Srinivasa Rao, Andavan Shaija	Computational studies on combustion instabilities of afterburner for different equivalence ratio	Fluid mechanics and fluid power proceedings of 2019, Lecture notes in mechanical engineering, Springer Nature Prabhu T., Viswananthan, P., Agraval, A., Banerjeee (Eds.)	Chapter 11, 2021, 99-109
Sabareesh V, Milan K John, Muraleedharan C, Rohinikumar B	Experimentation and Mathematical modelling: Indirect forced convection solar drying of tomato with novel drying chamber arrangement using phase change material as thermal energy storage	International Conference on Intelligent Manufacturing and Energy Sustainability(ICIM ES),MRCET, Hyderabad	August 2020
Raj A K, Srinivas M, Jayaraj S	Macro-Encapsulation of PCM Integrated with Double-Pass Solar Air Heater System	Advances in Energy Research, Vol. 2: Selected Papers from ICAER 2017	2020, 181
S. Jayaraj, C.S. Sujith Kumar, Inba Oli	"Characteristics of Surface Engineering and Coatings" in the book Advanced Materials and Manufacturing Processes	CRC Press	2021
Moo-Yeon Lee, Kunal Sandip Garud, Simon Jayaraj	"Fuzzy Logic Energy Management for Photovoltaic System" in the book Artificial Intelligence for Smart Photovoltaic Technologies	AIP Publishing	2021
Muthukumar Palanisamy, Senthil Kumar Natarajan, Simon Jayaraj, Murugan Sivalingam	Editor of a Series on "Lecture Notes in Mechanical Engineering" for a Book Titled <i>Innovations in Energy</i> , <i>Power and Thermal</i> <i>Engineering</i>	Springer Nature	2021
M. Mohanraj, S. Jayaraj	Guest Editor for a Special Issue on "Energy and Environment" in <i>Proceedings</i> of Mechanical Engineering, Institution of Engineers, Part	SAGE Publishers	2021

urnal of Processes anical Engineering	

a. Community Services

Dr. Jagdeesha—

• Performed Counting duty and Presiding officer duty at elections.

Dr. Sandip R Budhe—

• Performed Counting duty and Presiding officer duty at elections.

Dr. Deepak Lawrence K.—

- Institute committee member of the Covid19Jagratha portal (<u>https://covid19jagratha.kerala.nic.in/</u>) development by District collector of Kozhikode. Kerala
- Treasurer of NIT Calicut Alumni Association (NITCAA) that sponsored 350 laptops to financially needy UG students of NIT Calicut in 2020
- Served as the Technical subcommittee member in the domain of Additive Manufacturing / 3D printing for FutureSkills PRIME (Programme for Reskilling / Upskilling of IT Manpower for Employability) programme jointly conceived by Ministry of Electronics and Information Technology, Government of India and National Association of Software and Service Companies (NASSCOM)
- Served as the external examiner for evaluation of project work & conduct of viva for M.E manufacturing engineering and M .E degree in product design and commerce PG thesis at production engineering Department of PSG college of Technology, Coimbatore

Dr. R Manu—

• Led the teams which developed (a) 'Foot operated hand sanitizer dispenser' (b) 'UV-base automatic baggage sanitizing machine' as Institute's reponse to COVID-19 pandemic

Dr. Sumer Dirbude—

- Performed Counting duty and Presiding officer duty at elections.
- Doctoral thesis committee member at Vellore Institute of Technology (VTU) Vellore 632014, Tamil Nadu, India (Recognized as an Institution of Eminence by the Govt. of India.) 2021-2025.

Dr V Madhusudanan Pillai—

- Vice Chairman, Indian Institution of Industrial Engineering Kozhikode Chapter, Since September 2016
- Curriculum review of ME Industrial Engineering (2021 Regulations), PSG College of Technology Coimbatore, October November 2020
- Reviewer of International conference on Computational Sciences: Modelling, Computing and Soft Computing, Since Aug 2020, September 10-12, 2020

Dr. A Shaija—

- Financing poor students for education, construction of houses for the needy, helping poor girls to get married,
- Santhwanam is a home for destitute elderly women discharged from Mental hospital, Sai Old Age home is a home for destitute elderly women.
- Association with CRY
- Association with Save the Children
- Part of Milap Campaign
- Association with Oxfam India

Dr Devendra Kumar Yadav—

- Session Chair in the International Conference on "Advances in Materials Processing & Manufacturing Applications (iCADMA 2020) MNIT Jaipur during November 05-06, 2020.
- Session chair in the 11th International Conference on Materials Manufacturing and Characterization at IIT Indore during 15-17th December 2020.
- Session chair in the International Conference on Recent Advancement in Mechanical and Industrial Engineering at MANIT Bhopal during 19-20th March 2021.

Dr.Biju T. Kuzhiveli —

- Designing compact PSA based oxygen liquefier for Hospitals
- Member Committee for in campus O2 Generation
- Member NIT MVR Cancer center oxygen supply schemes

b. Other Academic and Administrative Services

Name of Staff	Academic and Administrative Services		
Dr. Jose Mathew	 HoD of Mechanical Engineering Department from July 2019 – July 2021 All MED Class rooms were equipped with audio video facilities, major repair of all machines/furniture were done, Academic and administrative formalities have been streamlined, Ensured proper interactions with all the classes, students, staff and faculty. Arranged online webinars with distinguished alumni, Conducted online workshop involving eminent personalities. DST-FIST Coordinator, Department of Mechanical Engineering, NIT Calicut and Successfully purchased and commissioned all the equipment 		
Dr. Jinu Paul	 PhD Test/ Adhoc Faculty/Technical Staff Test Committee IQAC, NBA Evaluation form submission, pre-qualifier dat collection, NIRF data collection Lab-in-Charge, Central Workshop, MED Lab-in-Charge, Materials Science Laboratory, MED Faculty Advisor, III Semester (2020 admission) Convener, IQAC, NIT Calicut 		
Dr. Sandip Rudha Budhe	Faculty advisor, BTech Project Evaluation committee		
Dr. Jagadeesha T	• Warden of G hostel, NITC		

Deepak Lawrence K	 Lab-in-charge—DST-FIST centre for precision measurements and nanomechanical testing, MEA faculty in-charge
Dr. K Sekhar	 Coordinator- B.Tech First year coordinator, Mechanical Engg. Warden- A- Hostel Faculty-in-charge- Materials Science Laboratory, MED Project Evaluation Committee - M.Tech Materials Science and Technology Faculty Advisor- Production Engg and Mechanical Engineering
Dr. Vineesh K P	 Course Faculty for ME3026D Engineering Fracture Mechanics ME4191 CAD/CAM Laboratory ME3021D Introduction to Finite Element Methods ME3011D Machine Design II ME3195D Computer Integrated Manufacturing Laboratory Other Duties Lab in Charge- CAD/CAM Lab (Sharing basis) Faculty Advisor- ME B batch (2018 Admission) Member- B. Tech Project evaluation committee New Project proposal submission- Indian railways PhD, M.Tech and B.Tech project guidance Question paper setter for PhD admission test and adhoc faculty selection Invited lecture, DC member and M.Tech project external examiner of other department
Dr. Basil kuriachen	 Faculty in charge common/ Office Computers, Accessories, audio-Video equipment(mechanical), Lab in charge of Advanced Manufacturing Centre, lab in charge of Sophisticated Instruments Centre, in charge of DST-FIST centre for Precision Measurements and Nanomechanical Testing, member PG project Evaluation (ME64)
Dr. Sumer Dirbude	 2020-till date, Faculty Advisor (FA), E1 (first Year)/E(1-30) (Second to Fourth Year)-Batch, B Tech ME (2019-2023 Batch), Department of Mechanical Engineering, National Institute of Technology Calicut, Kozhikode, Kerala. 2020-till date, Lab-in-charge, Fluid Mechanics, Fluid Machinery Laboratory and CFD Laboratory, Department of Mechanical Engineering, National Institute of Technology Calicut, Kozhikode, Kerala. 2020-till date, Lab-in-charge, Heat Engines Laboratory, Department of Mechanical Engineering, National Engineering, National Institute of Technology Calicut, Kozhikode, Kerala.

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	 2020-2021, B. Tech. Project Evaluation Committee, Member, Thermal/ Fluid Mechanics Group, Department of Mechanical Engineering, National Institute of Technology Calicut. Winter 2021, Department Web Manager & Faculty-in-Charge of Information and Facilitations, Department of Mechanical Engineering, National Institute of Technology Calicut. Since 22-2-2021, Committee Member, Centre for Computational Modelling and Simulation (CCMS), National Institute of Technology Calicut. FA of 40 Mechanical students from 2018 – 19 batch 		
Dr. Ashesh Saha	 In charge of "Tribology and Vibration Lab" Member of BTech major project evaluation committee One of the PhD coordinators in MED Member of MED time-table committee Coordinator of Audio-Visual Club 		
Dr. Jayadeep U.B.	 One of the two faculty coordinators of Design Innovation Center, NITC. Member of the Advisory Committee of Center for Computational Modeling and Simulation Member of Central Library Purchase Committee 		
Dr M L Joy	Programme Coordinator, M Tech (Machine Design)		
Dr Ratna Kumar K	 Faculty Advisor Dept Time Table committee Liason with Main Library PTA Coordinator PG Project Evaluation Committee UG Project Evaluation Committee Alumini and International affairs SWAYAM course Mentor SGC Dept. Coordinator 		
Dr V Vinay Panicker	 Vice Chairperson ETL (from 26 June 2019 to 31 December 2020) Convener, IQAC (from 04 December 2018 to 29 January 2021) Training Coordinator, Centre for Training and Placement (from 07 January 2021 onwards) 		
Dr. V. Madhusudanan Pillai	 Coordinator for the adoption of National Innovation & Startup Policy in NIT Calicut Development of National Innovation & Startup Policy document for NIT Calicut Programme Coordinator, M.Tech. (Industrial Engineering & Management), Department of Mechanical Engineering from November 2019 to March 2021 Faculty-in-charge Industrial Engg. Lab & Supply Chain and System Simulation Laboratory from the year 2011 to March 2021 Member - Campus Accommodation Allocation Committee 		
Dr. R. Sridharan	 Member - Campus Accommodation Allocation Committee Chairman – AQMC HoD Representative to DC meetings, CC meetings and Open presentations Chairman – Plantation Committee 		

Dr K P Murali Dr. ARUN P	 FA of 2019 Mechanical B batch (30 students) Lab in-charge – Central workshop and Materials Science Member B. Tech and M.Tech project evaluation committee Deputy Chairman - PG admissions Associate Dean (Research and Consultancy) Convenor-Purchase Committee, Dept. of Mechanical Engg. Faculty Adviser, 2017 Admission Batch of B.Tech. Mechanical Engg.
Dr. A Shaija	 B. Tech Project Co-ordinator since 2015 Secretary, PTA, NIT Calicut July 2016-2020 Faculty Advisor, Final Year Mechanical Engg. students PG (Enery Engg. & Mangt) - Program Coordinator since 2018 Lab in Charge- Green Energy Lab & Fuel Cell research lab. Thermal Sciences Lab - Overall Incharge Joint Secretary cum Treasurer, Parents Teachers Association, NITC, 2000-2004 Member, Centre for Value Education, NITC, 2001-2004 Lady Coordinator, Compulsory Social Service (CSS), NITC, 2001-2003 Department Secretary, Mechanical Engineering Department, NITC, 1999-2002 Staff-in-Charge, Mechanical Engineering Association, NITC, 1999-2002 Class Committee Chairman-Fourth Production Engg. Class Committee Chairman-Fifth Sem. Mechanical Engg 2009 Faculty-In charge, Thermal Science Laboratory - 2009. Member, Department Accreditation Committee Warden, Ladies Hostel, NITC from 2009 -2015 Member, Institute Examination Vigilance Cell -2016 Project Evaluation Committee - M.Tech in Energy management since 2009
Dr. Rohinikumar B	 Lab in Charge Faculty Advisor Warden for NITC hostel Department Placement Representative
Dr. Muraleedharan C	 Chairperson, IQAC, NIT CALICUT Member, Board of studies, Rajagiri school of Engineering and Technology, Kochi Member, Board of studies, TKM College of Engineering, Kollam
Dr.gangadhara kiran kumar l	 Faculty-in-Charge/Head for the Vehicle Section, NIT Calicut Warden for Hostels, NIT Calicut Faculty-in-Charge for the Club Innovation (SEF), NIT Calicut Lab - In - Charge, Fluid Mechanics and Machinery Laboratory. Lab - In - Charge, Computational Fluid Dynamics Laboratory.

	 Department Representative, Industry Institute Interaction Cell (IIIC) Faculty Advisor, B. Tech Students of 2010, 2014 & 2018 admission. Course coordinator for Engineering Graphics (ZZ1002D) 		
Dr. P V Manu	 Lab in charge of Heat Engines Laboratory B. Tech (IE stream) project evaluation committee member Faculty Advisor 		
Dr. Sujith Kumar C. S.	Department Sports CoordinatorInstitute Level Additional Reponsibility		
Dr. Saleel Ismail	 Lab I/c Heat Engines, Green Energy, Fuel Cells laboratories and Centre for Advanced Studies in Cryogenics (CASC) One of the coordinators of B. Tech Project (ME4098D and ME4099D) Campus administrator of NITC alumni website Faculty Advisor 		
Dr. M Srinivas	Warden for Mega Boys Hostel		
Dr. T.J. Sarvoththama Jothi	 Member of timetable committee Thermal science lab incharge PG project evaluation committee member Faculty advisor 		
Dr. Simon Peter	 Faculty Advisor for 35 ME/PE 2019 admitted students Fluid Mechanics & Fluid Machinery Laboratory I/C B. Tech. Project Evaluation Committee, Member, Thermal/ Fluid Mechanics Group Faculty-in-Charge of Information and Facilitations 		
Dr Devendra Kumar Yadav	 Faculty Advisor for 2020 batch Production and Mechanical Engineering students Lab-in-charge of Industrial Engineering Management Lab-in-charge of Supply Chain and System Simulation Lab B.Tech Project Evaluation committee 		
Dr.Biju T. Kuzhiveli	 Co-ordinator, PG-Thermal sciences Activities-Centre for advanced studies in cryogenics Got accreditation for PG-Thermal sciences Team lead for NBA accreditation Member – Committee for in campus O2 Generation Member – NIT- MVR Cancer center oxygen supply schemes 		

c. Conferences/Summer/Winter School/Short term Courses/ Workshops conducted

Coordinators	Duration & Period
Dr. Sumer Dirbude	1 st -5 th February 2021
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d. Expert lecturers delivered in Conferences/Seminar/workshops

Name of Staff	Title of the Programme	Duration and Period	Organization
Dr. Jose Mathew	"Micro-Machining of Difficult to Machine Materials" in the Five- day e-Shot Term Course on Advanced Manufacturing Processes & Applications (AMPA-2020)	August 24 th - 28 th 2020 (Five- Day - e-Shot Term Course)	MNIT Jaipur
Dr. Dhanish P B Dr. Dhanish P B	Design Of Experiments Design of Experiments in	1-5 Aug 2020	Younus College of Engineering ,Vadakkevila B. V. Raju Institute of
	Engineering	04-09 Jan 202	Technology, Vishnupur
Dr. Jinu Paul	7 th National Seminar on "Advances In Scientific And Industrial Instrumentation" Ascii-2021	24-25 March, 2021	Cochin University of Science & Technology
Dr. Sandip Rudha Budhe	Brief introduction to the research: A journey from writing to Publication	26/05/2020 3 hrs	Priyadarshini Bhagwati College of Engineering Nagpur
Dr. Vineesh K P	Short term training Program Finite Element Methods Design In Ansys, And Abaqus'	5 days, December 2020	Vidya Academy Of Science And Technology In Engineering
Dr. Vineesh K P	Five-Days Online Workshop Under Teqip-Iii (Rtu-Atu) On "Finite Element Methods (Fem) For Engineers"	5 days, December 2020	Rajasthan Technological University Kota
Dr. Vineesh K P	Faculty Development Program "Theoretical Foundations Of Fem And Hands On Training On Ansys",	5 days , February 2020	Government Engineering College Palakkad
Dr. Basil Kuriachen	One Week Online Faculty Development Programme On Advances In Materials Engineering And Sustainable Manufacturing Held	10th August to 14th August 2020	Federal Institute Of Science And Technology (FISAT)
Dr. Basil Kuriachen	AICTE Sponsored Online Short Term Training Programme (Sttp) Series On Recent Advances In Tribology A Series 4 Of 4 - Surface Characterization And Treatments In Tribology	23-28 November 2020	Saintgits College of Engineering Kottayam

Dr. Sumer Dirbude	AICTE sponsored Short Term Training Program on "Applied Computational Fluid Dynamics for Automotive, Space and Defence Sector	March 4, 2021	Mechanical Engineering Department, A D Patel Institute Of Technology (A Constituent College of CVM University)
Dr. Ashesh Saha	AICTE sponsored STTP on "Vibration Analysis and Measurements"	May 3-8, 2021	Misrimal Navajee Munoth Jain Engineering College, Chennai
Dr Devendra Kumar Yadav	Five Days' Faculty Development Programme on System Engineering	September 28 th to October 2 nd , 2020	MANIT Bhopal
Dr. Jayadeep U B	Recent Advances In Tribology And Surface Engineering: Series 3 of 4 - Introduction to Special Topics like Nanotribology, Biotribology, Space Tribology, Biomimetics and Tribology in Industry	October 12-17, 2020	Saint Gits College of Engineering, Kottayam
Dr. Jayadeep U B	Recent Advances In Tribology And Surface Engineering: Series 4 of 4 - Surface characterization and treatments in Tribology	November 23- 28, 2020	Saint Gits College of Engineering, Kottayam
Dr. Vinay V. Panicker	Resource person for an AICTE sponsored Online Short term Training Programme on Guidance and Counselling – Series 1, 2 and 3 on the topic "Flipped Teaching and Adaptive Learning"	15th October 2020, 10th December 2020 and 11th February 2021	St. Joseph's College of Engineering and Technology Palai, Kottayam
Dr. V. Madhusudanan Pillai	Online STTP on Research Methodology – Lecture title: "Optimization Tools in Research"	28-05-20 to 30- 05-20	Amal Jyothi College of Engineering, Kanjirapally- 686518
Pillai	Online workshop on Innovation in Lean Thinking – Lecture title: Lean Tools and Its Impact	11 – 12 Dec, 2020	The National Institute of Engineering, Mysore, Karnataka
Dr. R. Sridharan	National Workshop on "Perspectives and Challenges in Outcome Based Research" under the aegis of AICTE- MARGDHARSHAN Scheme	One week, July 13 – 17, 2020	NIT Trichy
Dr. R. Sridharan	Online STTP on Research Methodology	Three days, 28- 05-20 to 30-05- 20	Amal Jyothi College of Engineering, Kanjirapally, Kerala.
Dr. R. Sridharan	Innovations in product design, Precision Engineering and Optimization	Five days, 10- 08-2020 to 14- 08-2020.	Vasavi College of Engineering, Hyderabad.
Dr Murali K P	Microwave Materials for Strategic Application	International Seminar on	Mar Ivanios College

		Advances in	
		Functional	
		Materials, June 2020	
Dr. Rohinikumar B	Opportunities and Challenges in Academic Research	11-16 March 2021	Government engineering College, Kozhikode
Dr. Rohinikumar B	Energy Management and Control System for Smart Renewable Energy Remote Power Generation	22-27 March 2021	Annamacharya Institute of Technology and Sciences, Rajampet, Andhra Pradesh
Dr. Srinu Gangolu	Advances in Materials Engineering and Sustainable Manufacturing	10th August to 14th August 2020	Department of Mechanical Engineering, Federal Institute of Science and Technology (FISAT). Angamaly, Kerala.
Dr. Srinu gangolu	Mechanics of Bio & Composite Materials	11 th -13 th June 2020	Department of Mechanical Engineering, Andhra Loyola Institute of Engineering, Vijayawada.
Dr. Saleel Ismail	Expert lecture at National Webinar on Thermal Systems of Next-generation Automobiles (TSoNA 2020),	12 th July 2020	VIT Chennai
Dr. Saleel Ismail	Keynote speech at Virtual International Conference on Sustainable Energy Solutions for a Better Tomorrow (SESBT 2020),	24 th July 2020	VIT Chennai
Dr. Saleel Ismail	Webinar on Modeling Thermo- Fluids	8 th August 2020	VIT Chennai
Dr. Saleel Ismail	FDP on Emerging Fields in Thermal Engineering	15 th August 2020	Providence College of Engineering, Chengannur
Dr. Simon Peter	FDP expert lecture: basics of computational fluid dynamics: applications and analysis	31 August -04 September 2020	Department of Mechanical Engineering NIE Mysore
Dr. Simon Peter	FDP expert lecture: emerging fields in thermal engineering	13-15 August 2020	Providence College of Engineering, Chengamur
Dr. Simon Peter	FDP expert lecture: fluid mechanics and systems	03-07 August 2020	Adi Shankara Institute of Engineering & Technology, Ernakulam
Dr. Devendra Kumar Yadav	Five Days' Faculty Development Programme on System Engineering	28th to October 2nd, 2020	MANIT Bhopal
Dr P.K.	STTP on Tribology of Machine Components and Applied	14-19 September, 2020	Saintgits College of Engineering, Kottayam, Korola, India
Rajendrakumar Dr. S Jayaraj	Tribology FDP on "Sustainable Energy Processes"	2020 2020	Kerala, India M. Dasan Institute of Technology, Ulliery, Kozhikode

e. Consultancy and testing

Nature of Service	Organization	Revenue earned	Status
DST-FIST Centre	Advanced Manufacturing Centre- NIT Calicut	5,000	
All type of material testing and characterization	NIT C	150,000/-	Ongoing
3D Printing	CIDAC	20,000	Completed
3D Printing	MVR Cancer Centre	3,000	Ongoing
3D Printing	Baby Memorial Hospital, Calicut	3,000	Ongoing
Roughness and profile measurement	BARC Mysore,	6,000	Completed
Roughness and profile measurement	Govt. Dental College Calicut	6,000	Completed
Roughness and profile measurement	MES Dental College	1,000	Completed
Roughness and profile measurement	KMCT Dental College	1,000	Completed
Roughness measurement	NIFFT	2,500	Completed
King Khalid University (KSA), Roughness and profile measurement	King Khalid University (KSA)	5,000	Completed
Corelaed Technologies, 3D printing	Corelaed Technologies	1,200	Completed
Roughness and profile measurement	Saintgits college of engineering Kottayam	1,000	Completed
For conducting fuel property testing, For conducting engine performance and emission testing	Various academic and research institutions	Rs.35,000/-	Testing completed and result delivered

f. Patents acquired and filed

Name of Staff	Title	Year
Dr. Deepak Lawrence	Feature extraction and Fixture planning: FiXplan software, Copyright with number: SW- 14005/2020 dated 14/12/2020 received	2020

	from Copyrights Office, Govt. of India	
Dr. Sudheer.A. P Jibin Varghese	Radial robotic friction gripper 6094/CHE/2014	1/7/2016 Exam Reply filed
Dr.Sudheer.A.P,Hariram sankar,Murali M	Deployable Retractable Prefabricated Building Structure 2136/CHE/2015	22/12/2016 Exam Reply filed
Dr. Sudheer.A. P Dr.M.L.Joy,Shruthi.C.M	Robot for high voltage electrical transmission line inspection 201641027854	23/02/2018 Exam Reply filed
Dr. Sudheer.A. P Hari Prasanth	Radially Contracting Toroidal Pneumatic Artificial Muscle, 202041047095 28/10/2020	06/11/2020
Dr.Sudheer.A.P, Vamsi, GuruTheja	Automatic Book Returning System 202041047027 28/10/2020	06/11/2020
Dr. Sudheer.A. P Jubin,Nidhi	Adjustable Bed for Physically Challenged, 202041051490 26/11/2020	04/12/2020
Dr. Sudheer.A. P Prahlad	Dynamic Head Load Redistributing Wearable Robot, 202041056655 28/12/2020	01/01/2021
Dr. Sudheer.A. P Ajith.A.M,HariPrasanth	Robotic Tree Climber, 202141013008 25/03/2021	02/04/2021
Mr Renju Mohan, Dr U B Jayadeep & Dr R. Manu	Multi – Mode Friction Stir Welding Tool – Indian Patent Application No. 201741036108 filed on 11.10.2017	Published in The Patent Office Journal No. 44/2017 dated 03-11-2017.
Dr. Vinay V. Panicker	Multi-Utility Plogging Bag (Patent Application No. 202041050568 filed on 20.11.2020)	2020
S. Jayaraj and K.P. Mohanan	'Solar PV Based Jet Propulsion Boat'	2020

g. Student achievements

Name of the student	Programme of study (B.Tech./ M.Tech./ Ph.D.)	Details of his/her achievements during this period
Sreeraj P R	M. Tech.	Got selection to PhD at NIT Trichy
Nitika Suresh	B.Tech Project Student	Got admission to MS program in Robotics in Carnegie Mellon University USA
Sathish S	M.Tech-Material Science&Tech	He got PhD in IIT Hyderabad
Shashank, G., Sairam, D., Revanth Reddy, B., Afreed, K	B. Tech.	Presented a paper in IEEE ICSCAN 2020 - 3rd International Conference on Systems, Computation, Automation and Networking, Manakula Vinayagar Institute of Technology, Puducherry.
Balavinayagam K	M Tech	Best paper in conference
B Charles Divya Teja	M Tech	Best paper in conference
Sabareesh V	M Tech	Best paper in conference
Jijy Renj	M.Tech (Thermal Sciences)	Best M.Tech Thesis award - Indian Society for Heat and Mass Transfer (ISHMT) Regional Chapter, Trivandrum
A Kartheeswaran	M.Tech	Received 3 rd position for ISHMT (TVM) best M.Tech Thesis Award

DEPARTMENT OF MATHAMATICS

a. Other Academic and Administrative Services

Name of Staff	Academic and Administrative Services	
Sunil Jacob John	Chairperson UG admissions	
Satyananda Panda	HoDshipMathematics Department	
Tamal Pramanick	M.Sc 2021 Admissions and Program Coordinator	
Ashish Awasthi	B.Tech. First -Year Coordinator	
	TEQIP-III Twinning coordinator	
	Hostel Warden, M.Sc. 2020 batch Faculty Advisor	
Lineesh M C	Mmber of IQAC	
	Office Warden of NITC Hostels	
	Institue Admission duty in UG Admission	
M S Sunitha	HoDMathematics Department (Feb 12, 2021 onwards),	
	Chairperson, Disciplinary Committee (June 2020 to	
	February 2021)	
Suresh Kumar Nadupuri	Hostel Warden	
	M.Sc. 2019-2021 batch Faculty advisor	
	Institute UG admission duty	

b. Conferences/Summer/Winter School/Short term Courses/ Workshops conducted

Title	Coordinators	Duration & Period
Int. Web conference on Computational	A A Awasthi, S J John,	Sept. 10-12, 2021
sciences: Modeling, Computing and soft Computing	S Panda	

c. Expert lecturers delivered in Conferences/Seminar/workshops

Name of Staff	Title of the Programme	Duration and Period	Organization
S. Panda	Surface Decontamination: A Mathematical Model,	January 7 - 9, 2021	Department of Mathematics, PSG College of
	International Conference	2021	Technology, Coimbatore, India
	on Applied Mathematical Models (ICAMM 2021) - Online		
S.Panda	Surface Decontamination: A Mathematical Model, Webinar on Emerging Trends in applied mathematics	16-18, Dec. 2020	St. Thomas' College (Aut). Thrissur

d. Student achievements

Name	Achievement
Jeeva Jose C	Gate (MA) 2020.
Karthik S	Gate (MA) 2021, Gate (ST) 2021
Manoj Yadav	Gate (MA) 2021
Ashitha RC	GATE 2021
Teli Sanket Nemichand	GATE 2021 , MH-SET 2021
Priyank Vasu	CSIR-UGC JRF AIR -138 (June-2020) GATE AIR- 568 (2021)

DEPARTMENT OF CHEMISTRY

a. Other Academic and Administrative Services

Name of Staff	Academic and Administrative Services	
Dr. Janardhan Banothu	 Member, Annual sports day organizing committee Member, Annual stock verification committee Faculty In-charge for B. Tech Chemistry Laboratory Course coordinator for first year B. Tech Chemistry Laboratory (CY1094D) Faculty In-charge for IR Instrument 	
Dr. Muniyandi Sankaralingam	 Faculty Advisor for the 2019-2021 MSc Chemistry batch Department Sports Coordinator Department Project Coordinator Parent Teachers Association Member Department Website in-charge Purchase Committee Member, Department of Physics Bioinspired & Biomimetic Inorganic Chemistry Lab was sup for PhD/MSc research purpose Supervising 3 PhD students Completed 7 MSc dissertations Organized an international conference as a convener 	
Dr. Mini Mol Menamparambath	 Program officer for NSS Faculty-in-charge of student club-IGNITE Warden of ladies' hostel Advisory committee of centre for materials Characterization (cmc) Annual sports day organizing committee-2020 Covid helpdesk-sanitizer distribution to nitc and calicut airport Judge: tathva - feynman's challenge (science category) Faculty in-charge for department time-table Member of purchase committee, chemistry Faculty in-charge for sophisticated instruments at department of chemistry Course coordinator: physical chemistry lab, m.sc (cy7391) Course coordinator: physical chemistry lab, second year b. tech (cy2091d) Assisted in phd interview coordination for december 2020 and july 2021 Supervising 3 phd students Supervised 5 pg students and 2 are ongoing yet up a research lab, laboratory for advanced materials and applied research, at chemistry department for the phd and pg/UG STUDENT RESEARCH PURPOSE 	

Dr. Chinna ayya Swamy P.	 Faculty in charge for departmental time table Coordinator of departmental webinar series Member, scrutiny committee for the phd admission Inorganic laboratory in charge N charge of departmental instruments
Dr. A. Sujith	Head of the Department, Chemistry

b. Conferences/Summer/Winter School/Short term Courses/ Workshops conducted

Title	Coordinators	Duration & Period
International conference on Recent	Dr. P. Parameswaran,	26-29, February, 2020
Trends in Catalysis (RTC) 2020	Dr. Muniyandi	
	Sankaralingam	
	Dr. Raju Dey	

c. Expert lecturers delivered in Conferences/Seminar/workshops

Name of Staff	Title of the Programme	Duration and Period	Organization
	E- Lecture Workshop on	January, 29, 2020	Virudhunagar Hindu Nadars'
Dr. Muniyandi	Advances in Chemical		Senthikumara Nadar College,
Sankaralingam	Sciences, Chemical		Virudhunagar
	Research Society of India		
	(CRSI) (Trichy-Madurai		
	Local Chapter)		
Dr. Muniyandi	UGC-HRDC–Bharathiar	December 12,	Bharathiar University, Coimbatore
Sankaralingam	University Refresher	2020	
	Course		
Dr. Muniyandi	UGC-HRDC–Bharathiar	December 12,	Bharathiar University, Coimbatore
Sankaralingam	University Refresher	2020	
	Course		
Dr. Muniyandi	Frontiers in Chemical	December 03,	Bharathiar University, Coimbatore
Sankaralingam	Sciences	2020	
Dr. Muniyandi	PG Chemical Society	October 12, 2020	Ayya Nadar Janaki Ammal College,
Sankaralingam	inaugural function		Sivakasi
Dr. Muniyandi	Faculty development	June 22-28, 2020	Saranathan Engineering College,
Sankaralingam	program on Recent		Tiruchirappalli
	Avenues in Chemical		
	Sciences		
	EXPERT LECTURE AT	2021	CHEMISTRY, NITC
Dr. Mini Mol	THE FACULTY		
Menamparamba	DEVELOPMENT		
th	PROGRAM, `SMART		

	AND FUNCTIONAL		
	NANOMATERIALS`		
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
Dr. Mini Mol	INVITED LECTURE AT	2021	SREE
Menamparamba	THE FACULTY		BUDDHA COLLEGE OF
th	DEVELOPMENT		ENGINEERING, PATTOOR
	PROGRAM,		
	"RECENT		
	DEVELOPMENT OF		
	BIOPOLYMER AND		
	SUSTAINABLE		
	COMPOSITES FOR		
	ENGINEERING		
	APPLICATIONS" AT		
Dr. Mini Mol	INVITED LECTURE AT	2021	ACADEMY OF MARITIME
Menamparamba	THE ONE DAY		EDUCATION AND
th	NATIONAL WEBINAR		TRAINING (AMET), CHENNAI
	ON		
	SYNTHESIS OF		
	NANOMATERIALS FOR		
	ENERGY STORAGE		
	APPLICATIONS		
	IOCER-COVID-19	1 hour	JIS College of Engineering, Kalyani,
Mausumi	(International conference,		West Bengal
Chattopadhyaya	delivered a talk)		

# d. Details of Faculty, who acquired Higher Qualification

### Dr. Janardhan Banothu

Dr. Chinna ayya swamy P has total experience of 6 years including 1.4 years in NITC.

#### h. Patents acquired and filed

Name of Staff	Title	Year
Dr. Mini Mol	A sensor for selective detection of	2020
Menamparambath	dopamine in real-time	2020

### **DEPARTMENT OF PHYSICS**

# a. Other Academic and Administrative Services

Name of Staff	Academic and Administrative Services
Dr.M K Ravi Varma	Secretary, TBI-NITC

Dr. Sreeraj T P	1. Joint BTech First year lab coordinator (PH1091D- Physics Lab)		
Dr. P N Bala Subramanian	1. First Year B.Tech Lab Coordinator (PH1091D- Physics Lab)		
Dr. Saurabh Gupta	<ol> <li>Faculty in-charge Official Language Unit (OLU), NITC</li> <li>Timetable in-charge, Physics Department, NITC</li> <li>GeM consignee, Physics Department, NITC</li> </ol>		
Dr. Goutam Kumar Chandra	<ol> <li>Faculty advisor MSc 2020 batch</li> <li>Optics Lab in-Charge, Department of Physics, NITC</li> <li>First year B. Tech. Co-coordinator, NITC</li> <li>Member of Project Implementation Group (DST-FIST), Department of Mathematics, NITC.</li> </ol>		
Dr. Maneesh Chandran	<ol> <li>Department Ph.D. coordinator</li> <li>Department purchase coordinator</li> <li>Department website in-charge</li> <li>PG admission committee member</li> </ol>		
Dr. Subramanyan Namboodiri Varanakkottu	<ol> <li>UBA Coordinator</li> <li>Tathva 2020 coordinator</li> </ol>		
Dr Aswathi. G	<ol> <li>Faculty Advisor (B-Tech EP-2018 Admissions)</li> <li>First Year Course Coordinator, (PH1001D-Physics)</li> <li>Department Alumni Coordinator</li> </ol>		
Dr. P. K. Madhavan Unni Dr. Ram Ajor Maurya	<ol> <li>Associate Dean (Faculty Welfare), Since</li> <li>Returning Officer SAC Elections 2019</li> <li>Coordinator for NITC-PTA from Physics Department</li> <li>Chairman Time-Table Committee</li> <li>Member Purchase Committee, Dept of Physics</li> <li>Program Coordinator Engineering Physics</li> <li>Class Committee Chairman MSc. 2019-Batch</li> <li>Faculty In-charge, Computational Physics Lab</li> <li>Programme Coordinator, M.Sc. (Physics)</li> <li>Faculty Advisor, M.Sc.(Physics) – 2019 Admission</li> <li>Class Committee Chairman, B.Tech (Eng. Physics) – 2018 Admission</li> </ol>		

# b. Conferences/Summer/Winter School/Short term Courses/ Workshops conducted

Title	Coordinators	Duration & Period
High End Workshop on "Solar	Dr R. A. Maurya	7 days, March 8-14, 2021
Activities and their Influences in the	(convener),	
Heliosphere and Planetary	Dr M. K. Ravi Verma	
Atmospheres" (supported by the	(co-convener)	
DST/SERB)		

Webinars on Nobel Prize in Physics	Dr R. A. Maurya	2 days, October 20 & 27, 2020
2020		

Name of Staff	Title of the Programme	Duration and Period	Organization
Dr.M K Ravi Varma	SAIHPA-2021, High-end Workshop DST Sponsored	March 8 – 14, 2021	NIT Caicut
Dr.R. A. Maurya	Connecting Aditya-L1 observation to Photosphere and below	30 min. December 17 2020	ISRO
Dr.R. A. Maurya	Maple Conference 2020	30 min, November 1-3, 2020	Maplesoft, Waterloo, Canada
Dr.Maneesh Chandran	One Week Online Short- Term Training Program On Emerging Tools and Technologies in Material Science and Engineering	September 21- 25, 2020	Jabalpur Engineering College Jabalpur, M.P
Dr. Saurabh Gupta	40th International Conference on High Energy Physics (Virtual Conference)	July 28 – August 06, 2020	Prague, Czech Republic

#### c. Expert lecturers delivered in Conferences/Seminar/workshops

#### SCHOOL OF MATERIAL SCIENCE AND ENGINEERING

#### a. Community Services

# The following contributions were made by faculties and students of SMSE during pandemic situation.

#### UV Box: COVIMOT Plus

The UV box was developed for disinfecting files and folders in the offices from Covid 19 viruses. The box is fitted with four numbers of UVC tubes of 1 feet length (18w) with timer and buzzer. A disinfecting time of 30 sec was optimized for office uses. The box also integrated with exhaust fans to remove ozone formation after the disinfection process to take care of the health of the operator.

## **UV Tower: COVIMOT Monster**

The UV tower can be used for disinfecting large areas like class room, offices, hostel rooms etc., in case of a Covid-19 infection. UV disinfection tower is installed with 8 numbers of 36 W, 4 feet UV-C (253 nm) tubes with heavy duty ballast with a capability to sterilize 3 meter radius in 30 minutes time. The tower is equipped with features like timer with buzzer and remote control switch (100 m distance). The tower is fabricated on a 4 wheeled trolley platform with heavy handles for transportation.

## **Aerosol Box**

This is a protective device for frontline medical professionals in the battle against covid-19. The transparent box provides safe airway management for covid-19 patients, enhanced protection from droplet spillage and aerosols generated during intubation of covid-19 patients. It separates the doctor from patients as a barrier. As the box is made of 4mm laser cut acrylic sheet, it can be sanitized and reused.

Name of Staff	Academic and Administrative Services		
C. B. Sobhan	1.Member, Purchase Committee, SMSE		
N. Sandhyarani	1.Exam in charge – SMSE		
	2.President, IIC-NITC		
	3.Member, Purchase Committee, SMSE		
	4.Lab-in-charge,NanoScience Research Laboratory		
	1.Head of the department, T&P		
Sajith V.	2.Time table in charge, SMSE		
	3. Faculty Advisor, SAE Collegiate Club, NITC		
	4. Member, Purchase Committee, SMSE		
	5. Lab-in-Charge, Applied Nano Engineering Laboratory		
	1.Head of the department, SMSE		
Soney Varghese	2.SEM and SPM Manager		
	3. Lab-In-Charge -Nano Materials and Devices Research Laboratory		
	2.Member, Purchase Committee, SMSE		
Hanas T.	<ol> <li>Faculty-in-charge, Central XRD</li> <li>Lab-In-Charge - Nanomaterials Research Laboratory</li> <li>Lab-In-Charge- PG Laboratory, SMSE</li> <li>Faculty Advisor - School of Materials Science and Engineering Association</li> <li>Lab-In-Charge- Materials Processing Laboratory, SMSE</li> <li>Member - TEQIP III Phase Purchase committee</li> </ol>		
Shijo Thomas	1.Faculty Advisor, SAE India Collegiate Club, NITC		

## b. Other Academic and Administrative Services

2.Laboratory in Charge, Nanotechnology Research Laboratory
3.Member, Purchase Committee, SMSE
4.Senate Nominee to BoG, NITC
5.Associate Dean (Alumni Affairs & International Relations)
6.PG programme coordinator
7.Member-IQAC, NITC
8.Staff secretary,SMSE

## c. Expert lecturers delivered in Conferences/Seminar/workshops

Name of Staff	Title of the Programme	Duration and Period	Organization
Dr.Shijo Thomas	Application of	22-24th February	Mangalam College of
	Nanomaterials in Solar Thermal Systems		Engineering, Kottayam
Dr.Hanas.T	Nanotechnology and Medical Materials	July 2020	Vignan's Foundation for Science, Technology and Research

# SCHOOL OF MANAGEMENT STUDIES

## a. Community Services

Title	Coordinators	<b>Duration &amp; Period</b>
Tarang (Annual Management Fest)	Dr. Reju George	25-27 Feb 2021
	Mathew	
Member, Board of Studies, Department of	Dr. Muhammad Shafi	March 2014 till date
Management Studies, Jamia Hamdard University		
Member, Board of Studies, St. Teresa's College,	Dr. Sunitha S	June 2015 till date
Ernakulam (Autonomous)		
Member, Board of Studies, Department of	Dr. Sreejith S S	Oct 2018 till date
Management Studies, Nandha College of		
Engineering, Erode, Tamil Nadu		
Member, Board of Governors, College of	Dr Suresh Babu T K	June 2019 till date
Engineering, Kidangoor, Govt of Kerala		
Member, Board of studies, Mar Basellos College of	Dr Suresh Babu T K	June 2019 till date
Engg and Technology Trivandrum		
Member in the Editorial Board, for the Journal of	Dr.Sunitha S	April 2019 till date
ABBS Management Business and		
Entrepreneurship Review		
Reviewer, Psychology Research and Behavior	Dr. Muhammad Shafi	2021-22
Management		
Member BoS, Saintgits College of Engineering &	Dr. Muhammad Shafi	2020 till date
Management (Autonomous)		
Reviewer to International Journal of EMerging	Dr.Sunitha S	June 2020 till the

Markets (Emerald)	date

# b. Other Academic and Administrative Services

Name of Staff	Academic and Administrative Services
Dr. Muhammad Shafi	Faculty-in-charge (Adventure Club), 2015 till date
Dr. Sreejith S S	Member, Institute Innovation Council
Dr. Muhammad Shafi	Faculty-in-charge (I-ink-NIT Calicut) 2020
Dr. Reju George Mathew	Faculty-in-charge, IGNITE Student Club from 21.01.21

## c. Expert lectures delivered in Conferences/Seminar/Workshops

Name of Staff	Title of the Programme	Duration and Period	Organization
Dr. Sreejith S S	FDP on Research Methodology	6 days; 19 – 25 Oct 2020	NIT Andhra Pradesh
Dr. Sreejith S S	Workshop on Research Methodology	1 day 19 Feb 2021	Al Irshad College, Calicut
Dr. Sunitha S	Short term training programme Research Methodology	28-30,May 2020	Amal Jyothi Engineering College, Kanjirappally, Kerala
Dr. Reju George Mathew	Webinar on Cultural Studies	15 July 2020	Providence College, Kozhikode, Kerala
Dr. Reju George Mathew	National FDP- "Critical Thinking for the English Classroom"	3-5 August 2020	Madanapalle Institute of Technology and Science, Madanapalle - 517 325, Andhra Pradesh
Dr. Reju George Mathew	Refresher Course in English conducted for University and College Teachers	10-23 December 2020	UGC-HRDC of Bharathiar University, Tamil Nadu
Dr. Reju George Mathew	Invited Lecture- "Talking of the Elephant in the English Language Classroom"	8 February 2021	KMO Arts and Science College, Koduvally, Kozhikode, Kerala
Dr. Reju George Mathew	National Webinar on Imagining Justice in Postcolonial Indian Literatures	15 February 2021	Research Forum, Department of English, Mar Thoma College for Women, Perumbavoor, Kerala

Dr. Reju George Mathew	Webinar- "Strategies for Better Communication"	3 March 2021	Sree Vidyanikethan Engineering College, Tirupati
Dr. Muhammad Shafi	FDP on Research Methodology	6 days; 19 – 25 Oct 2020	NIT Andhra Pradesh
Dr. Muhammad Shafi	STC on Research Methods for University College Teachers	08-14 Jan 2021	HRD Centre, Calicut University
Dr. Muhammad Shafi	Short Term Course on Strategic Planning for Quality Improvement for University/College teachers	11th to 17th February, 2021	HRD Centre, Calicut University
Dr. Muhammad Shafi	Short Term Course on Disaster Management for University/College Teachers	26th February to 04th March, 2021	HRD Centre, Calicut University
Dr. Muhammad Shafi	STTP: Interaction Programme for Ph.D Research Scholars / Post Doctoral Fellows	16.03.2021 to 22.03.2021 i	HRD Centre, Calicut University
Dr. Muhammad Shafi	One Day Workshop on Pedagogy of Teaching	21 Dec 2020	Al Irshad College of Arts & Science Thiruvampady.

## SCHOOL OF BIOTECHNOLOGY

## a. Other Academic and Administrative Services

Name of Staff	Academic and Administrative Services	
Dr. MD Anaul Kabir	IQAC Co-ordinator	
	IBSC Co-ordinator	
	Member - Library Advisory Board	
	Ph.D coordinator	
	Coordinator - B.Tech Major Project	
Dr. Rajanikant G. K	1. President, Faculty Association of NITC, 2021.	
	2. Server as Evaluator for the Young Innovators Program	
	(YIP) 2020-21, KDISC, Govt. of Kerala.	
	3. Served as International Grant Reviewer, Fundación Bancaria	
	Caixa d'Estalvis i Pensions de Barcelona, "la Caixa", 2021.	
	4. Academic Editor, PLOS ONE Editorial Board	
Dr.A.Santhiagu	Chief Warden	
Dr. Rathinasamy K	1.Time table coordinator	
	2.Exam time table coordinator	
Dr. Baiju G Nair	Purchase coordinator	
	IQAC Coordinator	
	First year course coordinator	

	Hostel warden IPR cell coordinator Member of syllabus revision committee Institution's innovation council convener
Dr. Suresh P. S	Coordinator - B.Tech Mini Project Coordinator - Industry Interaction Cell
Dr. Tom Skaria	<ol> <li>FA and class committee chairman, B Tech Biotechnology 2020- 24 batch</li> <li>Departmental First Year B Tech Biotechnology coordinator</li> <li>Course Coordinator for Introduction to Life Sciences (B Tech first year course)</li> <li>Member of Committee for Centre for Material Characterization (CMC), NIT Calicut to oversee the usage policy and activities of the centre</li> </ol>
Dr. Cecil Antony	DCC member Secretary
Dr. Ravindra Kumar	Dept. Sports coordinator

## b. Expert lecturers delivered in Conferences/Seminar/workshops

Name of Staff	Title of the Programme	Duration and Period	Organization
	The road to	11/06/2021	Institute's innovation council, NITC
Dr. Baiju G Nair	entrepreneurship in 21 st		
	century		
Dr. Suresh P. S	National Level Webinar	17/6/2020	St Aloysius, Mangalore
	on "Preparation of a		
	Manuscript"		
	Virology and Immunology	02.08.2021 to	Department of Life Sciences,
Dr. Tom Skaria	Webinar	09.08.2021	University of Calicut.
Dr. Rajanikant G. K	Computational drug	January 29th,	Hanyang University, South Korea
	repurposing for ischemic	2021.	
	stroke		

### c. Patents acquired and filed

Name of Staff	Title	Year
Suchithra, T. V	Gelatin based adhesive hydrogel as wound dressing patch for diverse surface	2020

## **11.3 PAST ACHIEVEMENTS**

## DEPARTMENT OF ARCHITECTURE

### • NIRF Rank 3 for the consecutive years 2019 and 2020.

Sl. No	Year	Name of Faculty	Name of the award, fellowship, received from Government or recognized bodies	
1	2016	Dr. Kasthurba A.K.	Society of Architecture Historians and Getty Foundation Fellowship to attend annual SAH meet	
2	2013	Dr. Kasthurba A.K.	Fulbright Nehru award to Visit 15 Universities in USA funded by CIES and US India educational foundation	
3	2012	Dr. Kasthurba A.K.	RWTH Aachen University Visiting Fellowship to attend Administrators Enrichment Seminar	
4	2009	Dr. Kasthurba A.K.	Netherland Fellowship Program to attend PG Diploma at I H S Eurasmus University, Rotterdam	
5	2009	Dr. Kasthurba A.K.	Vocational Excellency award by Rotary International for Architectural services	
6	2018 2019	Dr. Anil Kumar P.P. Dr. Anil Kumar P.P.	<ul> <li>Received the Eminent Architectural Engineer Award instituted by Institution of Engineers, India in recognition of the eminent and contribution to the profession of Architectural Engineering from P.K.Maity (Chairman, IE Division, Calcutta) and D Umamaheswara Rao (Director, NIT Suratkal) during the 344 National Convention of Architectural Engineers on 244 November at NIT Suratkal.</li> <li>Authored the Book titled 'Introduction to Smart Cities published by Pearson Education in 2019. (ISBN No. 978-93534-3957-6, Hardcopy and kindle editions are available). The book introduces the idea of 'Smart cities' comprehensively be covering the conceptual basis and the principles in practice systematically and sector-wise. Written lucidly, covering possible new attempts and retrofitting options in turning smart, the book is an all in one handy volume for citienthusiasts to advanced learners and also the first major texpool.</li> </ul>	
8		Dr. Mohammed Firoz C.	<ul> <li>Visiting teacher at the prestigious School of Architecture, Architectural Association London (AA London), UK</li> <li>Early Faculty Induction Programme Fellowship from All India Council of Technical Education</li> </ul>	
			• Third Rank, Bachelor of Architecture-2002, Department of Architecture, NIT Calicut, (Former REC Calicut)	
			• Overall Proficiency award for academic achievements from NIT Calicut. 1997-2002 B.Arch	
			• QIP Fellowship from Government of India for undertaking PhD degree.	
			• M-FAR fellowship for academic achievements from Muslim Educational Society Kerala	
			• School Sports Champion in the Years 1993 and 1994. Several Medals and certificates in sports events at School, District, State and South India levels.	

9		Dr. Chithra K	• NFP Fellowship by the Dutch Government to do a Post Graduate Diploma in Green City Planning
			• Thiru B Rajagopal Endowment gold medal for the Best Thesis M Plan for the academic year 2005-06
			• YuvaRatna Award 2011 for being the Team Guide of Ms Amrita Krishnan, Interpretation Centre for Rain Forest Category
			• Icon SWM 2015 Excellent paper Award for the paper titled Land use based modelling of solid waste generation for sustainable residential development in small/ medium scale urban areas in the 5th IconSWM 2015
			• Best Paper Award for the paper titled Green Building Rating System from the perspective of three pillars of Sustainability through Building Lifecycle, International Conference on Sustainable Technologies in Building & Environment, Chennai, in Jan 2018
10	2019	Dr. Bimal P	India Best Paper Award for "Residential location choice with multi-criteria", 'Geomatrix12', International conference held at IIT Bombay
11	2019	Dr. Bimal P.	Third best paper presentation award for "Geodesign: an emerging application of geoinformatics & urban design", at national symposium 2011 on 'Empowering Rural India Through Space Technology', Indian Society of Remote Sensing, Bhopal
12	2020	Dr. Bimal P.	Best poster presentation award, for the poster "Carrying Capacity & Performance Assessment as quantitative tools to assess sustainability of Coastal Tourism sector", at the International Conference on Urban Science and Engineering, (ICUSE 2020), IIT Bombay.
13	2009-10	Dr. Deepthi Bendi	Received the Merit scholarship for International Student - University of Salford

# DEPARTMENT OF CHEMICAL ENGINEERING

S. No.	Name	Award
1.	Dr. Lity Alen Varghese	<ul> <li>Best poster, Material Research Society of India, 2006.</li> <li>Best research poster, Kerala State Council for Science, Technology and Environment, 2005.</li> </ul>
2.	Dr. V Sivasubramanian	<ul> <li>Jawaharlal Nehru Gold Medal award for excellence in education and research, Thiruvannamalai, Tamil Nadu, 2014</li> <li>Dr. Radhakrishnan Gold Medal award for contribution to education and national development, Thiruvannamalai, Tamil Nadu, 2014</li> <li>Universal Achievers Gold Medal award for contribution to education and national development, 11th Unity conference, Salem, Tamil Nadu, 2015.</li> </ul>

		• Bets paper, CHEMCON, Mumbai, 2004
		<ul> <li>Best paper, 20th International Conference on Sustainable Water Resources Management, London, UK, 2018</li> </ul>
		• Best paper, National Conference on Innovative Engineering Technologies (IEEE), Bangalore, 2016
		• Best paper, National Conference on Contemporary Trends in Bioenergy and Green Technology: Challenges and Opportunities (DBT), Tamil Nadu, 2016
		• Best paper, International Conference on Green Technologies for Environmental Pollution Prevention and Pollution Control, NIT Trichy, 2016
		• Best paper, National Conference on Emerging Trends in Engineering, Kozhikode, 2014
		• Best Poster, 26 th Kerala Science Congress, Kerala, 2014
		• Best paper, Biological Wastewater Treatment towards Green Environment, NIT Calicut, 2011
		• Rashtriya Gaurav Award by IIFS, New Delhi for the Contribution to Scientific Development and Social Work, 2011
		Managing Guest Editor, Fuel, Elsevier, 2018
3	Dr. M V Pavan Kumar	• Post-doc Fellowship, Max Planck Institute for Dynamics of Complex Technical Systems, Magdeburg, Germany (2008-2010)
		• Chemical Weekly Award for best paper in Indian Chemical Engineer, 2017
	Dr. Chandra Shekar	• IIChE NRC Award for best paper in Indian Chemical Engineer, 2017
4	Br. Chandra Shekar Bestha	• Kuloor Memorial Award for best technical paper in Indian Chemical Engineer, 2017
		• Best paper, International Conference on Advances In Chemical Engineering, 2015
		Best oral presentation, S-CHEMCON, 2008
		• Hiyoshi Young Leaf Award in environmental protection and conservation, 2019
		• Acharya PC Ray Award for undergraduate students project, IIChE, 2018
5	Dr. Noel Jacob Kaleekkal	• Best paper, 8 th DAE-BRNS biennial symposium on Emerging Trends in Separation Science and Technology, 2018
		• Technology Transfer Fellowship, Anna University, 2015
		• Best Master's thesis, Thermax, 2015
		• Best working model, TECHFLUENCE by CII and Anna University, 2013

6	Dr. Sudev Das	<ul> <li>Member, Chemical Engineering Division, Tripura State Center (2011-2013)</li> <li>Sir Ganga Ram Memorial Prize for best paper in the Journal of the Institution of Engineers, 2006</li> </ul>
7	Dr. Prasanna Kumar S Mural	<ul> <li>Post-doc Fellowship, CSIR, Pretoria, South Africa (2017 – 2018)</li> </ul>
8	Dr. Panneerselvam Ranganathan	<ul> <li>DST INPSIRE Faculty (2015-2020)</li> <li>Early Career Research Plenary Presentation Award – UKCCSRC, UK, 2013</li> <li>Research Fellow at Cranfield University (2013 – 2015)</li> <li>Post-Doctoral Fellow at TU Delft University of Technology (2009 – 2012)</li> <li>Best Paper, Ansys India Conference on Elevating Innovation, 2007</li> </ul>
9	Dr. Teja Reddy Vakamalla	<ul> <li>International Travel Support (ITS) by SERB, DST to attend 12th International Conference on Fluidized Beds (CFB-12), Poland, 2017</li> <li>Research Excellence Award, Department of Chemical Engineering, IIT Hyderabad (2014, 2015)</li> </ul>
10	Dr. Susmita Das	<ul> <li>SERB Young Scientist (2015-2018)</li> <li>Intellectual Ventures Invention Award (IN-810177), 2010</li> </ul>

- Department has bagged a number of R&D projects sponsored by various departments and organizations including the Ministry of Human Resources Development (MHRD), Department of Science & Technology (DST), R&D TATA Steel, Scheme for Promotion of Academic and Research Collaboration (SPARC), and the Kerala State Council for Science Technology and Environment (KSCSTE).
- Department R&D has been increased by establishing advanced laboratories.
- Department faculties are being working as technical reviewers for more than 50 international Journals.
- Department faculty has been invited for delivering lectures in various FDP's, guest lecturers conducted at different universities and colleges across the country.
- Department faculty also got the invitations to review Postgraduate and PhD thesis from various government and private universities.
- Department organized the following in the previous years

## **CONFERENCES AND WORKSHOP**

• International Conference on Innovative Applied Energy 14–15 March 2019 Oxford, United Kingdom.

- International Conference on Advanced Materials for Energy Science and Technology (AMEST 2019) during February 26-28, 2019, Department of Energy Engineering, North-Eastern Hill University, Shillong-793022, Meghalaya.
- International Conference on Biotechnological Research and Innovation for Sustainable Development (BioSD 2018), Hyderabad.
- International Conference on Recent Advancements in Chemical, Environmental and Energy Engineering (RACEEE 2019), Chennai.
  - International Conference on Next Generation Plant Production and Bioresources Utilization Technologies (NGPPBUT) organized by Indian Institute of Technology Guwahati, India.
  - International Conference on Material for the Millenium (MATCON) organized by Cochin University of Science and Technology, Cochin, India.
  - 10th International Conference on Advancements in Polymeric Materials (ICEE 2019).
  - International Conference on Advanced Materials for Energy Science and Technology 2019.
  - 2nd International Conference on New Frontiers in Engineering, Science & Technology (NFEST 2019), Feb 18-22, 2019, Kurukshetra, India.
  - SESTEC 2018 organized by ASSET at BITS, Goa held on 23rd -26th May 2018.
  - A Five Day GIAN Course on Advances in Combustion Modeling organized by NIT Calicut, 4th-9th March 2019.

## FACULTY DEVELOPMENT PROGRAMS

- Advance Techniques in Energy and Wastewater treatment (2018)
- Advanced Pedagogy Training Program organized by IIT Madras, 2018.
- Emerging trends in chemical and environmental engineering (ETCEE-2014).
- Changing scenario in energy& environment (CSEE-2013).
- Recent research trends in chemical and environmental engineering in May 2013.
- Modeling and Simulation in Chemical and Environmental Engineering in 2012

### DEPARTMENT OF CIVIL ENGINEERING

- 1 The Department had taken up training of local unemployed youth for self-employment under the Nehru Rozgar Yoganas (NRY) funded by Kerala Urban Development Finance Corporation. Training was imparted to youth in trades such as Plumbing, Carpentry, Masonry and Landscaping. About 300 youths were trained under this programme
- 2. The Department has four centres of excellence
  - a. Vehicle Motion Analyser Laboratory
  - b. Non Destructive Testing Laboratory
  - c. Biomechanics Laboratory

d. Centre for Transportation Research (CTR)

- 3. The Department has already conducted about 50 summer/ winter schools sponsored by the Indian Society for Technical Education and the All India Council for Technical Education.
- 4. The Department has organised in collaboration with Department of Training and Placement, more than 60 Short Term Courses in different fields of Civil Engineering
- 5. The Department has already produced 64 Ph.D Scholars in different fields of specialisation
- 6. The Department has completed about 50 sponsored research projects funded by various funding agencies such as the MHRD, DST, AICTE, Ministry of Water Resources, KSCSTE, etc.
- 7. The Department has been recognized as a centre for scrutinizing the design of important public buildings by the Government of Kerala.
- 8. The Department generates on an average about `.25 lakhs per year through testing and consultancy.
- 9. The faculty of the Department has published and continues to publish papers in peer reviewed national and international journals and national and international conferences
- 10. Large scale water tanks of 5,000 and 10,000 litres capacity, fabricated using ferro-cement technology was transferred to JALANIDHI to be used in rain water harvesting schemes
- 11. Developed an effective retrofitting technique using ferrocement wrapping for RCC frames under distress.
- 12. Developed sustainable cementitious composites
- 13. The Department had received two patents in the area of Bio-mechanics for the following:
  - Dynamic External Wrist Fixator
  - External Fixator Assembly for Tibial Fracture.
- 14. Community Services
- Popularized cost effective ferrocement water tanks in the rural and urban sector
- Designed and assisted in the implementation of water conservation techniques rain water harvesting and construction of check dams
- Actively participated in the people's participation programmes of Panchayats
- Created awareness of traffic rules and regulations in schools
- Actively associated with the awareness building campaign in connection with the implementation of the Model Solid Waste Disposal Scheme in Calicut Corporation
- Involved in a few biomechanics related projects which have benefited a number of patients visiting the Physical Medicine & Rehabilitation Centre of the Govt. Medical College, Kozhikode.
- Organised special lectures on good construction practices
- Assisted in the implementation of the Model Solid Waste Disposal Scheme in Calicut City.
- Skill up-gradation of rural craftsmen and women workers under TEQIP

- Organized a 5-day Workshop on "Career Guidance and Preparation for Interview" for 80 students from colleges all over Kerala from November 29-December 3, 2007 as part of NSS activities; also, conducted a 10 day special camp at Katippara Panchayat, Thamarassery, Kozhikode District from 7th December 2007 to 15th December 2007.
- Conducted "Self Enrichment Programme" for a selected group of first year students of the Department of Civil Engineering, in association with Centre for Research & Education for Social Transformation (CREST), Kozhikode, from 22nd December to 28th December 2012
- Developed low cost precast structural elements such as walls, lintels, beams etc. for buildings in rural areas
- Guided preparation of Master Plan for Avala Kuttoth Higher Secondary School jointly with the Dept. of Architecture as a social service project by the students of NITC
- Prepared the Master Plan for Meppyur Higher Secondary school in Calicut. NIT Calicut (Departments of Civil Engineering, and Architecture and Planning) is mentoring the activities of planning and execution carried out by KITCO and ULCCS.
- Prepared a proposal for improvement of basic infrastructure (buildings) at GUPS, Ariyallur in June 2016.
- Prepared the master plan for Spring Valley School, NIT Campus as part of its Silver Jubilee Celebrations with the help of students from the Departments of Civil Engineering, and Architecture and Planning.
- Carried out survey in Kunnamangalam Grama Panchayath for the "LIFE Mission" project of Govt. of Kerala as a student project initiative and submitted the report in January 2018.
- Carried out household survey in Meenangadi Grama Panchayath, in association with 'Niravu' an NGO. During July 3- 10, 2017, as part of activities of the National Service Scheme Cell, NIT Calicut.
- Carried out a household survey of Koruthodu Grama Panchayath, as part of activities of Unnat Bharat Abhiyan during May 15 - 16, 2017, as part of activities of the National Service Scheme Cell, NIT Calicut

Carried out a blood donation drive, medical camp, bed and book donation drive as part of activities of the National Service Scheme Cell, NIT Calicut

### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

- Organized the International Symposium on Biocomputing (ISB 2010) at Calicut, Kerala, jointly with the Indiana University Purdue University Indianapolis (IUPUI), USA, with cooperation from the Association for Computing Machinery (ACM).
- Organized the Indo-US Workshop on Biocomputing (ISB 2011) at Calicut, Kerala, jointly with the Indiana University Purdue University Indianapolis (IUPUI), USA, with cooperation from the IUSSTF and NSF.
- Organized the IEEE International Conference on Signal Processing, Informatics, Control and Energy Systems (IEEE SPICES) jointly with the Departments of Electrical Engineering and Electronics and Communication Engineering, NIT Calicut in February 2015.

- Dr. S.D Madhu Kumar has been selected as 'Big Data' Track- Co-Chair for the IEEE International Conference Recent Advances in Intelligent Computing Systems (RAICS 2013)
- Dr. Muralikrishnan K won the 'Best Ph. D Thesis Award' from the Indian Institute of Science (IISc), Bangalore in the year 2008.
- Dr. S.D Madhu Kumar has been selected as an External Examiner for evaluating the Computer Science courses offered by the colleges under Glasgow Caledonian University, UK.
- Dr. S.D Madhu Kumar gave the keynote address in the International Conference on Advances in Computing, Communications and Information Science (ACCIS'14) at TKM College of Engineering Kollam.
- Dr. S.D Madhu Kumar has served as Algorithms Tracks Co-Chair along with Dr.Priya Chandran and Dr.K Murali Krishnan for Seventh International Conference on Contemporary Computing (IC3 2014)-
- Dr. S.D Madhu Kumar has served as Program Chair for the International Workshop on Access Control Policies, Models and Mechanisms (ACPM-2014), Delhi.
- Dr.S.D Madhu Kumar has been selected as Vice Chair- ACM Trivandrum Professional Chapter.
- Dr. S.D Madhu Kumar has served as Publications and Web Support Chair for the IEEE Malabar Subsection (2014) and Vice Chairman (2016 onwards).
- Dr. S.D Madhu Kumar has served as Publicity Co-Chair for the ACM DEBS 2014.
- Dr. S.D Madhu Kumar has served as Cloud Computing Track co-Chair for the ACM SAC 2014.
- Dr. S.D Madhu Kumar has served as TPC Member for the 3rd International Workshop on Collaborative Cloud (CollabCloud 2014) of 10th IEEE International Conference on Collaborative Computing: Networking, Applications and Worksharing, Miami, Florida, United States
- A paper by titled "A Computational Method for Drug Repositioning using Publicly Available Gene Expression Data" authored by Shabana K M, Abdul Nazeer K A, Meeta Pradhan and Mathew J Palakal won the "Best paper Award" in the 4th IEEE International Conference on Computational Advances in Bio and Medical Sciences (ICCABS-2014) held at Florida, USA in June 2014.
- Two of the three members of the Organizing Committee of ACM SAC-2016, Piza, Italy Cloud Computing Track, are from this department - Dr. Priya Chandran (Professor) and Dr. Madhukumar S D (Associate Professor)
- Dr. S.D Madhu Kumar has been selected as Cloud Computing Track co-Chair for the ACM SAC 2016
- Dr. S.D Madhu Kumar has served as PC Member of IEEE International Conference Recent Advances in Intelligent Computing Systems (RAICS 2015
- Dr. S.D Madhu Kumar has served as Steering Committee member of the International Conference on Computing and Network Communications (CoCoNet'15)
- Dr. S.D Madhu Kumar has served as Keynote Speaker of Lecture Workshop on Internet of Things at GRD College Coimbatore- 2015

- Dr. S.D Madhu Kumar had given a Keynote Speech at the International Conference on Data Science Analytics and Applications (DaSAA'16), Guindy Engineering College, Chennai.
- Dr. S.D Madhu Kumar gave a Keynote speech at ICIA 2016, Coimbatore
- Dr. S.D Madhu Kumar has served as TPC Member in International Workshop on Internet-scale Clouds and Big Data (ISCBD 2016) Pittsburgh, PA, USA.
- Dr. S.D Madhukumar has served as TPC Member of PerfIoT: Workshop on Performance Evaluation of IoT Applications, France
- Dr. S.D Madhukumar has served as TPC Member 2nd IEEE International Conference on Anti-Cyber Crime (ICACC)'2017, Abha, Kingdom of Saudi Arabia
- Dr. S.D Madhukumar served as TPC Member -IEEE TenSymP 2017, Cochin
- Dr. S.D Madhukumar has served as TPC Member Symposium on Pervasive Systems, Algorithms, and Networks (IEEE I-SPAN 2017), Exeter, England
- Dr. S.D Madhukumar has been selected as Secretary, CREC Silver Jubilee Endowment Trust (2016 onwards)
- Dr. S.D Madhukumar and Dr. Priya Chandran have been selected as Track Chairs of ACM SAC 2017 Cloud Computing Track
- Dr. Jimmy Jose has been selected as Programme Committee Member, National Workshop on Cryptology '17, Annual event of Cryptology Research Society of India organised by the Department of Computer Science & Engineering, NIT Trichy during 28-30, Aug 2017.
- Dr. Anu Mary Chacko, Dr. Madhu Kumar SD, Alfredo C published a book chapter in the book Automatic Provenance Capture at Middleware in Big Data Context, University of Derby, United Kingdom: Springer Verlag Gmbh, ISBN: 9783319701011
- Dr. S D Madhu Kumar Selected as TPC Member- Symposium on Pervasive Systems, Algorithms, and Networks (IEEE I-SPAN 2017), Exeter, England
- Dr. S D Madhu Kumar has served as PC Member 2nd IEEE/ACM International Workshop on Distributed Big Data Management (DBDM 2017) Madrid, Spain- In conjunction with IEEE/ACM CCGRID2017
- Dr. S D Madhu Kumar has served as Track Chair-ACM SAC 2017 Cloud Computing Track
- Dr. S D Madhu Kumar has served as Tutorial Speaker (Big Data Analytics Tools and Techniques) IEEE SPICES2017

- Dr. S D Madhu Kumar has served as Academic Liaison Chair-IEEE Cloud Computing for Emerging Markets, 2018.
- Dr. S D Madhu Kumar has served as Program Chair- 2nd International Workshop on Internet Scale Clouds and Big Data (ISCBD) 2017, San Jose California
- Dr. S D Madhu Kumar, Anu Mary Chacko have been served as co-Chairs- IEEE TENCON 2017 Special session on Big Data Provenance
- Dr. S D Madhu Kumar delivered a Keynote speech in ICETEST 2018, Government Engineering College, Thrissur
- Dr. K.A. Abdul Nazeer has been selected as Member of the NIRMAN initiative, A network of institutions in Calicut for collaborative activities aimed at social development.
- Dr. K.A. Abdul Nazeer has been selected as Member, Executive Committee, 'Bioinformatics Centre', Indian Institute of Spices Research, Calicut.
- Dr. K.A. Abdul Nazeer has served as Member, Advisory Committee for NBA Accreditation, Govt. Engineering College, Kannur, 2017.
- Dr. K.A. Abdul Nazeer has served as Visiting faculty at Govt. Engineering College, Wayanad, 2017.

The Department of Computer Science & amp; Engineering, National Institute of Technology Calicut jointly with the Department of Radiation Oncology and Medical Physics, MVR Cancer Centre and Research Institute (MVR CCRI), Calicut organized 6-days' Faculty Development Programme on "Geometry, Imaging and Parallel Computing Techniques for Cancer Treatment (GIPCAN 2019)", under TEQIP-III at NIT Calicut, from 10 th to 15 th June 2019. Dr. Jayaraj P B, Dr. Pournami P N and Dr. Subhasree M of Dept. of Computer Science & amp; Engineering, NIT Calicut and Dr. NiyasPuzhakkal, Head (Medical Physics Division), MVR CCRI were the coordinators for the programme. This FDP introduced the latest trends in cancer treatment planning using various image processing, computational geometry, and parallel computing techniques.

Department of Computer Science & Engineering, National Institute of Technology Calicut jointly with the Institute of Mathematical Sciences Chennai organised an NCM-ACM India Summer School on "Graph theory and Graph Algorithms", at NIT Calicut, from 17th June to 5th July 2019. Dr. Subhasree and Dr. Subashini coordinated this summer school and it was sponsored by National Centre for Mathematics, IIT Bombay, ACM-India and Dell Technologies.

Dr Anu Mary Chacko and Dr Gopakumar G served as track chairs for Health Informatics track of ACM SAC 2019, 2020 and 2021.

Sl. No.	Name	Number
(a)	Publications	
	International Journals	639
	National Journals	5
	International Conferences	882

### DEPARTMENT OF ELECTRICAL ENGINEERING

	National Conferences	53
	Books	7
	Book Chapters	8
	Patents Granted	3
	Patents Filed	9
	Proceedings	44
(b)	Community Services	<ol> <li>Conducted 9 Training Camp to School students i Science, Mathematics etc.</li> <li>Feasibility Analysis of Solar power for Attapac tribal area is done and report submitted to Govt. o Kerala.</li> <li>Field survey is done in Wayanad Ghats for lightin Calicut-Bangalore highway and report submitted t District Administration.</li> <li>Visited the orphanage, Sree Sadashiva Bal Sadanam, Calicut and Distributed clothes, sweet and learning materials for the children.</li> </ol>
(c)	Other academic and administrative services	Faculty members are nominated as Technical Chair to various International Conferences, Academic Advisor Board Members of Various Universities and State leve and national level Committees
(d)	Conferences/Summer/ Winter Schools/ Short term courses/ Workshops conducted	111
(e)	Expert lectures delivered in conferences/ Seminars/ Workshops by faculty	338
(f)	Details of faculty who acquired higher qualification	
(g)	Consultancy and testing	Consultancy Projects:24 Testing Assignments: 473
(h)	Participation in Conferences/ Seminars/Workshops/Other training Programs	210
(i)	Sponsored R & D Projects	13 Projects are currently undergoing

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

- B.Tech ECE programme offered by Department of Electronics and Communication Engineering got accredited for 6 years by National Board of Accreditation (NBA).
- MTech Signal Processing programme offered by Department of Electronics and Communication Engineering got accredited for 6 years by National Board of Accreditation

(NBA).

- MTech Electronics Design and Technology programme offered by Department of Electronics and Communication Engineering got accredited for 3 years by National Board of Accreditation (NBA).
- The department has conducted several workshops short term courses and summer/winter term courses.
- The department has conducted own international Conference on its own in 2011 and one international conference combined with EEE and CSE departments in 2015.
- The department has also carried out a number of research projects.
- The faculty of the department has large number of published papers in National/ International Journals and National/ International conferences.
- The department is funded with SMDP project by Government of India for the development of manpower in the area of Microelectronics & VLSI Design.
- The department is supported with DST-FIST Level 1 project for setting up Advanced Wireless Communication & Signal Processing Lab

### DEPARTMENT OF MECHANICAL ENGINEERING

#### Dr. Muraleedharan C—

- Chief Warden: 2004-2006
- NITC Examination Coordinator: 2006-2011
- Dean (Students' Welfare): 2011-2013

#### Dr. Jose Mathew—

- HOD-Department of Mechanical Engineering at NIT Calicut from 2019-2021
- DST-FIST Coordinator, Department of Mechanical Engineering, NIT Calicut
- NBA- Institute Coordinator 2012-2018
- Dean Research and Consultancy at NIT Calicut during 2011 2014.
- Chairman, Technology Business Incubator (TBI) at NIT Calicut during 2011 2014.
- National Advisory Committee member of International Conferences COPEN and AIMTDR.
- Chairman, various Class Committees
- Represented NIT Calicut in CII-NIT's Industry Interaction Forum, Resource person for NCERT CLASS Project for Schools (1991-94).
- Was MED-Coordinator for World Bank Projects, Faculty in Charge- MED Time Table, Audio Visual Club, Warden-Student Hostels, Faculty in Charge of various Labs (CAD-CAM Centre, Advanced Manufacturing Centre, Metrology Lab., Sophisticated Instruments Centre- most of these in-charges are continuing) Project Coordinator for various MHRD projects, Dept., Coordinator for CEP and All India

Workshops, etc. He was Secretary to NITC Faculty Association, executive member, etc.

- Coordinator for the Two Day Online Workshop on 3D Printing Solutions for Medical Innovation (3DPSMI-2021) to be organized by NIT Calicut during July 17-18, 2021.
- Coordinator for National Workshop on Precision Measurements and Nanomechanical Testing, held at NIT Calicut during July 15-20, 2019.
- Coordinator for Global Initiative of Academic Networks (GIAN) course, held at NIT Calicut during June 24-29, 2019.
- Attended as an invited panellist under the vertical: V12H3 Advanced Manufacturing Technologies, Precision/Micro Nano Manufacturing/ Surface Engineering, in the VAIshwik BHAratiya Vaigyanik Summit **VAIBHAV**, Global Summit of Overseas and Resident Indian Scientists and Academicians Oct-Nov 2020, by Government of India on 12th October 2020.
- Delivered an invited lecture entitled "Micro-Machining of Difficult to Machine Materials" in the Five day e-Shot Term Course on Advanced Manufacturing Processes & Applications (AMPA-2020), organized by the Department of Mechanical Engineering, **MNIT Jaipur**, during August 24th 28th 2020.
- The DST-FIST Centre for precision measurements and nanomechanical testing was set up and sophisticated instruments like 3D optical profilometer (Alicona(Bruker): InfiniteFocus G5), Nano Indenter(HYSITRON/BRUKER:T1 Premier), Thermal imager (FLIR:T420), High speed camera (PHANTOM:MIRO LAB 110) where purchased.
- Conducted International Conference on Precision, Meso, Micro and Nano Engineering (**COPEN 8**) at NIT Calicut during Dec. 13-15, 2013 and was the Organizing Secretary for the same.
- Coordinator for NITC-NITK Joint National Workshop on Strategies to Attain Excellence in Impact Making Research and Development (SAEIMRD) held at NIT Calicut during Feb. 3-4, 2012
- A new 'Sophisticated Instruments Centre' was setup in the Department of Mechanical Engineering with the financial assistance of MHRD, which caters regular UG/PG student needs and has facilities for carrying out measurements of industrial products/undertake consultancy projects.
- Has contributed in a big way to the modernization of Metrology Lab, CAD/CAM Centre, Production Engineering Lab., etc. and has introduced many new experiments.
- The new machines added include, Micro Machining Centre, Rapid Prototyping Machine, Cutting Tool Dynamometers and Mini dynamometers, 4 axis CNC Vertical Machining Centre, CNC Turning Centre, etc.
- LabVIEW Software and various CAD/CAM packages like ANSYS, ABAQUS, Pro/E, CATIA, ESPRIT, PREDATOR, Creo, Mastercam, SolidWorks, Siemens NX, etc. were added to the CAD /CAM Lab.
- CAD-CAM Lab is opened till midnight, managed by NITC Students and which caters the need of entire NITC community.

### Dr P.K. Rajendrakumar—

• Filed a patent on Cost-Effective Passive Exoskeleton (CBR Number: 8957 dated:

### Dr. Sandip R Budhe—

- Secured second position in M. Tech in Mechanical department, IIT Guwahati
- Fourth Position for Best project in Inter university project competition
- Ph.D scholarship from the Amade Research Group, University of Girona, Spain
- Post-doctoral fellowship from Brazilian National Research agency, Rio de Janeiro, Brazil

### Dr. Jagdeesha T—

• He has delivered NPTEL lecture series on Fluid power control.

### Dr. K Sekar—

- International Award from World Research Council Innovation Research in Design and development of multiple casting machine for composite materials, 2018.
- Best Paper award and Presentation at International Conference on "Futuristic Trends in Materials and Manufacturing" at Delhi Technical Campus during 26-27 October, 2018.

### Dr. Basil Kuriachen-

- National level IEI Young Engineers Award 2019-20
- Best oral presentation award in International Conference on Recent Innovations & Developments in Mechanical Engineering (IC-RIDME 2018) organized by Department of Mechanical Engineering, NIT Meghalaya during 8th 10th November 2018.
- SERB-International Travel Fellowship 2017 and Early Career Research Award of DST: SERB 2016. He has filed two patents.

### Dr. Sumer Dirbude—

- Reviewer for: Energy Journal (February 2020), Elsevier, Scientific Reports-Nature (a *nature* research journal) (January 2019), Springer Nature; Emergent Materials (November 2018), Elsevier; Energy Journal (January and February 2019, March 2018, February 2015), Elsevier; Advances in Mechanical Engineering (March 2016), SAGE; Journal of Combustion, Hindawi Publishing Corporation, USA; Fuel Journal (December 2014), Elsevier; The Second International Conference on New Energy and Future Energy System (NEFES 2017) [June 2017]; Fourth International Conference on Advances on Clean Energy Research (ICACER 2019), Coimbra, Portugal [January 2019]; Session Chair and Reviewer: International Conference on Computational Sciences- Modelling Computing and Soft Computing (CSMCS 2020), 10-12 September 2020, Department of Mathematics, NIT Calicut 673601, Kerala India.
- Technical Program Committee Member at: International Conference on Thermology, January 13-15, 2018, Sanya, China; Springer Academic Conference, the 2nd International Conference on Sustainable Development of Water and Environment (ICSDWE2019), Jan 22-23, 2019, Hong Kong; Fifth International Congress on Energy Efficiency and Energy-Related Materials, October 22-28, 2019, Oludeniz, Fethiye/ Mugla-TURKEY; Committee Member of NESD 2020,

The 2020 International Conference on New Energy and Sustainable Development (NESD 2020), August 21-23, 2020 in Changchun, China, Organized by Academic Exchange Information Centre (AEIC).

- Ministry of Human Resource Development (MHRD) Scholarship for master's research, 2003-2005 and for doctoral research, 2007-2011.
- Research cash prize award by IIT Kanpur for publication in reputed journals (2011-12).
- Marquis Who's Who in the world-2013.
- National Advisory Committee Member for: a) International Conference on Mechanical and Materials Science Engineering: Innovation and Research (ICMMSE:IR-2018), 5-6 July 2018, Sandip Institute of Technology and Research Centre (SITRC), Sandip Foundation's/Sandip University, Nashik, India.

#### Dr Jayadeep U B—

- First rank holder during B.Tech. at Calicut REC (1998)
- CGPA of 10/10 during M.Tech. at IIT Kanpur (2003)

#### Dr Madhusudanan Pillai—

- Developed computational lab for the M. Tech. Industrial Engineering and Management programme and many of the exercises for the lab
- Invitation received to visit the Innovation Exhibition and Interaction with the Grassroots innovators during FINE 2018 and the innovation activities submitted have been shortlisted for presentation at Rashtrapati Bhawan. Accordingly, visited the Innovation Exhibition and Interacted with the Grassroots innovators on 20th and 21st March, 2018. Research works carried out by research scholars under my guidance have been presented at West Hall, Rashtrapati Bhawan, on 20th March, 2018, New Delhi as part of Festival of Innovation and Entrepreneurship (FINE 2018).
- Developed a new lab, Supply Chain and System Simulation Lab with several software packages in-house produced. Three of such software packages received copyrights

#### Dr Murali K P—

- Recipient of prestigious Fulbright scholarship
- Recipient of Kerala state energy conservation award
- Received 5 patents (including 2 US patents) & 25 international journal publications
- Successfully completed six sponsored projects of total outlay of ~ Rs. 8 crores funded by different agencies
- Soft Microwave substrate technology transfer to Private Industry

#### Dr. A Shaija—

• Elected as the Joint Secretary of The Combustion Institute - Indian Section (2011-2013)

- Member, Executive Committee of The Combustion Institute Indian Section, 2013 -2017
- Member, Technical Advisory Committee-National Conference, EPWIE, 2012; Expert Reviewer-DST project proposals, Dept. of Science & Technology, New Delhi
- Reviewer National Conference on Technological Trends (NCTT-2010) during August 19-20, 2011, held in College of Engineering, Trivandrum, Kerala.
- Conducted Faculty Development Programme (FDP) on 'Alternative Energy Options for IC Engines' from 28th June to 3rd July 2010, at NIT Calicut
- Conducted National Workshop on "Fuel Cell Technologies" during 11-12th June, 2011.
- Expert lecture on 'Alternative Energy Sources' in MHRD-AICTE Faculty Development Program on "Optimum Energy Utilization in Thermal Systems", June29-July12, 2008
- Expert lecture on "Geothermal Energy" in the MHRD-AICTE Faculty Development Program on "Renewable Energy Technology", June 21-26, 2010.
- Organizing Secretary, "**22nd National Conference in IC Engines and Combustion**" December 10-13, 2011 at NIT Calicut, in collaboration with the Combustion Institute (Indian Section)
- Co-ordinator, workshop on 'Research Scholars Meet' in NIT Calicut
- Coordinator, National Conference on 'Energy, Economy and Environment held during 16th and 17th december, 2016.
- Coordinator, National Workshop on 'Algal Technology and its Applications' during 17th and 18th March, 2017.
- Jury member, **'Yuva Master Mind'** sponsored by Malayala Manorama in Kottayam, 29 & 30 January, 2016
- Editorial member of "Iraqi Journal for Mechanical and Materials Engineering"
- Reviewer Algal Research, Resource-Efficient Technologies, Environmental Science and Pollution Research, Waste and Biomass Valorization (WAVE)-Springer, Aerosol and Air Quality Research, Bio resource Technology, Energy
- All India Radio Interview on "Biofuels" 9th December, 2016
- Judging Committee member TECHFEST 2017 jointly organized by KSCSTE, Govt.of Kerala and APJ Abdul Kalam KTU at MA College of Engg. Kothamangalam on 13 & 14 January, 2017., inaugurated by the Governer of Kerala, Shri Justice (Retd) P. Sathasivam

#### Dr. Saleel Ismail—

- B.Tech (REC Calicut): Proficiency award (March 1999)
- M.Tech (IIT Madras): (i) Prof. N Venkatrayulu Memorial Prize for securing highest CGPA in M. Tech in Thermal Engineering stream April 2002 (ii) M.Tech: Mico-Bosch Prize for the best M. Tech project in the area of Environmental Pollution Control and Energy Conservation July 2002
- GE Aviation: (i) Certificate of Achievement for various projects (December 2002) (ii) Six Sigma Green Belt Certification (December 2003) (iii) Hats off Award for reducing project execution time (October 2004) (iv) Management

Awards for the Project of the Month (July 2003, March-April 2004 and July 2005) (v) Engineering Recognition Day Awards for Technical Excellence in Analysis (April 2004 and April 2005)

• VIT Chennai: Research Award for contributions to research at the institute (August 2015, 2016 and 2017)

### Dr. S Jayaraj—

- Patent: 'Direct Expansion Cascade Solar Assisted Heat Pump' by Aidarkhan Kaltayev, Yerzhan Belyayev and Simon Jayaraj (2018) Republic of Kazakhstan
- Patent: 'New Hydrocarbon Mixture for Solar Assisted Heat Pump System Suitable for Heating Applications' by Lokesh B. Paradeshi, M. Mohanraj, M. Srinivas and S. Jayaraj (2019) India

### SCHOOL OF BIOTECHNOLOGY

- 1. The school has obtained an R&D funding of about Rs.1.78 crore so far through 11 major funded projects from the Government (DST, DBT, CSIR, KSCSTE)
- 2. Two patent applications filed.

### **12 ANNEXURES**

- 12.1 Institute's Council
- 12.2 Board of Governors
- 12.3 Finance, Building and Works and other Committees

## 12.4 RESEARCH PROJECTS AND CONSULTATION JOBS

## DEPARTMENT OF ARCHITECTURE

Sl. No	Title of the Project	Investigators	Sponsoring agency	Year of starting	Amount (Rs)	Status
1	'Framework for flood mapping and preparing an early warning system in the occurrence of flood for the northern region Kerala'	Dr Chithra K & Dr Bimal P	DST - NRDMS		32.11 lakhs	ongoing
2	project titled 'Sociotope mapping as a tool for policy framework in an urban cultural landscape'	Dr Bimal P &Dr Chithra K	ICSSR IMPRESS	Jul 2019	8 lakhs	ongoing
3	Attitudes towards the environment	Dr. Anjana Bhagyanatha n	MHRD_I CSSR	2019	6 lakhs	ongoing

# DEPARTMENT OF CHEMICAL ENGINEERING

Sl. No	Title of the Project	Investigators	Sponsoring agency	Year of starting	Amount (Rs)	Status
1	A highly flexible Piezo- tribo nanogenerator based on electrospun PVDF nanofibers containing the modified and decorated carbonaceous nanoparticles for capturing human kinematics	Dr. Prasanna Kujmar S Mural	Science and Engineering Research Board (SERB) - Department of Science and Technology (DST)	2018	2289500	ongoing
2	Design modifications of TATA-JK dense medium cyclone for the efficient separation of middling coal	Dr. Teja Reddy Vakamalla	R&D TATA Steel	2019	920400	Completed
3	Solar pre-heated thermochemical conversion of municipal mixed solid waste to high quality plasto- fuels for transportation and industrial heating applications.	Praveen kumar G (Co-PI)	Technology Development & Transfer (TDT) Division, Department of Science & Technology, (DST), Government of India, New Delhi	2020	2.61 Crore	ongoing
4	Tuning the Performance of Thin-Film Composite Membranes on Electrospun Support for Engineered Osmosis in water remediation	Noel Jacob Kaleekkal, Prasanna Kumar S Mural, Lity Alen V	MHRD-SPARC	2019	44 Lakhs	ongoing
5	Integrated hydrodynamic cavitation - membrane distillation technology for enhanced water recovery from industrial effluent	Noel Jacob Kaleekkal, Prasanna Kumar S Mural, Lity Alen V	DST-TMD	2020	21 Lakhs	ongoing
6	Development of Electrospun Membranes with Graded Hydrophobicity for Membrane Distillation	Noel Jacob Kaleekkal, Prasanna Kumar S Mural, Lity Alen Varghese	SERB-SRG	2019	26 Lakhs	ongoing
7	Process Intensification of Post Combustion CO2 capture using Rotating	Panneerselvam Ranganathan	DST-SERB ECRA	2019	30.55 Lakhs	ongoing

	Packed bed Reactor concept					
8	Development of hydrothermal liquefaction of microalgae for production of bio-oil	Panneerselvam Ranganathan	DST-INSPIRE Faculty	2018	35 Lakhs	Ongoing
9	CFD Model development of commercial scale circulating fluidised bed combustor for understanding hydrodynamic behaviors	Panneerselvam Ranganathan	M/s ISGES Heavy Engineering Ltd, Noida	2020	2.36 Lakhs	Completed
10	Study and development of highly efficient multichannel photocatalytic micro/milli reactor for textile waste water treatment exploiting hollow spherical zinc based metal oxide composite	Susmita Das	SERB-SRG	2020	20.8	ongoing

# DEPARTMENT OF CIVIL ENGINEERING

Sl. No.	Title of the Project	Investigators	Sponsoring agency	Year of starting	Amount (`lakhs)	Status
1	Behaviour of Steel Fibre Reinforced Rubberized Concrete Deep Beams	Dr. Praveen Nagarajan (PI) Dr. A.P. Shashikala (Co-PI)	KSCSTE	2020	5.90	Ongoing
2	Design and development of an expert system for updating rainfall Intensity-Duration- Frequency curves under climate change and non-stationarity	Dr. Agilan V	SERB, DST, GoI	2019	18.623	On-going
3	e	(PI)	Directorate of Environmen t & Climate Change, Government of Kerala	2020	13.20	Ongoing

	Studies on the					
4	occurrence, distribution and composition of microplastics along the Kerala coast with emphasis on its manifestation in food chain of nearshore communities	Dr. Ranjeet, CUFOS (PI) Dr. George K. Varghese (Co-PI)	SERB	2018	39.80	Ongoing
5	Design and development of a real- time optical sensor for	George K. Varghese (PI) M. K. Ravi Varma (Co-PI) Abinaya S. (Co- PI)	KSCSTE	2019	4.55	Ongoing
6	for intelligent	Dr. Harikrishna M. & Dr. Dhanaraj K.J., ECED, NIT Calicut	KSCSTE	2019	9.45	Ongoing
7	Flood Forecasting using Hybrid Wavelet- ANN and Wavelet- SVM Models	Dr. Chithra. N. R. (PI) Dr. Santosh. G. Thampi (Co-PI)	KSCSTE	2018	5.90	Ongoing
8	Performance evaluation of stone column supported embankments	Dr. Anjana Bhasi	SERB (DST)	2017	39.00	Ongoing
9	Capacity Building in Dam Safety Related Areas	Dr. Santosh G Thampi (Principal Co- ordinator) Dr. Sathish Kumar. D. (Co-PC)	CWC, Ministry of Jal Shakthi (under DRIP)	2017	250.00	Ongoing
10	Centre for Transportation Research (CTR), a Centre of Excellence established by MHRD, Govt. of India, under the scheme 'Establishment of Centres of Excellence in Frontier Areas of Science and Technology"	Dr. MVLR Anjaneyulu Dr. K. Krishnamurthy Dr. M. Harikrishna Dr. M. Sivakumar	Ministry of Education	2013	100.00	Ongoing
11	Integrated electro- oxidation, electro- reduction and	Dr. Anantha Singh T S	SERB (Early Career	2019	31.559	Ongoing

electrocoagulation	Research	
process for the	Award (EC	
degradation of	Engineering	
ammoniacal nitrogen in	Sciences)	
the presence and		
absence of carbon-		
based pollutants		

## DEPARTMENT OF ELECTRICAL ENGINEERING

Sl	Title of the Project	Investigators	Sponsoring agency	Year of startin g	Amount (Rs)	Status
1	Development of an alternate fluid to transformer mineral oil	Dr. Preetha P& Dr. Sindhu T K	KSCSTE	01-08- 2020	5.7 lakh	Ongoing
2	A Resilient DC Community Grid for the Provision of Ancillary Services to Local Grid	Dr. Nikhil Sasidharan (Indian PI), Prof. Ashok S (Indian Co-PI), Prof. Saifur Rahman (VIRGINIA POLYTECHNIC INSTITUTE (VIRGINIA TECH)), Dr. Manisa Pipattanasomporn (VIRGINIA POLYTECHNIC INSTITUTE (VIRGINIA TECH))	Scheme for Promotion of Academic and Research Collaboratio n (SPARC)	2019	64, 79,841/-	On going
3	TEQIP collaborative Research Scheme	Investigation on thermally assisted electro migration mechanism in metallic nano- wires	September 2019	Septem ber 2020	12.10	CO-PI
4	CSIR, NEW DELHI	Design and development of	July 2019	July 2022	28.73	CO-PI

		solar pv fed efficient universal converter for v/f drives in smart irrigation system				
5	BIRAC, DBT, New Delhi	Solar Powered Smart Cooking System	December 2020	Decem ber 2021	5	PI

# Institute Funded FRG/FRP

Sl. No	Title of the project	Investigators	Year of Starting	Amount (Rs)	Status
1	Advanced control schmes for Hybrid Tank system	Dr.S.Kanagalakshmi	2019	5lakhs	On going
2	A Resilient DC Community Grid for the provision of Ancillary Services to Local Grid	Dr. Nikhil Sasidharan	2019	5lakhs	On going
3	Network Mechanisms of Stroke and Recovery – A Computational Study	Dr. Sanjay M	2019	5lakhs	On going
4	Composite Power System Model	Dr. Gopakumar P	2019	5lakhs	On going
5	Power Converters to EV drive and Fast- charging Infrastructure	Dr. V. Karthikeyan	2019	5lakhs	On going

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

SI. No	Title of the Project	Investigators	Sponsorin g agency	Year of starting	Amount (Rs)	Status
1	Augmentation of Post Graduate Teaching & Research Facilities of ECE Department	Dr. Sameer S. M. (PI) Dr. P. S. Sathidevi Dr. Babu A. V., Dr. Dhanaraj K. J.	DST-FIST	2018	216 Lakhs	On-going
2	VLSI implementation of Low Density Parity Check (LDPC) Encoder/Decoder	Dr. Deepthi P.P. Dr. Sameer S.M. Dr. Dhanaraj K.J.	ISRO	2019	30.12 L	Ongoing
3	An Intelligent System for Retinopathy of Prematurity (ROP) Screening & Diagnosis	PI: Dr. Sreelekha G Co-PIs: Dr. Sathidevi P. S. Dr. Subashini R	SERB, DST	2019	30.9 Lakhs	Ongoing

		Dr. Subhasree M. Dr. Poornima Mohanachandran 5 Dr. Anand Vinekar				
4	Special Manpower Development Programme – Chip to System Design (SMDP-C2SD)	Dr. Dhanaraj K. J. & Mr. Bhuvan B.	MeitY	2015	100 L	Ongoing
5	Image based Smart Parking Management for Intelligent Transportation Systems	Dr. Hariksrishna M. & Dr. Dhanaraj K. J.	KSCSTE	2018	9.45L	Ongoing
6	Design and Implementation of breath analyser for diabeted detection	Dr Suja K J	DST SERB	2019	51,65,00 0	ON GOING
7	Development of point of care prognosis based exhaled breath analyzer for cardiovascular diseases (CVD)	Ms Akshaya M V, Dr Suja K J	DST- WOS -B	2019	26,33,00 0/-	ON GOING
8	Development of a diagnostic tool for Cold Atmospheric Plasma	Dr Venu Anand (PI)	SRB: Startup Research Grant (SRG)	2020	25 lakhs	ongoing
9	Development of an indigenous tool for the enhancement of medical images using deep neural networks	Dr. Sudeep PV	SERB	2019	29,34,63 0/-	Ongoing
10	Fabrication and characterization of ZnON based photo sensors	Dr. Aswathi R Nair	DST- SERB	2021	27,54,35 0	Ongoing

# DEPARTMETN OF MECHANICAL ENGINEERING

Sl. No	Title of the Project	Investigators	Sponsoring agency	Year of starting		Status
1	Acquired DST-FIST project and purchased 3D optical profilometer (Alicona (Bruker): Infinite Focus G5), NanoIndenter (HYSITRON/BRUKER: T1 Premier), Thermal imager (FLIR:T420), High speed camera (PHANTOM:MIRO LAB 110	Dr. Jose Mathew	DST-FIST	2016	Rs 2,51,00,00 0	Active

2	Numerical Modeling, simulations and experimental investigations to improve the surface tribological properties of Ti-6Al-4V through developing wire electrical discharge alloying	Dr. Basil Kuriachen and Dr. Jose Mathew	DST-SERB	2017	Rs 25,00,000	Active
3	Experimental investigation and electro thermal modelling of electrode wear compensation in Micro Electric Discharge Machining (µEDM) of shaped holes on super alloys for improving the dimensional accuracy and functional performance of cooling holes on turbine blades and vanes	Dr. Basil Kuriachen and Dr. Jose Mathew	DRDO	2021	Rs 17,17,400	Active
				1992	Rs 6 Lakhs	Completed
	Modernisation of	Dr. Jose Mathew	MHRD Projects	1993	Rs 10 Lakhs	Completed
4	Mechanical /Production			1999	Rs 8 Lakhs	Completed
	Engineering Laboratories			2000	Rs 15 Lakhs	Completed
				2003	Rs 7 Lakhs	Completed
5	NITC FRP R&D project,	Dr. Jose Mathew	NITC	2006	Rs 0.30 Lakhs	Completed
6	NITC FRP R&D projects (3 Nos.)	Dr. Jose Mathew	NITC	2007	Rs 1.5 Lakhs	Completed
7	Investigations In To The Influence Of 3-D Surface Topographic Parameters And Cross Hatch Angle Of Cylinder Liner Surface On The Friction And Wear Of Piston Ring-Cylinder Liner Assembly	Deepak Lawrence K	SERB , DST, India	2018	Rs. 4109500	Ongoing as on 31 St March 2021
8	Development new tool designs and Experimental Investigations into the effect of reinforcement	Basil Kuriachen	Technology Innovation Hub- Indian Institute of Technology	2021	114.14 Lakhs	Expecting the fund to start the project

	particles on the tribological and corrosion properties of marine grade AA5052 aluminium alloy joints through FSW		Guwahati			
9	Analysis of Instabilities in Jeffcott Rotor	Ashesh Saha	Faculty Research Seed Grant (FRG), NIT Calicut	2018	Rs. 5,00,000/-	Ongoing
10	Control of Instabilities in Jeffcott Rotor	Ashesh Saha	Start-up Research Grant (SRG), DST- SERB sponsored	2019	Rs. 23,43,387/-	Ongoing
11	Development of kitchen layout for paraplegic persons	Ratna Kumar K	DST SERB	2019	26,75,120	ongoing
12	Assessment of Occupational hazards for worker well-being under Clean India Initiative	Dr. Vinay V. Panicker and Mr. Francis J. Emmatty	MoE (Formerly known as MHRD) and Indian Council for Social Science Research	2019	7,35,000	Report submitted for review
13	Development of a decision support system for multimodal freight transportation planning with a special application for FCI Kerala region	Dr. Anoop K.P. and Dr. Vinay V. Panicker	Kerala State Council for Science, Technology and Environment	2020	3,00,000	In Progress
14	Development of Flexible Microwave Substrate for Microwave Device/Circuit Applications	Dr Murali K P	FRG	2018	500000	Ongoing
15	Development of desalination system using selectively patterned solar absorber	Dr. Sujith Kumar C.S. (PI), Dr. S. Jayaraj (Co-PI)	Directorate of Environment & Climate Change Kerla	2020	1375000	Ongoing
16	Development of Aluminum –Cerium – Scandium Alloys for High Temperature Creep Applications and its Experimental Investigations	Srinu Gangolu	SERB	2020	34,77,400	On-going

17	Setting up of Design Innovation Centre at NIT Calicut	Principal Coordinator: P.K. Rajendrakumar Coordinator: Jayadeep U.B.	M.H.R.D., Government of India (Through IISc, Bangalore)	2015	Rs.75 lakhs	Ongoing
18	Selectively Patterned Porous Evaporative Structure for Enhanced Solar Driven Interfacial Evaporation	Dr. S Jayaraj	The Institution of Engineers (India)	2019- 2020	Rs.1 lakh	Completed
19	Solar Driven Co- Generation of Electricity and Water in Small, Rural Communities	Dr. S Jayaraj (CO-PI)	Department of Science & Technology(IB CD), Govt. of India	2021- 2024	Rs.25 lakhs	Ongoing

# **DEPARTMENT OF MATHAMATICS**

Sl. No	Title of the Project	Investigators	Sponsoring agency	Year of starting		Status
	Design of optimal reliability acceptance sampling plan based on multi-stage process	Mahesh Kumar	DST-SERB	2018	7,42,500	On- going
2.	Modeling and simulation of fluid motion on the surface profile generation in Micro-EDM	S.Panda	SERB-DST	2019	6,60,000	On- going
3.	A Study of Riesz Transforms Associated to the Grushin Operator	Sanjay P. K.	SERB-DST	2018	6,60,000	On- going

# **DEPARTMENT OF CHEMISTRY**

Sl. No	Title of the Project	Investigators	Sponsoring agency	Year of starting	Amount (Rs)	Status
1	Human Toll-Like Receptor 2-Selective Agonists: Design, Synthesis and Structure-Activity Relationship in Diverse Heterocyclic Scaffolds	Dr. Janardhan Banothu	DST-SERB	2021	47,34,700/-	Ongoing
2	Novel Fused Imidazole – Coumarin Hybrids: Synthesis, Characterization, Antimicrobial Investigation and Structural – Activity Relationship Studies,	Dr. Janardhan Banot	NIT Calicut under Faculty Research Seed Grant	2019	5,00,000/-,	Ongoing

3	Design and synthesis of novel single-atom catalysts for C-C bond cleavage and C-C bond formation reactions	Dr Raju Dey	SERB, New Delhi, India	2020	27,46.150	Ongoing
<u>4</u>	DST-Inspire Faculty Research Grant	Dr. Muniyandi Sankaralingam	DST	2018	35 lakhs	Ongoing
<u>5</u>	NITC -Faculty Research Seed Grant	Dr. Muniyandi Sankaralingam	NIT C	2019	5 lakhs	ongoing
<u>6</u>	"Design of Functional Main Group Organometallic Molecular Scaffolds: NIR Absorbing Excellent Materials for Sensing, Transportation of Bio-inspired Anions, Two photon Absorption and OLEDs"	Chinna ayya swamy P	DST-SERB	Submitted		
<u>7.</u>	Supramolecular Rigid Aromatic Multifarene Scaffolds: Selective Recognition of Environmental Pollutants and Ligands for Asymmetric Catalysis	Chinna ayya swamy P	DST-SERB- Start up	Submitted		

# **DEPARTMENT OF PHYSICS**

Sl. No	Title of the Project	Investigators	Sponsorin g agency	Year of starting	Amount (Rs)	Status
	FIST program- To augment XRD facility in the Department	Dr. P. Predeep Dr. Aji A Anappara, Dr. Sivaji Reddy, Dr. Suchand Sangeeth Dr. Maneesh Chandran, Dr. SubramanyanN.V,	DST-FIST	2020	1,65,00,00 0	Ongoing

## SCHOOL OF MATERIAL SCIENCE AND ENGINEERING

Sl.	Title of the Project	Investigators	Sponsoring	Year of	Amount	Status
No	The of the Troject	Investigators	agency	starting	( <b>R</b> s)	Status

1	Interface engineering of Rhenium based nano heterostructures for enhanced hydrogen evolution reaction,	Dr N.Sandhyarani	SERB POWER FELLOWSHIP 2021, Science and Engineering Research Board, Department of Science and Technology, Government of India	2021- 2024	Rs.38.1 Lakhs	ongoing
2	Risk assessment of nanoparticle accumulation in soils: Effects of engineered metal oxide nanoparticles on soil bacterial communities, soil microbial processes and evaluation of phytotoxicity using genomic approaches.	Dr.Sajith V (in collaboration with ICAR-Indian Institute of Spices Research, Kozhikode, Kerala, India)	National Agricultural Science Fund (NASF)	2020 - 2023	Rs. 75.41 Lakhs	ongoing
3	Development of 2D heterostructure based wear and corrosion resistant coatings,	Dr.Sajith.V	SERB, Department of Science and Technology,	(2020 - 2023)	Rs.29.57 lakhs	ongoing
4	Rational design and development of non precious mixed transition metal oxides for oxygen reduction reaction	Dr N.Sandhyarani	Science and Engineering Research Board,Department of Science and Technology	2020- 2023	Rs.41.48 Lakhs	ongoing
5	Develop & Characterization of Biodegradable magnesium based alloys for degradable metallic implants	Dr. Hanas T	ICMR Indian Council of Medical Research	2019- 2022	Rs 42 Lakhs	ongoing
6	Design and Development of a low cost, rapid and sensitive sensor for the on- site detection of Endotoxin	Dr N.Sandhyarani	Department of Science and Technology, Nanomission	2019- 2022	Rs.43.84 Lakhs	ongoing

7	Precise synthesis and purification of platinum nano cluster as anti-cancer agent-A new approach for cancer diagnosis and treatment	Dr Lakshmi V Nair	Department of Science and Technology (Inspire Faculty)	2018- 2023	Rs.35 Lakhs	ongoing
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# SCHOOL OF BIOTECHNOLOGY

Sl. No	Title of the Project	Investigators	Sponsoring agency	Year of starting	Amount (Rs)	Status
1	Unraveling molecular mechanisms linking adipokine (leptin) and steroid hormone	Dr. Suresh. P. S	DST-SERB	2018	26.05 lakhs	Completed
2	Title Exploration of the diagnostic/therapeutic potential of non- coding RNAs- Phosphatase-HER2- UPAR cross talk in breast cancer	Dr. Suresh. P. S	DBT	2018	57.9872 lakhs	Ongoing

# **12.5** Faculty Position (as on 31-03-2020)

	Professor	Asso. Professor	Asst.Professor	r Total
architecture	·	·	·	
Sanctioned				23
In Position	3	0	8	11
Vacant				12
Chemical				
Sanctioned				27
In Position	3	1	15	19
Vacant				8
Civil				
Sanctioned				64
In Position	11	3	22	36
Vacant				28
Computer				

Sanctioned				58
In Position	4	7	18	29
Vacant				29

Electrical Engineering								
Sanctioned				62				
In Position	6	9	16	31				
Vacant				31				

### Electronics & Communication

Sanctioned				60
In Position	7	4	23	34
Vacant				26

### Mathematics

Sanctioned				25
In Position	5	2	8	15
Vacant				10

# Mechanical

Sanctioned				81
In Position	11	4	25	40
Vacant				41

## Physics & Chemistry

Sanctioned				42
In Position	7	3	19	29
Vacant				13

## School of Bio Technology

Sanctioned				16
In Position	3	2	6	11
Vacant				5

## School of Management Studies

Sanctioned				16
In Position	1	2	6	9
Vacant				7

## School of Materials Science

&Engineering				
Sanctioned				6
In Position	2	2	2	6
Vacant				0

# Physical Education

Sanctioned				3
In Position	0	0	1	1
Vacant				2

Total

Iotui				
Sanctioned	69	138	276	483
In Position	63	39	169	271
Vacant	6	99	107	212

# 12.6 ADMINISTRATIVE AND OTHER STAFF

# TECHNICAL STAFF

SL.NO.	NAME	DESIGNATION	DEPARTMENT
1	Jayesh Kumar P	Sr. Mechanic	CED
2	Ajayakumar. R	Sr.Mechanic	CED
3	Noushad. K.K	Sr.Mechanic	CED
4	Sathiyan P K	Sr.Mechanic (Sl.Gr.)	CED
5	Ajayachandran V R	Computer Operator	CSED
6	Sasidharan Pillai G	Computer Technician	CSED
7	Biju Francis	Sr. Mechanic	CSED
8	Sreeja. V	Sr. Mechanic	CSED
9	Abdulsathar V M	Sr.Mechanic	CSED
10	Beljith. P	Sr.Mechanic	CSED
11	Rajagopalan A	System Analyst	CSED
12	Santhosh Kumar S	System Programmer	CSED
13	Praveen H Babu	Sr. Mechanic	ECED
14	Anandan K R	Sr.Mechanic (Sl.Gr.)	ECED
15	Krishnan kutty V	Sr.Mechanic (Sl.Gr.)	ECED
16	Sasesh A R	Sr.Mechanic (Sl.Gr.)	EED
17	Jayan V S	Sr.Mechanic	EED

18	Nandakumar K	Sr.Mechanic	EED
19	Mohammed Sali N K	Sr.Mechanic (Sl.Gr.)	EED
20	Somanath K A	Sr.Mechanic (Sl.Gr.)	EED
21	Mohan Kumar A K	Asst. Engineer	ENGG. UNIT
22	Thomas T E	Asst. Engineer	ENGG. UNIT
23	Alavikutty K	Sr.Mechanic (Sl.Gr.)	ENGG. UNIT
24	Prajith. P	Sr.Mechanic	ENGG. UNIT
25	Abdulsidheek P K	Sr.Mechanic	ENGG. UNIT
26	Mathew Varghese	Sr.Mechanic	ENGG. UNIT
27	Shibu K	Instructor	ENGG.UNIT
28	Anwar Sadath C	LD Steward	HOSTEL OFFICE
29	Chandramohan M K	Graphic Artist (Hr.Gr.)	LIBRARY
30	Sobhana J	Libraian Gr.IV.Hr.Gr	LIBRARY
31	Jayarajan T	Librarian Gr. IV(Hr.Gr.)	LIBRARY
32	Shaju K P	Librarian Gr.IV	LIBRARY
33	Jayaraman K	Offset Mechnine Operator (Hr.Gr)	LIBRARY
34	Climson C R	Sr. Mechanic	MAINTENANCE UNIT
35	Mahesan K A	Sr. Mechanic	MAINTENANCE UNIT
36	Radhakrishan M K	Sr. Mechanic	MAINTENANCE UNIT
37	Raju K P	Sr. Mechanic	MAINTENANCE UNIT
38	Santhosh Kumar M V	Sr. Mechanic	MAINTENANCE UNIT
39	Venugopalan K P	Asst. Engineer(Electrical i/c)	MAINTENANCE. UNIT

40	Pradeep Kumar K K	Instructor	MED
41	Rajendran M K	Instructor	MED
42	Hariharan C P	Programmer	MED
43	Eldho. P. Varghese	Sr. Mechanic	MED
44	Manoj. K. G	Sr. Mechanic	MED
45	Sasi K K	Sr.Mechanic (Sl.Gr.)	MED
46	Narayanalal M	Sr.Mechanic	MED
47	Prasad Moochikkal Variath	Sr.Mechanic	MED
48	Shaly Joseph. K	Sr.Mechanic	MED
49	Unnikrishnan R	Sr.Mechanic	MED
50	Sudheer.P.R	Sr.Mechanic	MED
51	Anandan P	Sr.Mechanic (Sl.Gr.)	MED
52	Velayudhan Kutty N P	Sr.Mechanic (Sl.Gr.)	MED
53	Abhilash. A	Sr.Mechanic (Sl.Gr.)	MED
54	Ajayan A	Sr.Mechanic (Sl.Gr.)	MED
55	George T M	Sr.Mechanic (Sl.Gr.)	MED
56	Raghu P V	Sr.Mechanic (Sl.Gr.)	MED
57	Sanal P R	Sr.Mechanic (Sl.Gr.)	MED
58	Surendran P K	Sr.Mechanic (Sl.Gr.)	MED
59	Suresh.K.C.	Sr.Mechanic (Sl.Gr.)	MED
60	Vasu.T.C.	Sr.Mechanic (Sl.Gr.)	MED
61	AnilKumar P	Supervisor	MED
62	Pradeep Kumar E	Supervisor	MED

63	Prakash Peter	Lab Assistant	PHYSICS
64	Tomin Sunny	Executive Engineer	MAINTENANCE. UNIT

# **MINISTERIAL STAFFS**

SL.NO.	NAME	DESIGNATION	DEPARTMENT
1	Lt Col Pankajakshan K	Registrar	Registrar's Office
2	Gejo C V	Deputy Registrar	Finance
3	Praveen Kumar.P	UD Clerk	Engg. Unit
4	Sethumadhavan Mechery	UD Clerk	Accounts
5	S.M.Shafi	UD Clerk	Accounts
6	Purushothaman Pillai K N	UD Clerk	Purchase
7	K.T. Sasikumar	UD Clerk	Dean R & C
8	P. Muraleedharan	JS	Establishment
9	K. Unnikrishnan	UD Clerk	Academic
10	M.Reejish Kumar	JS	Hostel Office
11	Petson Andrew	UD Clerk	Admission
12	M.V. Prasad	DA	Engg. Unit
13	Ashok Kumar Dev	AR (Finance)	Accounts
14	S.Saravanan	AR (Admn.)	Administration
15	Dr.A.A.Celine	RMO	Health Center
16	C Veluthaki	CA Gr.II (Hr.Gr.)	ECED
17	Sindu .P	UD Clerk	Academic
18	Sobhana.T	UD Clerk	Academic
19	G. Chandrika	UD Clerk	Academic
20	J.L. Soosykutty	UD Clerk	Establishment
21	Smera K.S	UD Clerk	Establishment
22	P.D.Juliet Das	UD Clerk	Establishment

23	Mereena John	U D Clerk	Accounts
24	K. Mini	JS	Accounts
25	P. Prama	UD Clerk	Accounts
26	C.P. Rugmini	SS	Accounts
27	S. Sreeda	AR Estt.	Establishment
28	Dr. Asha Gopalan	AR (S&P)	Stores & Purchase

# SUPPORTING STAFF

SL.NO.	NAME	DESIGNATION	DEPARTMENT
1	C Preman	Watchman cum Gardner	Director Office
2	C.Geetha	Sweeper Cum Sanitation	First Year Cordinator Office
3	C.Unnikrishnan	Vehicle Cleaner	MED/CED
4	Devi Poolakkal	Sanitation Worker	Accounts
5	Jameela. A.K	Sweeper Cum Sanitation	Dean R&C, FW
6	K Bhaskaran	Watchman cum Gardner	Physics
7	K P Devi	Sanitation Worker	Dean Academic/ Dean P&D
8	K Thankamani	Sanitation Worker	Engineering Unit
9	K V Chandu	Peon	Hostel Office
10	L. Sasikala	Sweeper Cum Sanitation	Health Center
11	M.K.Rajan	Watchman cum Gardner	EED
12	M.M.Sadanandan	Watchman cum Gardner	Guest House
13	M.Mamukoya	Watchman cum Gardner	Guest House
14	N.K.Ummerkutty	Watchman	Purchase
15	P.Abdul Razack	Watchman cum Gardner	Sergeant Office

16	P.K.Sangeeta	Peon	Establishment
17	P.V.Bhagianathan	Watchman cum Gardner	Sergeant Office
18	Saroja. T M	Sanitation Worker	Chemistry
19	T.Janardhanan	Watchman cum Gardner	Accounts
20	T.P.Ravia	Peon	Maths
21	Thanka.C	Sweeper Cum Sanitation	CSED
22	V.Pushpavalli	Sanitation Worker	Academic, Admission office
23	Vinod. K.P	Watchman cum Gardner	Library

### 12.7 STAFF MEMBERS DEPUTED/SPONSORED FOR TRAINING, LEARNING

Nil

### **12.8 SCHOLARSHIPS AND AWARDS**

#### CREC Silver Jubilee Endowment Trust Scholarships

CREC Silver Jubilee Endowment Trust (SJET) of the Institute, a registered body with the Director as Chairman, Deans & Heads of Departments as ex-officio and other nominated members as Trustees, currently awarded 93 scholarships worth Rs. 5000 to 10000/- each per annum to the students. The number and the value of the scholarships for a year will vary depending on the availability of funds and the sponsors. The SJET invites applications from the students and Heads of the departments/ a sub-committee will scrutinize the applications, and verifies the data with the students and others. The scholarships are awarded to the deserving students based on their academic merits, economic backwardness and other performance parameters. The SJET scholarships include.

Sl.No.	SCHOLARSHIPS
1.	Prof. A. O. Kunjipaulo Endowment Scholarship
2.	Class of 1992 Computer Engineering Alumni Scholarship
3.	RECCAA, Singapore Scholarship
4.	RECCAA, USA Scholarship
5.	RECCAA, Bahrain Scholarship
6.	REC 1 st Batch Scholarship
7.	RECCAA, Mumbai Scholarships (2 Nos.)
8.	CSAI (Class of 2000) Scholarships (4 Nos.)
9.	REC 76 – 81 Batch Scholarships (2 Nos.)
10.	10 years of XXXII nd Batch (CREC 96) Scholarship
11.	REC Calicut 1982 Batch Scholarship
12.	NITC (REC) 1983 Batch Scholarship
13.	REC Calicut, Class of '84 Trust Scholarship
14.	CREC 80-85 Batch Scholarship
15.	Padmanabhan Scholarship in Memory of All Departed Souls of 77 Batch, CREC
16.	Capt. Mohammed Memorial Endowment Scholarship
17.	Nitin Sharma Memorial Scholarship

18.	1997 – 2001 CSE B. Tech. Batch Scholarship
19.	Joseephus M T, John Sebastian & Luthufi K T Memorial Scholarship 2004-08
19.	Batch
20.	MariveetilRaghunath Memorial Endowment Scholarship
21.	1984-88 Batch of REC/NITC Scholarship

# **12.9 THE PARENT TEACHER ASSOCIATION**

CREC Parent –Teacher Association had originated as a charitable society keeping the objective of developing the educational, cultural, and training activities of students of CREC (presently NIT Calicut, NITC)) on a no-profit no loss basis. During the year 2020-21, PTA provided financial assistance to many needy students of NITC. Some of the major activities are listed below.

- 1. Cash awards (Rs. 5,000/- each) were given to all the branch toppers in the month of December2020. An amount of Rs. 2,05,000/- was utilized for this purpose.
- 2. Scholarships were given to financially needy students to help their tuition fees. An amount of Rs. 59365/- was utilized for this purpose.
- 3. Registration fees were given to students for presenting papers in international conferences held in India. Total amount of Rs. 15000/- was awarded from the PTA fund.
- 4. The annual department level PTA meeting was held on 10-07-2021 by online mode and the meeting was well attended and served as a platform for useful discussion between parents and the faculty members.

## **12.10 NATIONAL SERVICE SCHEME**

- The National Service Scheme (NSS) Cell of National Institute of Technology Calicut (NITC) provided abundant opportunities for its volunteers to participate in the various events and activities for the greater good of the community. Through its drives and fundraisers, NSS Cell has provided for the needy, while through its events, NSS has fostered creativity and fun for school children, be it through cultural activities or promoting knowledge.
- The NSS Cell at NIT Calicut has four units working under it. Participation in NSS activities is mandatory for the completion of B Tech. credit requirements in NIT Calicut. All students Enrolled for the B Tech. programme of the Institute shall register for and complete the course requirements of NSS before they enter their third year of study, normally. The course requirement includes completion of minimum 15 hours of socially relevant activities in a semester. This, they are allowed to undertake within the campus, surrounding area of the campus or even near their home-town. The registered students keep an 'NSS Diary' along with them in which these activities are recorded and got endorsed by authorized persons. At the end of the registration period, grades are awarded after the evaluation of the diary. Apart from this mandatory component, there are a lot of voluntary activities from students even after their period of registration in NSS.
- Even though in the last academic year, the students were not available in the campus, NSS units continued its activities in its full rigor, keeping the values of NSS in our mind.
- The NSS unit of NITC distributed sanitizers to Kerala state road transport corporation depot at Kozhikode and the students during Kerala state's SSLC and higher secondary examinations on the first week of May. 3500 home-made masks were also distributed to shops and schools.

- NSS conducted pachapp, an online greenery challenge from May 7 to June 2, 2020, in which the student community was challenged to plant at least one sapling and post the photos on various social media platforms. 117 students volunteered and accepted the challenge. Besides, in order to encourage students to connect with nature, "pet a plant" programme was carried out. Under this event, 117 students grew a plant as their pet in a bottle
- Prior to the world environment day on 2020, NSS NITC unit organized the 'Art of Hope' competition in which NSS volunteers all over India were invited to participate by submitting their art and literary works on the topic.
- On June 6, 2020, NITC, under the coordination of Mr.Subhash.K.M, EED handed over 4 television sets along with cable connection to the Chathamangalam Panchayath Secretary on facilitate the education of students from the low economic background as Kerala government has decided to conduct the academic year by broadcasting via Kite Victers channel. Two televisions were sponsored by the NSS-NITC unit and the remaining two by the Faculty Association.
- NSS NITC donated 10 tablets to the Chathamangalam panchayath on June 23, 2020 to facilitate the online education of specially-abled children in the locality. This donation went to "white board"- a special scheme under Samagra Shiksha Kerala- an overarching program for the school education sector by the government of Kerala.
- Coordinating with the institute, the beds of graduating students willing to donate were collected and donated to Grace Palliative Care, Santhwanam old age home and Jeeva Jyothi charitable trust by NSS NITC.
- NSS NIT Calicut, in collaboration with NSS SVNIT, organized a Plantation Drive with a target of planting 500 trees on the occasion of NSS Day from 16th to 23rd of September, 2020.
- As part of NSS day, NSS NITC conducted QuizBuzz, an online quizzing competition and TrollAway, an online troll competition to utilize the current meme sensation for social awareness regarding varying topics.
- On the third week of September (World Marrow day), NSS organized a webinar hosted by Mr. Aby Sam John, the first person from Kerala to donate his blood stem cells. It was attended by 250 students.
- On September and October, Unnat Bharat Abhiyan Cell and NSS unit of NITC jointly organizing a webinar series on National Education Policy 2020.
- As part of Gandhi Jayanti, 2020, NSS NITC organized a Gandhi quiz from September 22nd to 27^t, incorporating students from different schools and colleges around India. The quiz was conducted through different online platforms. Besides, in connection with Fit India Freedom run, NSS also organized 'My TREE FOR THE YEARS TO COME' programme. The event was inaugurated by Dr.P.S.Sathidevi, director in charge, NIT Calicut on 1st October 2020. Sites where cleaned and saplings were planted in front of every department building.
- Throughout the course of 2020-21, NSS NITC organized various webinars to raise social awareness. Some of them are 'Fighting Climate Change through Diet' hosted by Sally Varma, an animal advocate;"Food-planet-health" hosted by Ms. Bhavya Vatrapu ;"Safety and First Aid" by Femina Fathima; "Road safety awareness" hosted by Sir T.J. Thankachan, a retired motor vehicle

insoector; 'the supreme law of India; the mighty constitution' hosted by advocate T J Chakanad and "Role of Technology in Biological disasters" hosted by Dr. Jinesh Veetilakath. Also on November 21, The NSS unit of NIT Calicut in collaboration with Sanjeevani-Life beyond Cancer, conducted a webinar on 'Cancer prevention and healthy lifestyle'.

- NSS NITC also initiated a "Bird Feeding" programme in which waste plastic bottles and cans were recycled to make bird feeders. 47 students participated in the programme.
- On February, NSS NITC conducted a hair donation drive. With around 30 registrations, people willingly came forward to donate their hair.
- NSS NITC, in association with Calicut Corporation and District Cleanliness Mission and in connection with "Nammade Kozhikode" event organized the "Mission Clean Beach". As a part of this drive, NSS NITC volunteers, cleaned Calicut Beach on March 13, 2021.
- NSS donated some of the extra unused Tathva 2019 T-shirts to Grace Palliative Care and Institute of Palliative Care, Kozhikode.
- A webinar was organized on the topic "Choose to Challenge" on April 8, which was hosted by Commander Prasanna Edayilliam, a retired naval officer.
- The most well-known aspect of NSS is farm work. Due to the COVID situation, NSS NITC initiated a kitchen garden and micro green garden project in which students began and maintained a small scale vegetable garden at their homes in spaces available to them. Participation: kitchen garden = 174 students and Micro green garden = 145 students.
- Under the 'Lets Teach' initiative, NSS NITC volunteers provided scholarship exam assistance to the students of Puthoor government UP school (USS scholarship exam) and Aduvad A.L.P.S primary school, Mavoor (LSS scholarship exam) through online platforms.

## **12.11 TRAINING AND PLACEMENT STATISTICS**

	Total	Total					
UG Program Details	Placed*	Registered**	Percentage	Min Salary	Max Salary	Avg. Salary	
B.Arch	4	6	66.7	3	8	5.5	
B.Tech Bio Technology	7	9	77.8	4.38	8.93	6.52	
B.Tech Civil	42	63	66.7	3.65	31.5	7.27	
B.Tech Chemical	33	42	78.6	4.5	13.43	7.76	
B.Tech Computer Science	124	124	100	4	43.31	17.14	

### **Placement statistics 2020-21**

B.Tech Electrical & Electronics	92	101	91.1	3.6	31.5	9.43
B.Tech Electronics & Commn.	113	115	98.3	3.5	35	12.19
B.Tech Mechanical	77	97	79.4	3.5	27.51	6.64
B.Tech Production	17	22	77.3	5	10	6.91
B.Tech Engg.Physics	6	11	54.5	3.5	8.01	5.74
Total UG	515	590	87.3			

* Indicates total number of students placed [double offers not counted]

** Includes students with CGPA  $\geq = 6.5$  and who participated in all T&P registrations. If a company has offered a job to a student having CGPA < 6.5,

it is included in both placed as well registered counts.

	Total	Total		Min	Max	A	
PG Program Details	Placed* Registered**		Percentage	Salary	Salary	Avg. Salary	
AR - M.Plan	0	5	0	0	0	0	
CE - M.Tech Environmental GeoTech	2	6	33.33	8.89	8.89	8.89	
CE - M.Tech Offshore Structures	6	15	40	6	6	6	
CE - M.Tech Structural Engineering	2	10	20	3.5	6.25	4.87	
CE - M.Tech Traffic & Transportation Planning	5	9	55.56	3.6	5.25	4.92	
CE - M.Tech Water Resources Engineering	1	7	14.29	5.25	5.25	5.25	
CH - M.Tech Chemical	1	1	100	3.6	3.6	3.6	
CS - M.Tech Computer Science	20	21	95.24	7	28.01	14.31	
CS - M.Tech Computer Science (Information Security)	18	18	100	6.5	28.01	12.15	
CS - MCA	30	33	90.91	5	17.43	10.05	

EE - M.Tech Power Systems	0	7	0	0	0	0
EE - M.Tech High Voltage Engineering	4	8	50	3.6	11.5	6.9
EE - M.Tech Instrumentation and Control Systems	7	15	46.67	3.6	12.52	7.1
EE - M.Tech Industrial Power and Automation	5	12	41.67	4.5	11.5	7
EE - M.Tech Power Electronics EC - M.Tech	6	12	50	3.5	12.5	7.5
Electronics Design and Technology	12	13	92.31	13	23.9	16.2
EC - M.Tech Signal Processing	6	14	42.86	3.6	11.6	7.86
EC - M.Tech Telecommunication	11	12	91.67	5	26.01	9.45
EC - M.Tech Micro Electronics & VLSI Design	16	17	94.12	15.26	23.9	19.18
ME - M.Tech Energy Engg. & Management	4	9	44.44	3.5	8.89	6.69
ME - M.Tech Industrial Engg. & Management	5	18	27.78	3.5	8.89	5.5
ME - M.Tech Machine Design	3	8	37.5	3.5	12.52	6.5
ME - M.Tech Material Science & Technology	4	13	30.77	3.5	8.89	6.19
ME - M.Tech Manufacturing Technology	0	9	0	0	0	0
ME - M.Tech Thermal Engineering	5	9	55.56	8.2	9	8.7
NS - M.Tech Nano Technology	2	4	50	8.89	8.89	8.89
MS - MBA	21	30	70	3.33	8.89	6.03

Total PG	199	342	58.19			
Mathematics	2	4	50	4.30	4.30	4.30
MA - M.Sc.	2	1	50	4.38	4.38	4.38
CY - M.Sc. Chemistry	0	1	0	0	0	0
PH - M.Sc. Physics	1	2	50	3.5	3.5	3.5

* Indicates total number of students placed [double offers not counted]

** Includes students with CGPA >= 6.5 and who participated in all T&P registrations. If a company has offered a job to a student having CGPA < 6.5,

it is included in both placed as well registered counts.

# NATIONAL INSTITUTE OF TECHNOLOGY, CALICUT

ANNUAL ACCOUNTS 2020-21

# NATIONAL INSTITUTE OF TECHNOLOGY, CALICUT BALANCE SHEET AS AT 31.03.2021

			(Amount in Rupees)
SOURCES OF FUNDS	Schedule	Current Year	Previous Year
CAPITAL FUND	1	5,19,81,89,588.11	4,97,15,35,581.31
DESIGNATED/EARMARKED/ENDOWMENT FUNDS	2	1,35,07,37,786.60	1,28,24,65,945.60
GPF & CPF	2A	36,17,39,975.54	32,28,52,128.54
LONG TERM LIABILITIES	3D	60,09,96,863.00	46,10,00,000.00
CURRENT LIABILITIES & PROVISIONS	3	1,58,82,52,446.10	1,62,50,70,777.60
RESERVES AND SURPLUS		-	-
TOTAL		9,09,99,16,659.35	8,66,29,24,433.06
APPLICATION OF FUNDS			
FIXED ASSETS			
Tangible Assets		1,79,88,28,079.31	1,80,82,81,084.27
Intangible Assets	4	66,40,058.66	32,06,056.39
Capital Work-In-Progress		2,34,41,93,530.00	2,11,02,04,424.32
INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS	100.00		
Long Term		83,89,67,083.00	83,44,44,972.00
Short term	5	-	37,73,24,916.30
INVESTMENTS- OTHERS	6	-	
CURRENT ASSETS	7	3,40,34,44,179.24	2,80,93,84,664.64
LOANS, ADVANCES & DEPOSITS	8	70,78,43,729.14	72,00,78,315.14
TOTAL		9,09,99,16,659.35	8,66,29,24,433.06

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# NATIONAL INSTITUTE OF TECHNOLOGY, CALICUT

# INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31.03.2021

	¥.		(Amount in Rupees)
PARTICULARS	Schedule	Current Year	Previous Year
INCOME			
Academic Receipts	9	37,43,22,743.55	41,93,69,252.46
Grants/Donations/Subsidies	10	1,36,36,59,216.00	1,16,40,11,991.00
Income from investments	11	(1,92,40,153.00)	4,06,75,038.00
Interest earned	12	1,90,24,847.00	2,18,36,325.00
Other Incomes	13	1,69,78,665.00	5,01,41,137.40
Prior Period Income	14	3,50,004.00	3,12,162.00
TOTAL (A)		1,75,50,95,322.55	1,69,63,45,905.86
EXPENDITURE			
Staff Payments & Benefits (Establishment expenses)	15	1,08,53,71,012.00	99,48,65,443.00
Academic Expenses	16	28,58,06,739.00	26,96,03,499.00
Administrative and General Expenses	17	5,00,25,448.75	9,54,53,658.30
Transportation Expenses	18	11,32,421.00	13,12,186.00
Repairs & Maintenance	19	6,74,42,113.00	8,71,50,726.00
Finance costs	20	3,95,75,464.00	2,09,85,390.00
Depreciation/Amortization	4	7,08,14,437.00	6,10,75,057.00
Other Expenses	21	2	1,21,98,46,706.00
Prior Period Expenses	22	-	28,757.00
TOTAL (B)		1,60,01,67,634.75	2,75,03,21,422.30
Balance being excess of Income over Expenditure (A-B)	-	15,49,27,687.80	(1,05,39,75,516.44
Less/(Add): Unitilised Non Plan Grant transferred to Liabilities/ (Assets)	3C		
Foreign Exchange gain/ loss			
Add:Transfers from Capital Grants		7,07,73,406.00	6,10,75,057.00
Balance Being Surplus / (Deficit) Carried to Capital Fund		22,57,01,093.80	(99,29,00,459.44



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# SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31.03.2021

SCHEDU	LE -1	CAPITAL FUND

Particulars	Current Year	Previous Year
Balance at the beginning of the year	4,97,15,35,581.31	6,48,66,24,366.75
Add: Contributions towards Capital Fund		-
Add: Grants from UGC, GOI & State Govt. to the extent utilized for capital expenditure	5,00,00,000.00	3,62,56,000.00
Add: Assets purchased out of earmarked funds	-	, · · · .
Add: Assets purchased out of Sponsored Projects, where ownership vests in the		
institution	38,06,763.00	20,14,769.00
Add: Assets donated/Gifts received	-	÷ ,,
Add: Interest on Term Deposits and Savings account	-66,03,872.00	1,22,58,926.00
Less: Bank charges	0.00	1,712.00
Less: Transfer to earmarked funds - TEQIP	-	-
Add/(Less): Excess/(Deficit) of Income over Expenditure transferred from Income and		
Expenditure account	22,57,01,093.80	(99,29,00,459.44)
Total	5,24,44,39,566.11	5,54,42,51,890.31
Less/ (Add): Unspent Plan Fund transferred to Liabilites	(2,45,23,428.00)	51,16,41,252.00
Less: Transfers from Capital Fund	7,07,73,406.00	6,10,75,057.00
Balance at the year end	5,19,81,89,588.11	4,97,15,35,581.31

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(Amount in Rupees)

#### SCHEDULE 2 - DESIGNATED/EARMARKED/ENDOWMENT FUNDS

					100 CONTROL 1- 1-		The Local State								TOT	AL
Particulars	TEQIP	TEQIP-II	TEQIP-II (Equipment Modernisation Grant)	TEQIP-II Reserves	TEQIP-III	FBS	GROWTH FUND	STUDENTS FUND	GYMKHANA	тві	TBI-11	TBI-NIDHI PRAYAS	H.W.D	Endowm ent	Current Year	Previous Year
L	and the second second								2 02 002 00	1 70 17 10 00	10 55 104 00	2 04 70 202 00	26 28 240 00	1	1 20 24 55 045 25	1 30 17 30 040 0
a) Opening balance of the funds	23,54,832.00	3,94,391.00	0.00	1,01,49,540.00	20,84,553.00	62,624.00	1,19,15,39,991.06	2,65,61,000.20	3,02,002.00	1,30,43,196.00	48,56,194.00	2,84,79,382.00	26,38,240.00		1,28,24,65,945.26	1,20,17,38,049.0
<ul> <li>Additions during the year</li> </ul>	-	•		•	91,10,232.00	-	1,20,45,024.00	1,24,04,021.00	0.00	74,59,164.00	0.00	30,19,734.00	0.00		4,40,38,175.00	13,50,45,902.0
c) Income from investments made out of funds							4,98,83,243.00	8,55,439.00		2,19,699.00					5,09,58,381.00	1,54,57,757.0
i) Accrued interest on nvestments/Advances					-					1,54,642.00					1,54,642.00	2,73,92,490.66
e) Interest on Savings Bank A/c		1997.	-				5,04,894.00	(3,85,625.00)			-				1,19,269.00	42,575.0
Other additions				•	(39,66,721.00)		-	-		-		1			(39,66,721.00)	53,76,381.00
Total(A)	23,54,832.00	3,94,391.00	0.00	1,01,49,540.00	72,28,064.00	62,624.00	1,25,39,73,152.06	3,94,34,835.20	3,02,002.00	2,08,76,701.00	48,56,194.00	3,14,99,116.00	26,38,240.00	- 1	1,37,37,69,691.26	1,38,50,53,154.6
8.	1.10															and the second second
Jtilisation/Expenditure towards																
i) Capital Expenditure	-	0.00			(89,133.00)	•		-							-89,133.00	3,11,18,815.0
ii) Revenue Expenditure		0.00		•	59,07,537.00		99,132.00	72,95,475.00	0.00	34,92,897.00		61,23,819.00	2,02,178.00		2,31,21,038.00	7,13,66,346.4
Total(B)	• [		-	1	58,18,404.00	•	99,132.00	72,95,475.00	•	34,92,897.00	•	61,23,819.00	2,02,178.00	-	2,30,31,905.00	10,24,85,161.4
<u>.</u>															0.00	1,02,048.0
Amount paid back to the authority															0.00	1,02,048.0
Total(C)			· · · · · · · · · · · · · · · · · · ·													4-4-
Closing balance at the year end (A-B)	23.54,832.00	3,94,391.00	0.00	1,01,49,540.00	14,09,660.00	62 624 00	1,25,38,74,020.06	3,21,39,360,20	3,02,002.00	1,73,83,804.00	48.56.194.00	2,53,75,297.00	24,36,062.00		1,35,07,37,786.60	1,28,24,65,945.5

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SCHEDULE 2(A) GPF & CPF

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		CDE	TOTAL		
	GPF	CPF	Current year	Previous year	
Α.					
a) Opening balance of the funds	30,53,26,706.72	1,75,25,421.63	32,28,52,128.35	29,50,99,616.35	
b) Additions during the year	5,70,58,642	7,61,13,743	13,31,72,385	9,57,74,193.00	
c) Income from investments made out of funds	2,19,12,413.00	10,53,377.00	2,29,65,790.00	70,14,628.00	
d) Accrued interest on investments/Advances			-	1,01,97,302.00	
e) Interest on Savings Bank A/c	1,00,248	34,501	1,34,749	25,518.00	
f) Other additions					
Total(A)	38,43,98,009.72	9,47,27,042.63	47,91,25,052.35	40,81,11,257.35	
В.					
Utilisation/Expenditure towards objectives funds					
i) Capital Expenditure					
ii) Revenue Expenditure	4,10,21,893.00	7,63,63,184	11,73,85,077.00	8,52,59,129.00	
Total(B)	4,10,21,893.00	7,63,63,184	11,73,85,077.00	8,52,59,129.00	
Closing balance at the year end (A-B)	34,33,76,116.72	1,83,63,858.63	36,17,39,975.54	32,28,52,128.54	

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# SCHEDULE 3 - CURRENT LIABILITIES & PROVISIONS

Particulars		Current Year	Previous Year
A. CURRENT LIABILITIES			
1. Deposits from staff			
2. Deposits from students		3,26,22,114.00	3,19,70,114.00
3. Sundry Creditors	1.2		
a) For Goods & Services		41,463.00	41,463.00
b) Others	-	9,82,683.00	8,81,907.00
4. Deposits - Others (including EMD, Security Deposit)	1	6,09,72,116.20	6,09,33,974.70
5. Statutory Liabilities (GPF, TDS, WC TAX, CPF, GIS, NPS):			
a) Overdue			
b) Others		15,64,675.83	82,49,298.83
6. Other current Liabilities			
a) Salaries	- 19	44,64,401.00	5,41,29,462.00
b) Receipts against sponsored projects		15,43,23,821.50	13,87,78,024.50
c) Receipts against sponsored fellowships & scholarships		4,59,69,766.94	4,83,01,374.94
d) Unutilised Grants		50,44,24,704.00	51,50,71,311.00
e) Grants in advance		-	-
f) Tuition fee		46,15,975.53	46,22,604.53
g) Other liabilities		20,57,58,743.10	20,61,47,002.10
	Total (A)	1,01,57,40,464.10	1,06,91,26,536.60
B. PROVISIONS			
1. For Taxation		-	-
2. Gratuity		26,36,37,029.00	24,20,87,040.00
3. Superannuation/Pension		0.00	0.00
4. Accumulated Leave Encashment		27,86,62,118.00	25,88,02,625.00
5. Expenses payable		3,02,12,835.00	5,50,54,576.00
6. Trade Warranties/Claims	- 1		-
7. Others		-	
	Total (B)	57,25,11,982.00	55,59,44,241.00
Total (A+B)		1,58,82,52,446.10	1,62,50,70,777.60

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#### SCHEDULE 3A- SPONSORED PROJECTS

		Opening Ba	lance				Closing Balance	
.Sr. No	 2. Name of the Project	3. Credit	4. Debit	5. Receipts during the year	6. Total	7. Expenditure during the year	8. Credit	9. Debit
1	Linear & Non Linear Optical (Dst)		11,153.00	-	(11,153.00)	-		11,153.00
	Stable Isotopic Investigation	1,98,524.00		-	1,98,524.00	-	1,98,524.00	
	Experimental investigation	2,60,895.00	-	-	2,60,895.00	-	2,60,895.00	
	Development Of Transparent Conducting Polymer Films For	3,03,928.00	-	_	3,03,928.00	_	3,03,928.00	
	Electrode	5,09,237.00	-		5,09,237.00	-	5,09,237.00	
	Information Security Education Multifunctional Plasmonic Nanoparticles - Nano Composites - Targeted Drug Delivery	5,429.00		-	5,429.00	_	5,429.00	
	Strengthen The Research Facilities In Networking And Security Area	100.00		-	100.00	-	100.00	
8	Enhancement Of The Sensivity Of Peptide Nanotube Based Biosensors	18,808.00	•	-	18,808.00	-	18,808.00	
9	Development Of An Interoperable Spatial Database Of Road Network For Clt	15,08,674.00	*	-	15,08,674.00	-	15,08,674.00	
10	Fast Development Of Chitosan Reinforced Polymer Nanocomposites	8,914.00		_	8,914.00	-	8,914.00	
11	Development Of Tools & Techniques For Modeling & Analysis	31,60,016.00			31,60,016.00	-	31,60,015.00	
12	Strengthen The Research And Post Graduate In Area Power Quality	14,03,213.00			14,03,213.00	<u> </u>	14,03,213.00	
13	Thermo Responsive Ion Track Membrance	2,168.00		-	2,168.00	· · · · · · · · · · · · · · · · · · ·	2,168.00	
14	Fast Track Project Treatment Of Effrluent Using Biomembran Techniques		2,640.00	-	(2,640.00)	99,500.00		1,02,140.00
15	Synthesis And Grafting Of Thermo Responsive Hydrogels On Nano Porous Memberanes-Iradication-Drug	90,348.00	-	-	90,348.00		90,348.00	
16	Design Development And Optimization Of Miniature And Micro	5,14,936.00	-	-	5,14,936.00		5,14,936.00	
17	Fast Track Development Of An Extractive Fermentation Process For Enhanced Alkline Phosphatase	12,863.00			12,863.00	-	12,863.00	<b></b>
18	Molecular And Functional Charactarization Of Putative- Zingiber Zerumbt-Ginger		6,512.00	16.00	(6,496.00)	-		6,496.00
19	Regulation Of L- Sorbose Utilization In Human Fungal Pathogen Candida Albicans	11,66,075.00		*	11,66,075.00		11,56,075.00	
	Molecular Cloning And Characterization Of Terpene Synthas- Zingiber Zerumbet	1,00,990.00	<b>.</b>	-	1,00,990.00		1,00,990.00	
	Simulation Of Solid Rocket Exhaust Plumes Devimpt. Of Activity Based Models For Forecasting Of	-		*	-		-	
22	Travel Demand		1,950.00		(1,950.00)	<u> </u>		1, <del>9</del> 50.00

	Developmet Of A Toolbox For Evaluation And Identification				ľ			
23	Of Urban Road Safty Improvement Measures	1,950.00		-	1,950.00		1,950.00	
	Investigation Of Distributed Generation Stm. Integration							
24		-	-				*	
	Identification And Characterization Of Phytochemicals From	1						
25	Indian Medicinal Herbs	-	- [			-	-	
	Design & Devlp. Of Electro-Magnatically Driven Miniature-				226.00		236.00	
26	Ir Sensor Array Phase I	236.00			236.00		230.00	
	Development Of Pro-Flurophore Scaffolds To Probe Peptide						7 64 939 00	
27	Aggregation And-Transition	7,64,819.00	-	-	7,64,819.00		7,64,819.00	
	Study On Long Term Performance Pavements With Coir					C 105 00	22 64 406 00	
28	Geotextiles	22,10,271.00	-	60,630.00	22,70,901.00	6,495.00	22,64,406-00	
	Use Of Colr Pith For Airport Soft Ground Arrestor System							3 365
29		809.00	-		809.00	3,174.00		2,365.
	Pufa Therapy Ameliorates Cognitive Impairment And		1					
30	Miochodrial Dysfunction In Caeno	-	-	-	-			
	Productivity Monitoring And Wage Analysis For Nreg Works					1		
31		1,670.00	-	-	1,670.00	-	1,670.00	
	Production Management System	3,805.00	-	105.00	3,910.00	-	3,910.00	
	Establishment Of Bif - Btbi	10,491.00	-	13,312.00	23,803.00	23,414.00	389.00	
	Electron C Structure Studies Of Adsorption Of Unsatured				1			
3/	Hydrocarbons		-	-	-		*	
	Combination Of Therapy In Ischmic	31,519.00	-	14,799.00	46,318.00	45,596.00	722.00	
	Cavity - Enhanced Absorbtion Spectroscopy For Trace Gas					1		
36	6 Pollutant Monitoring	9,62,122.00	-	10,20,000.00	19,82,122.00	10,26,250.00	9,55,872.00	
	Novel Functionalized Porphyrinic Coordination							
2-	7 Arrays, Polymers And Frameworks		13,344.00	-	(13,344.00)	-		13,344
 	Tunable Hierarchical Zeolities Using Polymer Macro-	27,65,053.00	-	-	27,65,053.00	-	27,65,053.00	
	Theoreatical Study Onysis By Methane Mono-Oxygenase							
24	The Enzymatic Castal	-	-	-	-		-	
	Noval Triazole Vridged Metalloporphyrins Formed Via Click							
	Chem.		40,792.00	-	(40,792.00)			40,792
	Nonlinear Analysis Of Eeg Signals Of Patients With							
	Alzheimers Disease	8,63,090.00	-	68.00	8,63,158.00	-	8,63,158.00	
	Design Uranium Based Catalist For Activation And							
<i>.</i>	2 Functionaliation A Computational Quantum		1.00	-	(1.00)	-		
44	Design And In Vitro Evaluation - Hif Prolyil Hydroxilase							
	-		1,59,242.00	2,03,504.00	44,262.00	32,174.00	12,088.00	
4	Oleamide As Novel Neuroprotectant Against Ischemic Stroke							
	1 1	3,86,746.00	-	55,161.00	4,41,907.00	4,35,404.00	6,503.00	
		5,00,140.00						
44				-	1,25,295.00	-	1,25,295.00	
	Assessment Of Effectiveness Of Nh-47 Gye Pass Road In	1 75 295 00	-					
	Assessment Of Effectiveness Of Nh-47 Gye Pass Road In 5 Coimbatore (Los)	1,25,295.00	-				1	
4	Assessment Of Effectiveness Of Nh-47 Gye Pass Road In 5 Coimbatore (Los) Biodegradability Enhancement Of Low Density Polyethylene	1,25,2 <del>9</del> 5.00	- 6 16 129 00		(6.16.139.00)	-		6,16,13
4	Assessment Qf Effectiveness Of Nh-47 Gye Pass Road In 5 Coimbatore (Los) Biodegradability Enhancement Of Low Density Polyethylene 6 By Using Biopolymet Nano-	1,25,295.00	6,16,139.00	-	(6,16,139.00)	-		6,16,13
45	Assessment Of Effectiveness Of Nh-47 Gye Pass Road In 5 Coimbatore (Los) Biodegradability Enhancement Of Low Density Polyethylene	1,25,295.00	6,16,139.00		(6, <u>16,139.00)</u> 17,698.00	-	17,698.00	6,16,13

49 A Genetic Approach Towards Understanding	4,26,645.00	-		4,26,645.00		4,26,645.00	
50 Fast Track Project	3,04,647.00	-	-	3,04,647.00	-	3,04,647.00	
Poly (3,4Ethylenedioxthiophene ) Poly(Methyl Methacrylate)		2,87,035.00	-	(2,87,035.00)			2,87,035.00
Investigation On Bio-Hydrogen Production By Thermo- 52 Chemical Method	1,66,938.00	-		1,66,938.00		1,56,938.00	
53 Cenre For Transportation Research	55,63,329.00	-	1,13,648.00	56,76,977.00	5,63,560.00	51,13,417.00	
Development Of Bistable Memory Devices Based On Organic 54 Semi-Conductors	5,52,686.00	-		5,52,686.00		5,52,686.00	
Rational Design And Synthesis Of Metalloprophyrin- 55 Lanthanoid Hybrid Material For Dna Binding	13,85,798.00	-	~	13,85,798.00	+	13,85,798.00	
56 Photo Switchable K Ion Channel Blockers	19,972.00	-	-	19,972.00	-	19,972.00	
Experimental And Deterministic Model Studies In Regeneration Of Microbial Biosorbents After Heavy Metal 57 Desorption	19,603.50			19,603.50		19,603.50	
Devt Of Low Cost Elastomeric Fullerene Derivatives Using Electron And Gamma irradiation For Organic Electronic 58 Applications	6,29,407.00	-	-	6,29,407.00		6,29,407.00	
Design And Implementation Of Secure Communication 59 System	8,069.00	-		8,069.00		8,06 <b>9.00</b>	
inhibiation Of Mitochondrial Dynamin Relates Protein One 60	1,04,552.00		3,539.00	1,08,091.00	1,06,184.00	1,907.00	
High Energy Density Photochemical Fules Based On 61 Nanomaterial Hybrids	34,53,470.00		4,186.00	34,57,656.00	70,305.00	33,87,351.00	
Transparent Flexible And Conducting Electrodes Based On 62 Graphene- Nanometal Hybrids		6,17,316.00	3,961.00	(6,13,355.00)	1,47,161.00		7,60,516.00
Ruthenium (11) Osmium (11) And Gold (111)Alkaloids: Active Targets For Dna Intercalation Interactions 63	11,81,618.00		1,010.00	11,82,628.00		11,82,628.00	
Investigation Of Optical Nonlinearity By Defect State In One 64 Dimensional Photonic Crystals		13,121.00	-	(13,121.00)	*		13,121.00
Characterizing The Interactons Of Chiorpromazine With The 65 Mitotic Kinesin Eg5 And Tublin		13.00	-	(13.00)			13.00
Design And Fabrication Of Anechoic Test Facility And Characterization Of Acoustic Emission From Airfolis In Flow 66 Field	70,784.00	-	72.00	70,856.00	5,484.00	65,372.00	
Ultrasensitive, Rapid & Low Cost Detection Of Cancer 67 Biomakers	377.00	-	-	377.00		377.00	
68 Development Of Nanocomposites Ethylene	6,44,791.00	-	16,956.00	6,61,747.00	<u> </u>	5,61,747.00	
69 Investigation-Scrap Tyre Shreds -Cement Concrete	62,308.00		-	62,308.00		62,308.00	
70 Investigation Of Performance	-	-	-	-		-	
Development Of Attached Media-Treatment Of Domestic - 71 Colr Geotextiles.	61,301.00	-		61,30 <b>1.00</b>	_	61,301.00	
Studies On Ground Water Pollution By Heavy Metal Disch & 72 Ex	37,247.00	-		37,247.00	-	<u>37,247.00</u> 1.00	
73 Investigation On Power Quality Issues Of Drives Mesophase Formation And Characterisation Of Organised	1.00		-	1.00	-	1.00	

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		9.00		(9.00)	-		9.00
75 Stand. Of Engi. Properties	2 00 211 00	3.00		3,98,311.00	-	3,98,311.00	
76 Implementation Of Multy.	3,98,311.00	-		0,00,111.00			
Seismic Evaluation Of Existing Multy - Storey Buildings In		-	8,23,000.00	11,63,941.00		11,63,941.00	
77 Kozhikode Dist.	3,40,941.00		8,23,000.00	11,00,041.00		12,02,2 1200	
Development Of Risk Management Tool In Green					-		
78 Construction Sites	-	-		(20,000.00)			20,000.0
79 Transcript Profiling Of Differentially Expr.		20,000.00		(20,000.00)			20,000.0
Experimental Investigation For Potential Use Of Coir Path In	ļ					_	
80 Making Value Added Products	-	-	-	-	*		
Development Of Intelligent Robot For Fault Diagnosis Of						a 2 6 7 9 9 9	
81 Power	12,679.00	-	-	12,679.00		12,679.00	
Low Density Polythylene / Nanochitosan Biodegradable							
82 Films For Food-	33,804.00	-	-	33,804.00		33,804.00	
Development Of Low Cost Polymer Electrolyte Membranes							
83	4,06,866.00	-	-	4,06,866.00	-	4,06,866.00	
Investigation On Absorption Of Flouride From Water Using							
84 Nano Material	-		-	-	~	-	
Comprehensive Computational Analisys Of Anti- Diabetic							
85 Phytotherapeutics	2,87,726.00	- 1	-	2,87,726.00	-	2,87,726.00	
Flexible Nanomaterial Doped Polymer Dispersed Liquid							
Crystał (Pdic) Devices For Switchable Window Applications							
		9,97,824.00		(9,97,824.00)	-		9,97,824.0
86 Devt And Analysis Of Model For Green Operations In Supply							
			-	-	-	-	
87 Chain Management							
Enhancement Of Third-Order Optical Nonlinearity In	14,737.00	_		14,737.00	_	14,737.00	
88 Photonic Crystalcavity For Optical Switching	14,757.00						
Development Of Organic Solar Cells Based On Transition	001.00	-	_	921.00	-	921.00	
89 Metal Oxide Anode Buffer Layers	921.00	-		521.00		<b>PLINO</b>	
Temperature Dependent Optical Switch From Organized				1,594.00	-	1,594.00	
90 Assemblies	1,594.00	-		1,094.00		1,304.00	
Investigation On The Application Of Catalitic Nanoparticles						25,89,291.00	
91 As Diesel	25,89,291.00	-	-	25,89,291.00		25,69,291.00	
Devt Of A Model Framework For Land Use Based Estimation							
And Prediction Of Solid Waste Generation							
92	1,692.00	-	-	1,692.00	-	1,692.00	
Implimentation Of Habitat Devt. Prgrme. Of Three Corus in		:					
93 Attapadi	-	-	-		-		
Investigation Over The Experimental And Mathematical							
Modelling Of Novel Plant Based Biosorbents For The							
Sequestration Of Hexavalent Chromium							
94	7,930.00	-	469.00	8,399.00	-	8,399.00	
94 Development Of A Hybridelectrochemical Discharge							
	2,675.00	-	-	2,675.00	_	2,675.00	
95 Machine And Itsperformance Analysis	2,010,000			· · · · · · · · · · · · · · · · · · ·			
Securityassessment Of Microgrids In Isolated Andin Grid	2,57,340.00	_	-	2,57,340.00	-	2,57,340.00	
96 Connected Mode			68,321.00	30,02,391.00	28,420.00	29,73,971.00	
97 Setting Up Design Innovationcentre	29,34,070.00	· · · · · ·	00,321,00	30,02,001.00	20,120100		

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Special Manpowerdevelopment-Chip To Systemdesign(Snmdp-C2Sd)-Department Ofelectronics And			:				
98 Information Technology Mit	10,75,240.00		12,43,732.00	23,18,972.00	10,17,345.00	13,01,627.00	
Synthesis Of Novelelectrocatalytic Nanoparticles							
99 Andnanocomposites For Fuel Cell Application	13,853.00	-	-	13,853.00	-	13,853.00	
Development Of Recombinantsphingomonas Paucimobilis	I T						
Ofr Gellan GumproductionDelvery Stystem							
100	35,346.00	-	-	35,346.00	*	35,346.00	
Power Electronics For Grid Connected renewable Energy							
101 System Under Nampetphase li	2,99,884.00	-	-	2,99,884.00	-	2,99,884.00	
102 Production Of Bil Diesel Fromchiorella Vulagris	1,35,993.00	-	2,704.00	1,38,697.00	58,165.00	80,532.00	
Investigation Over The Experimental and Mathematical							
103 Modelling Of Aerosols in the Kde.Dist.	1,12,732.00	-	2,972.00	1,15,704.00	692.00	1,15,012.00	
Development Of Cost Effective 3-Axisintelligent Platform							
	1,65,621.00	-	4,550.00	1,70,171.00	-	1,70,171.00	
104 Stabilization System"	1,03,022100	2,053.00		(2,053.00)			2,053
105 Inspire Faculty,Ced - Inspire Research Project		2,055100					
Strength Improvement Of Locallyavailable Soft Clays In		79,093.00	_	(79,093.00)	-		79,093
106 Construction Offighways Using Lime-Enzymatic		75,055.00		(10)000000			
Development Of Advanced Fibrereinforced Polymer	2 216 00		5,047.00	8,363.00	2,23,847.00		2,15,48
107 Nanocomposites For	3,316.00		2,047.00	0,305.00			
DEVELOPMENT OF STABLE	21.00.000.00		_	31,80,068.00	1,27,320.00	30,52,748.00	
108 NANOFLUIDS THERMAL POWER PLANTS	31,80,068.00			31,00,000.00	1,27,320.00		
DEVELOPMENT OF SMART CONTROLLER FOR			1 701 05	88,251.00	1,03,888.00		15,63
109 SWITCHED RELUCTANCE MOTOR	86,470.00		1,781.00	00,231.00	1,00,000.00		
FIST PROGRAM-2015 IF DST TO STRENGTHEN THE				00 070 070 000		87,77,278.00	
110MED	87,53,435.00		23,843.00	87,77,278.00		01,11,210,00	
DEVELOPMT. OF SOLID STATE TRANSORMER						CC 471 00	
111 ASINTERFACING DEVICE	64,693.00	-	1,778.00	66,471.00	-	65,471.00 8,57,848.00	
112 DEVLMT. OF NANO LUBRICANT FOR DIESEL ENGINE	11,99,956.00	-	11,158.00	12,11,114.00	3,53,266.00	0,37,040.00	
HIGH VALENT TRANS-METALLOPORPHYRINS WITH							
113 GLYCODIC UNKAGES	18,665.00		-	18,665.00		18,665.00	
SYNTHESIS, CHARACTERIZATION AND						4 555 20	
114 APPLICATION OF NOVEL MAGNETICALLY.	2,26,869.00		4,715.00	2,31,584.00	2,30,029.00	1,555.00	
DESIGN,SYNTHESIS							
115 AND EVALUATION OF SOLID-EMMISSIVE	10,65,310.00		-	10,65,310.00	5,52,297.00	5,13,013.00	
116 SERB (DST) PROJ. "NAKED CARBON AS A BRIDGING	2,33,011.00	*	-	2,33,011.00	-	2,33,011.00	
A MULTI-WAVE LENGTH INTEGRATING NEPHELOMETER							
117	-	-	-	۰.	+	-	
118 STUDENT PEQIECT (GEORGE K.V)	-	-	-	-	-	-	
119 A MULTI-WAVE LENGTH INTEGRATING NEPHELOMETER	70.004.00			70,904.00	60,321.00	10,583.00	
	70,904.00			70,504,00		10,000.000	
DEVELOPMENT OF STEEL FIBRE REINFORCED SEISMIC				1,974.00	_	1,974.00	
120 RESISTANT DESIGN	1,974.00	- 1		1,374.00			
POLYMER AND HYBRID ELECTRONICS APPLICATIONS				4 75 4 49 00		4,75,142.00	
123	4,75,142.00	- [	· · · · · · · · · · · · · · · · · · ·	4,75,142.00	-	4,73,142.00	
SIMULTANEOUS REMOVAL OF ORGANIC BIO-ELECTRO				70 426 00		28,136.00	
122 CHEMICAL CELL	28,136.00			28,136.00		26,130.00	
MICRO-RNA-9 REGULATION OF NEUROFOR ISCHEMIC					4 10 000 00		1,20,44
123 STROKE	30,529.00	-	-	30,529.00	1,50,978.00		1,20,44

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124 MS.SREEJA M "CHETAS"	24,763.00	-	5,52,888.00	5,77,651.00	5,71,442.00	6,209.00	
MODEL FOR PART BASEDTRAFFIC OPERATION I	N INDIA 1,00,581.00	-	4,56,277.00	5,56,858.00	3,71,100.00	1,85,758.00	
DEVELOPMENT, TESTING AND STANDARDISATION OF HEAT PUMPTHERMAL HYBRID 126 EVAPORATORS		-	14,740.00	7,44,321.00	7,59,559.00		15,238.00
CAPACITY BUILDING IN DAMREHABILATION & 127 IMPROVEMENT	1,15,81,893.00	-	2,00,587.00	1,17,82,480.00	71,63,927.00	46,18,553.00	
CATIONIC MESOTHIENYLPORPHYRINSDNA INTE 128		-	8,08,307.00	8,48,404.00	8,32,739.00	15,665.00	
TECHNOLOGICAL INNOVATION UNDER THE BAN 129 "BRIDGING THE INNOVATION GAP"		1,14,329.00	_	(1,14,329.00)	-		1,14,329.0
DR.LISA SREEJITH "MHRD SWACCHATA ACTION F	PLAN" 41,11,600.00	-	1,05,491.00	42,17,091.00	6 <u>,09,623.00</u>	36,07,468.00	
MHRD GIAN COURSE DR.A V BABU "KEY ENABLIN 131	NG	1,24,374.00		(1,24,374.00)			1,24,374.0
OTHER PROJ.DR.SAMEER S M "FIST PROGR OF 132	1,89,74,371.00		95,938.00	1,90,70,309.00	1,73,95,936.00	16,74,373.00	
OTHER PROLOR.SANJAY P K SERB PROJ."A STUD 133	2,08,770.00	-	1,73,382.00	3,82,152.00	1,68,945.00	2,13,207.00	
OTHER PROJ.(SERB) CR.M PRABHU"A LONG TERM 134	Vi 2,17,892.00	-	5,07,528.00	7,25,420.00	6,27,367.00	98,053.00	
MHRD GIAN COURSE DR.SATYANANDA PANDA " 135	A	21,947.00		(21,947.00)	655.00		22,602.0
OTHER PROJ.DR.SUBRAMANIAN NAMBOODIRI S	ER8 18,33,445.00	-	4,35,364.00	22,68,809.00	5,90,606.00	16,78,203.00	
OTHER PROJ.DR.RAMYA K (UNDER MENTORSHIP	² OF 26,301.00			25,301.00		26,301.00	
OTHER PROJ. MS.ATHULYA DAS "INSPIRE 138	54,874.00	-	3,85,123.00	4,39,997.00	3,63,548.00	76,449.00	
OTHER PROJ.DR.DHANYA RAM V SERB	25,64,992.00	-	62,072.00	26,27,064.00	23,34,238.00	2,92,826.00	
OTHER PROJ.DR.ARUN RAJ KUMAR PARTHIBAN	7,58,831.00	<u> </u>	5,15,028.00	12,73,859.00	12,97,804.00		23,945.0
OTHER PROLDR.MAHESH KUMAR SERB	95,159.00	-	2,285.00	97,444.00	1,24,462.00		27,018.0
OTHER PROJ.DR.ANJANA BHASI SERB	14,05,054.00	-	36,884.00	14,41,938.00	5,38,450.00	9,03,488.00	
OTHER PROJ.DR.DEEPAK LAWRENCE K SERB	4,79,781.00	-	9,226.00	4,89,007.00	2,31,290.00	2,57,717.00	<u> </u>
OTHER PROJ. DR.SURESH P S DBT	6,08,702.00	-	19,155.00	6,27,857.00	7,94,140.00		1,66,283.0
INSPIRE FACULTY AWARD TO DR.MUNIYANDI 145	7,12,624.00		15,48,800.00	22,61,424.00	2,12,825.00	20,48,599.00	
OTHER PROJ.DR.N SANDHYARANI DST	2,16,287.00	~	7,40,114.00	9,56,401.00	4,03,445.00	5,52,956.00	
OTHER PROJ.DR.PANNEERSELVAM RANGANATH	AN 4,49,749.00	-	11,853.00	4,61,602.00	38,900.00	4,22,702.00	
OTHER PROJ.MS.AKSHAYA M V DST (WOS-B)	5,36,153.00	-	8,55,212.00	13,91,365.00	12,00,489.00	1,90,876.00	
OTHER PROJ.DR.M A NASEER DST TRAINING	3,11,224.00	-	4,903.00	3,16,127.00	2,99,995.00	16,132.00	

150 151 152 152 153 154 155 156 157 158 159	STUDENT PEOJECT (GEORGE K.V) REFUNDABLE FOR WORKSHOP FROM KSEB HRM IMPLEMENTATION OF BREATH ANALYZER FOR DIABETES DETECTION" DEVELOPMENT OF BIO-MDIFIED CARBON PASTEMETALS FROM WASTE WATER" ."A HIGHLY FLEXIBLE PIEZO-TRIBO NANOGENERATORCAPTURING HUMAN MODELING AND SIMULATION OF FLUID MOTION	5,640.00 68,86,320.00 9,22,504.00 6,36,995.00 2,05,773.00 13,55,454.00 609.00 13,83,072.00 2,749.00	4,961.00	6,00,283.00 6,21,140.00 3,59,425.00 1,509.00 5,86,706.00 16.00	5,640.00 (4,961.00) 74,86,603.00 15,43,644.00 9,96,420.00 2,07,282.00 19,42,160.00 625.00	- 37,40,575.00 6,24,729.00 8,05,394.00 1,85,151.00 6,03,206.00 5,55,927.00	5,640.00 37,46,028.00 9,18,915.00 1,91,026.00 22,131.00 13,38,954.00	4,961.00
151           152           153           153           154           155           156           157           158           159	IMPLEMENTATION OF BREATH ANALYZER FOR DIABETES DEFECTION" DEVELOPMENT OF BIO-MDIFIED CARBON PASTEMETALS FROM WASTE WATER" ."A HIGHLY FLEXIBLE PIEZO-TRIBO NANOGENERATORCAPTURING HUMAN MODELING AND SIMULATION OF FLUID MOTION	9,22,504.00 6,36,995.00 2,05,773.00 13,55,454.00 609.00 13,83,072.00	4,961.00	6,21,140.00 3,59,425.00 1,509.00 5,86,706.00	74,86,603.00 15,43,644.00 9,96,420.00 2,07,282.00 19,42,160.00	6,24,729.00 8,05,394.00 1,85,151.00 6,03,206.00	9,18,915.00 1,91,026.00 22,131.00	4,961.00
152 153 153 154 155 156 156 157 158 159	DETECTION" DEVELOPMENT OF BIO-MDIFIED CARBON PASTEMETALS FROM WASTE WATER" "A HIGHLY FLEXIBLE PIEZO-TRIBO NANOGENERATORCAPTURING HUMAN MODELING AND SIMULATION OF FLUID MOTION	9,22,504.00 6,36,995.00 2,05,773.00 13,55,454.00 609.00 13,83,072.00		6,21,140.00 3,59,425.00 1,509.00 5,86,706.00	15,43,644.00 9,96,420.00 2,07,282.00 19,42,160.00	6,24,729.00 8,05,394.00 1,85,151.00 6,03,206.00	9,18,915.00 1,91,026.00 22,131.00	
	DEVELOPMENT OF BIO-MDIFIED CARBON PASTEMETALS FROM WASTE WATER" ."A HIGHLY FLEXIBLE PIEZO-TRIBO NANOGENERATORCAPTURING HUMAN MODELING AND SIMULATION OF FLUID MOTION	9,22,504.00 6,36,995.00 2,05,773.00 13,55,454.00 609.00 13,83,072.00		3,59,425.00 1,509.00 5,86,706.00	9,96,420.00 2,07,282.00 19,42,160.00	8,05,394.00 1,85,151.00 6,03,206.00	1,91,026.00 22,131.00	
154 155 156 157 158 159	A HIGHLY FLEXIBLE PIEZO-TRIBO NANOGENERATORCAPTURING HUMAN MODELING AND SIMULATION OF FLUID MOTION	6,36,995.00 2,05,773.00 13,55,454.00 609.00 13,83,072.00		3,59,425.00 1,509.00 5,86,706.00	9,96,420.00 2,07,282.00 19,42,160.00	8,05,394.00 1,85,151.00 6,03,206.00	1,91,026.00 22,131.00	
154 155 156 157 158	NANOGENERATORCAPTURING HUMAN MODELING AND SIMULATION OF FLUID MODELING AND SIMULATION OF FLUID MODELING AND SIMULATION OF POST- COMBUSTION	2,05,773.00 13,55,454.00 609.00 13,83,072.00		1,509.00 5,86,706.00	2,07,282.00 19,42,160.00	1,85,151.00 6,03,206.00	22,131.00	
155 156 157 158	MICTION MICRO EDM" PROCESS INTENSIFICATION OF POST- COMBUSTION BED REACTOR CONCEPT" TURNING THE PERFORMANCE OF THIN FILM COMPOSITE OSMOSIS IN WATER INTELLIGENT SYSTEM FOR RETINOPATHY	13,55,454.00 609.00 13,83,072.00		5,86,706.00	19,42,160.00	6,03,206.00		
156 157 158 159	PROCESS INTENSIFICATION OF POST- COMBUSTION BED BEACTOR CONCEPT" TURNING THE PERFORMANCE OF THIN FILM COMPOSITE SYSTEM FOR RETINOPATHY	609.00 13,83,072.00					13,38,954.00	
157 158 159	TURNING THE PERFORMANCE OF THIN FILM COMPOSITEOSMOSIS IN WATER INTELLIGENT SYSTEM FOR RETINOPATHYSCREENING AND DIAGNOSIS" ATTITUDE TOWARDS THE ENVIRONMENTPOST 2018 ELOODS"	13,83,072.00		16.00	625.00	5,55,927.00		
158	INTELLIGENT SYSTEM FOR RETINOPATHYSCREENING AND DIAGNOSIS" ATTITUDE TOWARDS THE ENVIRONMENTPOST 2018	13,83,072.00						5,55,302.00
158	AND DIAGNOSIS" ATTITUDE TOWARDS THE ENVIRONMENTPOST 2018			454530.00	40.07.0000	15,22,658.00	3,14,952.00	
159	ti 00DS"	2,749.00		4,54,538.00	18,37,610.00			
	A RESILIENT DC COMMUNITY GRID SERVICES TO LOCAL	2,7 - 2100		1,82,505.00	1,85,254.00	40,276.00	1,44,978.00	
160	GRID"	3,81,680.00		1,12,592.00	4,94,372.00	80,256.00	4,14,116.00	
161	INITIATIVES TO RESOLVE SOCIO-ECONOMIC ISSUES	1,65,405.00	:	3,04,642.00	4,70,047.00	1,03,402.00	3,66,645.00	
	COMPUTATIONAL INVESTIGATIONS ON THE MECHANISMDEGRADATION WITH AGEING	3,16,900.00		7,148.00	3,24,048.00	3,04,380.00	19,668.00	
	"MICROBIAL RECOVERY OF BIOGENIC METHANEAND RECLAMINATION OF THE SITE"	6,50,151.00		2,17,298.00	8,67,449.00	5,14,975.00	3,52,474.00	
	"VLSI IMPLEMENTATION	20,01,551.00		1,14,143.00	21,15,694.00	18,26,528.00	2,89,166.00	
	"SYNTHESIS & CHARACTRIZATION OF CARBON BASED	20,01,331,00	4 77 429 00	1,24,781.00	1,343.00	73,107.00		71,764.00
	FUNCTIONAL" UNNAT BHARAT ABHIYAN		1,23,438.00	1,14,731.00		70,201100	1 70 010 00	
170	DEVELOPMENT AND CHARACTERISATION OF BIO	1,70,910.00		-	1,70,910.00	-	1,70,910.00	
171	DEGRADABLE METALLIC IMPLANTS"	21,50,733.00		43,044.00	21,93,777.00	12,37,317.00	9,56,460.00	
	DEVLPMINT OF ELECTROSPUNMEMBRANE DISTRICT ATION"	17,43,138.00		3,14,038.00	20,57,176.00	14,59,943.00	5,97,233.00	
	TWO DIMENSIONALLY TAILORED MULTIFUNCTIONAL	27,28,616.00		2,69,909.00	29,98,525.00	<b>9,89,00</b> 2.00	20,09,523.00	
175	CONTROL OF INSTABILITIES IN JEFFCOTT ROTOR"	20,60,444.00		55,977.00	21,16,421.00	15,92,881.00	5,23,540.00	
	DESIGN MODIFICATIONS OF TATA-JKMIDDLING	2,87,123.00		5,057.00	2,92,180.00	2,48,173.00	44,007.00	
1/6	CDALLISING CED" ."DESIGN AND DEVELOPMENT OF REAL TIME	, -		5,806.00	2,71,784.00	1,33,166.00	1,38,618.00	
177	OPTICAL FOR FIELD MEASUREMENTS* "DEVELOPMENT OF AN INDIGENOUS TOOL FOR THE	2,65,978.00						
178		19,42,496.00		3,09,586.00	22,52,082.00	17,47,835.00	5,04,247.00	
179	PERSONS"	12,43,356.00		29,311.00	12,72,667.00	7,13,117.00	5,59,550.00	
181	DESIGN AND DEVELOPMENT OF ANCLIMATE CHANGE AND NON STATIONABITY?	9,65,726.00		19,672.00	9,85,398.00	7,95,569.00	1,89,829.00	
	RATIONAL DESIGN AND DEVELEOPMENT	22,09,894.00		4,36,050.00	26,45,944.00	5,83,765.00	20,62,179.00	

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STUDY AND DEVELOPMENT OF HIGHLY	15,77,997.00	43,245.00	16,21,242.00	65,783.00	15,55,459.00	
183 OXIDE COMPOSITE" INTEGRATED HYDRODYNAMIC CAVITATIONFROM	17,82,875.00	45,124.00	18,28,000.00	6,43,719.00	11,84,281.00	
184 INDUSTRIAL FEELLENT" STATOR FAULT DIAGNOSIS THROUGH 185 WAVELET	5,70,000.00	12,640.00	5,82,640.00	99,750.00	4,82,890.00	
SOCIOTOPE MAPPING AS A TOOL FOR POLICY FRAMEWORK 186 IN AN URBAN CULTURAL LANDSCAPE		2,72,210.00	2,72,210.00	2,52,477.00	19,733.00	
DESIGN AND FABRICATION STRATEGIESHYBRID 187 PEROVSKITE SOLAR CELLS"		3,01,791.00	3,01,791.00	2,58,136.00	43,655.00	
"PROACTIVE MONITORING OF ONLINEWOMEN AND 188 CHILDREN"		5,12,963.00	5,12,963.00	3,50,411.00	1,52,552.00	
"TO DEVELOP A SOFTWARE FORE LINEAR APPLIED 189 ELEMENT METHOD"		3,90,654.00	3,90,654.00		3,90,654.00	
DST MATHEMATICS FIST PROGRAM 2020		25,34,264.00	25,34,264.00	10,65,561.00	14,68,703.00	
"TUNING THE PERFORMANCE OF THINFILM OSMOSIS 191 IN WATER REMEDIATION"		12,17,939.00	12,17,939.00	24,208.00	11,93,731.00	
"DEVELOPMENT OFDESALINATION SYSTEMSOLA 192 ABSORBER"		5,57,021.00	5,57,021.00	2,45,547.00	3,11,474.00	
"GAN BASED HIGH GAIN DC/DCCONVERTERUPS 193 APPEICATION"		32,74,308.00	32,74,308.00	5,56,513.00	27,17,795.00	
"FLOODFORECASTING USINGWAVELET-SVM MODELS"		4,25,260.00	4,25,260.00		4,25,260.00	
"DEVELOPMENT OF AN ALTERNATIVE FLUIDTO 195 TRANSFORMER MINERAL OIL"		3,18,624.00	3,18,624.00	63,985.00	2,54,639.00	
"IMAGE BASED SMARTPARKINGTRANSPORTATION 196 SYSTEM"		6,92,875.00	6,92,875.00	1,46,305.00	5,46,570.00	
."RISKASSESSMENT OF NANOPARTICLEPHYTOTOXICITY 197 USING GENOMICAPPROACHES"		8,77,330.00	8,77,330.00	2,77,650.00	5,99,680.00	
"ARYAKA NETWORKS INDIA PVT LTD" 198		7,07,537.00	7,07,537.00	1,54,835.00	5,52,702.00	
"INVESTIGATION OF SHORELINESTABILITYCOASTAL PROTECTION MEASURES"		5,34,074.00	5,34,074.00	2,14,749.00	3,19,325.00	
"FABRICATION ANDCHARACTERIZATIONPHOTO 200 SENSORS"		20,66,737.00	20,66,737.00		20,66,737.00	
201 OFKERALA"		23,62,065.00	23,62,065.00	84,418.00	22,77,647.00	
"HOD DEPARTMENT OFCHEMISTRY DST FIST PROGRAMME"		2,01,27,225.00	2,01,27,225.00		2,01,27,225.00	
."DEVELOPMENT OF A DIAGNOSTIC TOOL FORCOLD 203 ATMOSPHERIC PLASMA"		17,95,924.00	17,95,924.00		17,95,924.00	

	Total	13,87,78,024.50	32,57,286.00	8,19,58,803.00	21,74,79,541.50	6,75,87,150.00	15,43,23,821.50	44,31,430.0
213							-	
212	"ANOVEL REGENERATIVE DRIVE TRAINPOWERFACTOR CONNECTION CAPABILITY"			11,55,450.00	11,55,450.00		11,55,450.00	
211	"HUMAN TOLL-LIKERECEPTORHETEROCYCLIC SCAFFOLDS"			29,31,707.00	29,31,707.00		29,31,707.00	
	"DEVELOPMENT OF ORGANICOILBRAKE SYSTEM"			2,40,639.00	2,40,639.00		2,40,639.00	
209	"DEVELOPMENT OF 2DHETEROSTRUCTURESRESISTANT COATINGS"		0	8,01,835.00	8,01,835.00	1,12,727.00	6,89,108.00	
208	"DESIGNAND DEVELOPMENT OF A DEEPLEARNINGSPEECH SYSTHESIS"			8,87,932.00	8,87,932.00		8,87,932.00	
207	."DESIGNAND SYNTHESIS OFC-C BOND FORMATIONREACTIONS"			24,35,572.00	24,35,572.00	1	24,35,572.00	
206	"HOD DEPARTMENT OFPHYSICS DST FIST PROGRAMME"			1,40,32,104.00	1,40,32,104.00		1,40,32,104.00	
205	"GRAPHENE-GOLDNANOCLUSTEREARLY DIAGNOSIS OF CVDS"			10,68,044.00	10,68,044.00	76,290.00	9,91,754.00	
204	"DEVELOPMENT OFALUMINIUM- CERIUMEXPERIMENTALINVESTIGATIONS"			29,14,240.00	29,14,240.00		29,14,240.00	

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## SCHEDULE 3B- SPONSORED FELLOWSHIPS AND SCHOLARSHIPS

(Amount in Rupees)

1.Sr.		Opening E	alance	Transactions du	ring the year	Closing B	alance
No	2. Name of Sponsor	3. Credit	4. Debit	5. Credit	6. Debit	7. Credit	8. Debit
1	University Grants Commission	83,87,310.00	-	0.00	0.00	83,87,310.00	-
	Ministry (Central Govt.)	0.00	0.00			-	-
2	Director of College Education		4,000.00	-	-		4,000.00
3	Cultural Scholarship	13,43,279.00		24,70,390.00	25,74,150.00	12,39,519.00	
4	NCERT	23,013.00	-	-	-	23,013.00	-
	SC/ST Scholarship	5,09,344.00	-	-	-	5,09,344.00	-
	NIMCET		1,04,207.00	-	-		1,04,207.00
	Summer Course	35,16,955.00		0.00	-	35,16,955.00	
	Zonasa 2003	69,385.00		9,650.00	-	79,035.00	
	Minority Scholarship	6,70,487.00	-	· _	-	6,70,487.00	-
	Top Class Education Scholarship for SC Students	19,54,128.00		8,24,648.00	8,26,480.00	19,52,296.00	
	Merit Cum Means Scholarship for Minorities		3,46,467.00				3,46,467.00
	NBHM Fellowship	61,915.00	-			61,915.00	-
	SPDC Scholarship	7,92,336.44		1,16,18,567.00	1,16,18,567.00	7,92,336.44	
	Inspire Fellowship		57,962.00	-	-		57,962.00
	AIEE-CCB	-	-	-	-	-	•
	Visweswarayya Scheme	2,63,406.00		9,83,341.00	11,05,060.00	1,41,687.00	
	Inspire Fellowship - Dr. Subrahmanian Nampoothiri	42,06,886.00		3,91,918.00	4,15,801.00	41,83,003.00	
	Inspire Fellowship - Dr. Mini Mol	8,60,646.00		6,69,295.00	8,55,247.00	6,74,694.00	
	Post Doctoral Fellowship - Dr. Robin	2,28,873.00	-	0.00	-	2,28,873.00	-
	OBC Scholarship	- 1	-	-	-	-	-
	Inspire Faculty Award-Dr. Lakshmi V Nair	26,20,258.00		22,91,846.00	30,57,078.00	18,55,026.00	
	Young Faculty research Fellowship- Dr. Kumaravel	3,79,008.00		39,69,384.00	39,86,733.00	3,61,659.00	
	National post doctral felloship- Dr.Muhsin	92,946.00		11,27,118.00	9,05,516.00	3,14,548.00	
	Inspire Faculty Award-Dr. Tharaknath Kobaku	6,86,948.00		18,283.00	6,87,033.00	18,198.00	
	inspire Felloship-Anagha Yadeendran	2,43,573.00		4,49,914.00	4,16,476.00	2,77,011.00	
	Post Doctoral Fellowship - Dr Baby Viswambaran	1,20,988.00		52,232.00	1,73,876.00	(656.00)	
	Inspire Faculty Award-Dr.Sreelakshmi	8,15,293.00		17,062.00	5,55,655.00	2,76,700.00	
	Keraia Government	- 0.00					
	KSCSTE Fellowship	4,72,148.00			10,079.00	4,62,069.00	
	E- Grants (For Backward Castes)	90,25,457.50		88,96,107.00	90,52,501.00	88,69,063.50	
	Minorties Scholarship	50,20,10,130	41,595.00	-	-	·····	41,595.00
23	Other State Governments	0.00	0.00				-
	Andhra Pradesh		34,692.00	-	-		34,692.00

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	Total	4,83,01,374.94	9,62,851.25	3,47,00,386.00	3,70,02,085.00	4,59,69,766.94	9,32,942.25
35	QIP - Poly Grant	72,23,735.00		1,61,191.00	1,61,191.00	72,23,735.00	
34	NIT - Kharakpur - GIAN		3,69,253.25	31,447.00	1,538.00		3,39,344.25
33	Vishakhapattam Steel Plant Scholarship	-	-	-	-		-
	E- Remittance (other States)	33,78,530.00		6,38,359.00	5,99,104.00	34,17,785.00	
123	Others	0.00	0.00			-	-
31	Chattisgarh	77,640.00	-	14,400.00	-	92,040.00	
30	Tamil Nadu	1,000.00	-	•	-	1,000.00	-
	Maharashtra		4,675.00	-	-		4,675.00
28	Madhya Pradesh	55,375.00	-		-	55,375.00	-
27	Lakshadweep			-	-		-
26	Karnataka	1,080.00	-	-	•	1,080.00	-
25	Bihar	2,19,432.00	-	65,234.00	0.00	2,84,666.00	

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# SCHEDULE -3C UNUTILISED GRANTS FROM UGC, GOVT. OF INDIA AND STATE GOVERNMENTS

	······		(Anount in Rupees)
Particulars		Current Year	Previous Year
A. Plan grants: Government of India			
Balance B/F		51,16,41,252.00	56,19,98,902.00
Add: Receipts during the year		5,00,00,000.00	3,62,56,000.00
	Total (a)	56,16,41,252.00	59,82,54,902.00
Less: Refunds		-	-
Less: Utilized for Revenue Expenditure		-	-
Less: Utilized for Capital Expenditure		6,99,67,057.00	8,66,13,550.00
	Total (b)	6,99,67,057.00	8,66,13,650.00
(Deficit)/Unitilized carried forward (a-b)		49,16,74,195.00	51,16,41,252.00
B. Plan: UGC grants			
Balance B/F		-	-
Add: Receipts during the year			<u> </u>
	Total (c)		-
Less: Refunds		-	-
Less: Utilized for Revenue Expenditure		-	-
Less: Utilized for Capital Expenditure		-	-
	Total (d)	-	-
Unitilized carried forward (c-d)		-	-

(Amount in Rupees)

		Contd
C. Non Plan: Government of India		
Balance B/F	(90,60,91,574.98)	(1,74,29,18,089.68)
Add: Receipts during the year	1,36,36,59,216.00	1,16,40,11,991.00
Add:Adjustment of Grant receivable fromGOI	-	1,14,21,85,426.00
Totaj (e) i	45.75,67,645.02	56,32,79.327.32
LENS, KENDADS	- 	•
Less: Utilities for Revenue Excenditure	1,48,79,43,715.75	1,46,93,70,902.30
Less: Utilized for Capital Expenditure		
Total (f)	1,48,79,43,715.75	1,46,93,70,902.30

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(Deficit)/Unitilized carried forward (e-f)	(1,03,03,76,074.73)	(90,60,91,574.98)
D. Non Plan: UGC grants		
Balance B/F	-	
Add: Receipts during the year	-	
Total (g)		
Less: Refunds	-	-
Less: Utilized for Revenue Expenditure		
Less: Utilized for Capital Expenditure		
Total (h)	-	-
Unitilized carried forward (g-h)		
Grand Total (A+B+C+D)	(53,87,01,879.73)	(39,44,50,322.98)

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## SCHEDULE 3(D) - LONG-TERM LIABILITIES

(Amount in Rupees)

Particulars	Opening balance	Additions during the year	Repaid during the year	Closing balance	Previous year
HEFA	46,10,00,000.00	22,79,96,863.00	8,80,00,000.00	60,09,96,863.00	46,10,00,000.00
Total	46,10,00,000.00	22,79,96,863.00	8,80,00,000.00	60,09,96,863.00	46,10,00,000.00

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SCHEDULE 4 -- FIXED ASSETS

												(Amount in Rupees)
-	DESCRIPTION		GROSS BLOCK	CARL WEEKS				DEPRECIAT	TION		NET B	LOCK
S. No	TANGIBLE ASSETS	Opening Balance 01/04/2020	Additions during the year	Deductions/ Reclassification during the year	Closing Balance	Dep.r ates	Depreciation Opening Balance	Depreciation for the year	Deductions/Adjust ment	Total Depreciation	31-03-2021	31-03-2020
1	Land:										7,69,000.00	7,69,000.00
	a) Freehold	7,69,000.00	•		7,69,000.00	Nil					7,03,000.00	7,00,000.00
	b) Leasehold		•		· · ·							
2	Buildings:											
	a) On Freehold Land							2,13,26,255.59		58,02,35,388.70	1,02,36,60,268.30	1,04,49,86,523.89
	iResidential	1,60,38,95,657.00			1,60,38,95,657.00		55,89,09,133.11			61,74,26,432.29	31,54,57,793.71	32,05,96,000.90
	ii.Non Residential	93,14,50,993.00	14,33,233.00	er and and the second	93,28,84,226.00	2%	61,08,54,992.10	65,71,440.19		01,/4,20,432.23	31,34,37,733.71	32,03,30,000.30
	b) On Leasehold Land			-				0.00				
	c) Ownership Flats/ Premises	•	-		· · ·			0.00	a line is a line in			
	d) Superstructures on Land not belonging to educational institutions							0.00				-
3	Tube wells & water supply		•	•	-		the second second	0.00			· · ·	
4	Sewerage & Drainage			-				0.00			-	6,10,62,244.95
5	Furniture & fixtures	12,56,06,504.00	77,14,535.00		13,43,21,039.00		6,55,44,259.05	55,29,582.96		7,10,73,842.01	6,32,47,196.99	
6	Electrical Installations	4,24,64,714.00	11,244.00	and the second	4,24,75,958.00		2,87,78,609.55	15,21,802.67		3,03,00,412.22	1,21,75,545.78	1,36,86,104.45
7	Plants, machinery & equipment	89,60,41,855.00	2,78,27,373.00	· · · · · · · · ·	92,38,69,228.00		55,42,93,291.70	2,14,16,155.82		57,57,09,447.52	34,81,59,780.48	34,17,48,563.30
8	FRG-IRG egipment		8,20,620.00		8,20,620.00			41,031.00		41,031.00	7,79,589.00	2 00 500 46
9	Office Equipment	47,55,731.00	63,000.00		48,18,731.00		44,75,230.54	27,468.28		45,02,698.82	3,16,032.18	2,80,500.46
10	Computer & Peripherals	18,11,38,421.00	1,50,17,256.00		19,61,55,677.00	20%	16,21,93,356.58	75,77,148.56		16,97,70,505.13	2,63,85,171.87	1,89,45,064.42
11	Vehicles	69,98,909.00		-	69,98,909.00		54,85,166.29	1,68,193.64		56,53,359.92	13,45,549.08	15,13,742.72
12	Library books	5,29,16,810.00	26,22,551.00		5,55,39,361.00	10%	4,82,23,470.81	7,83,737.23		4,90,07,208.04	65,32,152.96	46,93,339.19
-	Total (A)	3847038594	55509812	0	3902548406		2038757510	64962815.93	. 0	2103720326	1798828079	1808281084
13	Capital Work-in-progress (B)	2,11,02,04,424.00	23,39,89,106.00		2,34,41,93,530.00		-			-	2,34,41,93,530.00	2,11,02,04,424.32

i. No	INTANGIBLE ASSETS	Opening Balance	Additions during the year	Deductions during the year	Closing Balance		Total Depreciation	Depreciation/ Amortizations for the year	Deductions/Adjust ment	Total Depreciation	31/03/2021	31/03/2020
14	Computer Software	2,34,06,615.00	92,85,622.00		3,26,92,237.00	40%	2,02,00,558.61	58,51,619.73	18.	2,60,52,178.34	66,40,058.66	32,06,056.39
15	E-journals				-							
16	Patents and Copyrights	•			•		-	-		2,60,52,178.34	66,40,058.66	32,06,056.39
1	Total (C]	2,34,06,615.00	92,85,622.00	•	3,26,92,237.00		2,02,00,558.61	58,51,619.73	i	2,00,52,178.34	00,40,038.00	52,00,050.55
							2,05,89,58,068.34	7,08,14,435.66		2,12,97,72,504.00	4 14 96 61 667.97	3.92.16.91.564.98
	Grand Total (A+B+C)	5,98,06,49,633.00	29,87,84,540.00	0.00	6,27,94,34,173.00		2,05,89,58,008.54	7,06,14,455.00		2,22,51,12,50,100	1,21,30,02,02,001.01	

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# SCHEDULE 5 - INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS

			(Amount in Rupees)	
Particulars		Current Year	Previous Year	
Long term		current real	Tremous real	
1. In Central Government Securities		-		
2. In State Government Securities		-	-	
3. Other approved Securities		-	-	
4. Shares				
5. Debentures and Bonds			-	
6. Term Deposits with Banks		83,89,67,083.00	83,44,44,972.00	
7. Others		-		
	Total (A)	83,89,67,083.00	83,44,44,972.00	
Short term				
1. In Central Government Securities		-	-	
2. In State Government Securities		-		
3. Other approved Securities				
4. Shares			-	
5. Debentures and Bonds		-	-	
6. Term Deposits with Banks			37,73,24,916.30	
7. Others (Letter of Credit)				
7. Others (Letter of Cledity	Total (B)	0.00	37,73,24,916.30	
Grand Total (A+B)		83,89,67,083.00	1,21,17,69,888.30	

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	(Amount in Rupees)			
Particulars	Current Year	Previous Year		
1. In Central Government Securities	-	-		
2. In State Government Securities	-			
3. Other approved Securities	- I I - I	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
4. Shares	÷.,			
5. Debentures and Bonds	-	3-12		
6. Others (to be specified)	-	-		
Total	<u> </u>	-		

# **SCHEDULE 6 - INVESTMENTS OTHERS**

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#### SCHEDULE 7 - CURRENT ASSETS

Particulars	Current Year	Previous Year	
1. Stock:			
a) Stores and Spares			
b) Loose Tools		26,90,029.00	
c) Publications	26,90,029.00		
d) Laboratory chemicals, consumables and glass ware			
e) Stationary			
2. Sundry Debtors:			
a) Debts Outstanding for a period exceeding six months			
b) Others			
3. Cash in hand	7,94,449.50	8,83,785.50	
(i) Cash in hand	2,02,112.50	2,02,112.50	
(ii) Imprest	5,92,337.00	6,81,673.00	
4. Cash in Bank			
a) With Scheduled Banks:			
In Current Accounts	4,63,88,638.04	-28,97,37,018.16	
In Term deposit Accounts	1,05,19,97,664.96	1,74,12,12,779.96	
In Savings Accounts	2,22,46,83,377.22	1,24,44,59,473.37	
In EEFC Accounts (USD)	7,37,73,359.52	10,67,58,953.97	
b) With non-Scheduled Banks:			
In Term deposit Accounts	-	74	
In Savings Accounts	-	-	
5. Post Office- Savings Accounts		-	
6.Cash in Treasury	31,16,661.00	31,16,661.00	
Total	3,40,34,44,179.24	2,80,93,84,664.64	

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Particulars	Current Year	Previous Year
1. Advances to employees: (Interest bearing)		
a) Salary		
b) Festival	(1,13,185.00)	(48,535.00)
c) LTC	11,73,247.00	18,49,532.00
e)Special EL&LTC	50,66,587.00	
e) Medical Advance	-	-
f) Travelling advance	12,58,147.67	20,02,500.67
g) Computer advance	(1,60,689.00)	(1,85,489.00
h) Marriage advance	(66,184.00)	(66,184.00
i) Other (Plan & Dept. advances)	83,21,078.30	1,20,53,445.30
2. Long Term Advances to employees: (Interest bearing)		<u></u>
a) Vehicle Ioan	1,68,244.00	3,28,365.00
b) Home loan	(35,17,805.00)	(33,20,799.00
c) Others (to be specified)		-
3. Advances and other amounts recoverable in cash or in kind or		
for value to be received:		
a) On Capital Account	50,52,00,468.00	50,52,00,468.00
b) To suppliers	(4,08,127.00)	(4,08,127.00
c) Deficit Balance of Grants (Excess of expenditure)	-	-
d) TDS deducted on bank interest	3,32,13,417.00	3,75,61,702.00
e) Rent Receivable	24,08,084.00	24,08,084.00
f) Tuition Fee Receivable	-	
4. Prepaid Expenses		
a) Insurance	6,74,806.00	8,50,423.00
b) Other expenses	-	-
5. Deposits		
a) Telephone	-	
b) Lease Rent		_
c) Electricity	57,00,517.00	57,00,517.00
d) AICTE, if applicable	91,389.00	91,389.00

# SCHEDULE 8 – LOANS, ADVANCES & DEPOSITS

Total	70,78,43,729.14	72,00,78,315.14
8. Claims Receivable		
d) Other receivables from UGC		-
c) Grants Receivable	-	-
b) Debit balances in Sponsored Fellowships & Scholarships	9,32,942.25	9,62,851.2
a) Debit balances in Sponsored Projects	44,31,430.00	32,57,286.00
7. Other - Current assets receivable from UGC/sponsored projects/Govt. grants		
d) Others (includes income due unrealized-Rs)		-
c) On Security Deposit with KSEB	2,15,573.00	2,15,573.00
b) On Investments- Term Deposits	14,30,99,146.92	12,42,32,822.26
a) On Investments from Earmarked/ Endowment Funds	1,54,642.00	2,73,92,490.66
6. Income Accrued:		Sector Sector Sector
f) Others (to be specified)	-	-
e) MCI, if applicable	-	-

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### **SCHEDULE 9 – ACADEMIC RECEIPTS**

Particulars	Current Year	Previous Year
FEES FROM STUDENTS		
Academic		
1. Tuition fee*	35,95,92,904.55	40,14,28,539.66
2. Admission fee	5,79,300.00	5,77,847.60
3. Enroiment Fee	-	
4. Library Admission fee	29,02,323.00	31,08,864.80
5. Laboratory fee	-	
6. Art & Craft fee		
7. Registration fee	32,07,200.00	35,80,147.60
8. Syllabus fee		
Total (A)	36,62,81,727.55	40,86,95,399.66
Examinations		
1. Admission test fee		
2. Annual Examination fee	62,77,095.00	77,62,576.00
3. Mark sheet, certificate fee	1,40,307.00	5,62,816.80
4. Entrance examination fee		
Total (B)	64,17,402.00	83,25,392.80
Other fees		
1. Identity card fee	1,850.00	61,400.00
2. Fine/Miscellaneous fee	14,90,592.00	18,27,160.00
3. Medical fee		
4. Transportation fee	- 1	
5. Convocation fee		
6. Academic IRG	1,59,672.00	
Total (C)	16,52,114.00	18,88,560.00
Sale of publications		
1. Sale of Admission forms	-28,500.00	4,59,900.00
2. Sale of syliabus and Question Paper, etc.		
3. Sale of prospectus	-	
Total (D)	-28,500.00	4,59,900.00
Other Academic Receipts		······································
1. Registration fees for workshops, programmes	-	
2. Registration fees (Academic Staff College)	-	-
Total (E)	-	-
GRAND TOTAL (A+B+C+D+E)	37,43,22,743.55	41,93,69,252.46

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# SCHEDULE 10 - GRANTS/DONATIONS/SUBSIDIES

							(Amount in Rupees)	
	Plan							
			UGC	Total Plan	Non Plan Govt. of India	Current Year Total	Previous Year Total	
Particulars	Govt. of India	Plan	Specific Schemes	ic	Non Plan Gove of India	current rear rotar		
Balance B/F	51,16,41,252.00	-	-	51,16,41,252.00	(90,60,91,574.98)	(39,44,50,322.98)	(1,18,09,19,187.68)	
Add: Receipts during the year Add: Adjustment of Grant receivable from GOI*	5,00,00,000.00	~	-	5,00,00,000.00	1,36,36,59,216.00	1,41,36,59,216.00	1,20,02,67,991.00	
Total	56,16,41,252.00			56,16,41,252.00	45,75,67,641.02	1,01,92,08,893.02	1,93,48,803.32	
Less: Refund	· · · · · · · · · · · · · · · · · · ·			-			-	
Balance	56,16,41,252.00	-	0.000	56,16,41,252.00	45,75,67,641.02	1,01,92,08,893.02	1,93,48,803.32	
Less: Utilised for Capital Expenditure	6,99,67,057.00	-	-	6,99,67,057.00	-	6,99,67,057.00	8,66,13,650.00	
Balance	49,16,74,195.00			49,16,74,195.00	45,75,67,641.02	94,92,41,836.02	(6,72,64,846.68)	
Less: Utilised for Revenue Expenditure			- a.	-	1,48,79,43,715.75	1,48,79,43,715.75	1,46,93,70,902.30	
Balance C/F	49,16,74,195.00	-	-	49,16,74,195.00	(1,03,03,76,074.73)	(53,87,01,879.73)	(39,44,50,322.98)	



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## SCHEDULE 11 -INCOME FROM INVESTMENTS

(Amount in Rupees)

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Particulars	Earmarked/ Endowmen	t Funds,GPF& CPF	Other investments			
Farticulars	Current Year	Previous Year	Current Year	Previous Year		
1) Interest						
a) On Govt. Securities	-	-	-			
b) Other Bonds/Debentures	-	-	-	÷		
2) Interest on Term Deposits	5,09,58,381.00	1,54,57,757.00	-1,92,40,153.00	4,06,50,514.00		
<ol> <li>Income accrued but not due on Term Deposits/ Interest bearing advances to employees</li> </ol>	1,54,642.00	2,73,92,490.66	-	-		
4) Interest on Savings Banks Accounts	1,19,269.00	42,575.00	-	-		
5) GPF& CPF	2,29,65,790.00	1,72,11,930.00		24,524.00		
Total	7,41,98,082.00	6,01,04,752.66	-1,92,40,153.00	4,06,75,038.00		
Transferred to Earmarked/Endowment Funds	7,41,98,082.00	6,01,04,752.66				
Balance			(1,92,40,153.00)	4,06,75,038.00		

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		(Amount in Rupees)
Particulars	Current Year	Previous Year
1. On Savings account with scheduled Banks	1,90,24,847.00	2,18,36,325.00
2. On Loans a. Employees/Staff	-	
b. Others	-	
3. On Debtors and other receivables		•
Total	1,90,24,847.00	2,18,36,325.00

# SCHEDULE 12 - INTEREST EARNED

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### SCHEDULE 13- OTHER INCOME

Particulars		Current Year	Previous Year
A. Income from Land & Building			
1. Hostel Room Rent		9,94,700.00	86,94,611.00
2. License fee		37,44,048.00	66,45,029.80
<ol> <li>Hire Charges of Auditorium/Play ground/Convention Centre, etc.</li> </ol>			
4. Electricity charges recovered		55,58,603.00	2,13,21,898.00
5. Water charges recovered		1,21,044.00	4,00,754.00
6. Others		3,91,886.00	3,47,174.00
	• Total	1,08,10,281.00	3,74,09,466.80
B. Sale of Institute's publications		-	-
C. Income from holding events			
1. Gross Receipts from annual function/ sports carnival		-	•
Less: Direct expenditure incurred on the annual function/ sports c	arnival		-
2. Gross Receipts from fetes		-	-
Less: Direct expenditure incurred on the fetes		-	-
3. Gross Receipts for educational tours		-	
Less: Direct expenditure incurred on the tours			-
4. Others (to be specified and separately disclosed)			-
	Total	-	-
D. Others			
1. Income from consultancy		26,70,643.00	99,15,077.00
2. RTI fees		458.00	818.00
3. Income from Royalty		-	1
4. Sale of application form (recruitment)			
5. Misc. receipts (Sale of tender form, waste paper, etc.)		27,85,282.00	27,06,186.60
6. Profit on Sale/disposal of Assets:			
a) Owned assets		(-	
b) Assets acquired out of grants, or received free of cost		-	-
7. Grants/Donations from Institutions, Welfare Bodies and International	tional		
Organizations			
8. Others		7,12,001.00	1,09,589.00
	Total	61,68,384.00	1,27,31,670.60
GRAND TOTAL (A+B+C+D)	The second se	1,69,78,665.00	5,01,41,137.40

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		(Amount in Rupees)
Particulars	Current Year	Previous Year
1. Academic Receipts	-	-
2. Income from investments		-
3. Interest earned		
4. Other Income	3,50,004.00	3,12,162
Total	3,50,004.00	3,12,162.00

## SCHEDULE 14 - PRIOR PERIOD INCOME

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# SCHEDULE 15 - STAFF PAYMENTS & BENEFITS (ESTABLISHMENT EXPENSES)

1	Amount	in	Rupees	)

Particulars -		Current Ye	ar	Previous Year			
		Non plan	Total	Plan	Non plan	Total	
a) Salaries and Wages	-	71,87,34,951.00	71,87,34,951.00	-	70,37,24,298.00	70,37,24,298.00	
b) Allowances and Bonus	-	57,94,770.00	57,94,770.00	-	97,45,684.00	97,45,684.00	
c) Contribution to Provident Fund (CPF)	-	-	0.00	- 1	-	-	
d) Contribution to Other Fund (Leave Salary & Pension contribution)	-	25,81,295.00	25,81,295.00	-	2,75,710.00	2,75,710.00	
e) Contribution to New Pension Scheme	-	4,14,39,532.00	4,14,39,532.00		2,35,98,950.00	2,35,98,950.00	
f) Staff Welfare Expenses	-	-	0.00	-		-	
g) Retirement and Terminal Benefits	-	26,37,31,181.00	26,37,31,181.00	-	23,50,76,664.00	23,50,76,664.00	
h) LTC facility		14,62,725.00	14,62,725.00	-	46,89,103.00	46,89,103.00	
i) Medical facility	-	17,27,097.00	17,27,097.00	-	22,03,159.00	22,03,159.00	
i) Children Education Allowance	-	66,48,735.00	66,48,735.00	-	99,78,116.00	99,78,116.00	
k) Honorarium	-	16,56,705.00	16,56,705.00	-	14,44,448.00	14,44,448.00	
I) Travelling Allowances	-	1,84,539.00	1,84,539.00	-	41,29,311.00	41,29,311.00	
m) Others (Stipend to Trainees)	-		-	-		0.00	
n) Provision for gratuity and leave encashmment		4,14,09,482.00	4,14,09,482.00				
Total	-	1,08,53,71,012.00	1,08,53,71,012.00		99,48,65,443.00	99,48,65,443.00	

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### SCHEDULE 15A - EMPLOYEES RETIREMENT AND TERMINAL BENEFITS

				(Amount in Rupees)
Particulars	Pension	Gratuity	Leave Encashment	Total
Opening Balance as on	-	24,20,87,040.00	25,88,02,625.00	50,08,89,665.00
Addition: Capitalised value of Contributions received from other Organisations		-		
Total (a)	-	24,20,87,040.00	25,88,02,625.00	50,08,89,665.00
Less: Actual payment during the year (b)	-			
Balance available on 31/03/2019 (C)	-	24,20,87,040.00	25,88,02,625.00	50,08,89,665.00
Provision required as on 31/03/2021 as per Actuarial Valuation (d)	-	26,36,37,029.00	27,86,62,118.00	54,22,99,147.00
A. Provision to be made in current year (d-c)		2,15,49,989.00	1,98,59,493.00	4,14,09,482.00
B. Contribution to Pension scheme	-	-	-	-
C. Medical Reimbursement to Retired Employees	-	-		-
D. Travel to Hometown on Retirement	-			-
E. Deposit Linked Insurance Payment			-	-
Total (A+B+C+D+E)	-	2,15,49,989.00	1,98,59,493.00	4,14,09,482.00

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# SCHEDULE 16 - ACADEMIC EXPENSES

1	Amount	in F	Rupees	
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		Current Ye	ar	Previous Year			
Particulars	Plan	Non plan	Total	Plan	Non plan	Total	
a) Laboratory expenses	-	-	-	-	-	-	
b) Field work/Participation in Conferences	-	-4,000.00	(4,000.00)	-	37,507.00	37,507.00	
c) Expenses on Seminars/Workshops		-	-	-		-	
d) Payment to visiting faculty	-			-		-	
e) Examination	-			-		-	
f) Student Welfare expenses	- 1			-		-	
g) Admission expenses	-			-	-	-	
h) Convocation expenses		79,183.00	79,183.00	-	51,69,764.00	51,69,764.00	
i) Publications		-	-	-	-	-	
j) Stipend/means-cum-merit scholarship	-	24,11,06,125.00	24,11,06,125.00	-	23,49,84,392.00	23,49,84,392.00	
k) Books, periodicals, journals and e-journals	-	2,70,40,286.00	2,70,40,286.00	-	2,10,53,141.00	2,10,53,141.00	
I) Others (FDP,R&D,Medals & prizes)	-	1,75,85,145.00	1,75,85,145.00	-	83,58,695.00	83,58,695.00	
Total	-	28,58,06,739.00	28,58,06,739.00		26,96,03,499.00	26,96,03,499.00	

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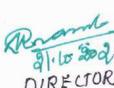
# SCHEDULE 17 - ADMINISTRATIVE AND GENERAL EXPENSES

	Current Year				Previous Year			
Particulars	Plan	Non plan	Total	Plan	Non plan	Total		
A) Infrastructure								
a) Electricity and power	-	2,01,95,230.00	2,01,95,230.00	-	4,34,33,004.00	4,34,33,004.00		
b) Water charges	-	-	-	-	-	-		
c) Insurance		-	- 1 - 1	-	-	-		
d) Rent, Rates and Taxes (including property tax)	-	43,33,954.00	43,33,954.00	-	42,19,711.00	42,19,711.00		
B) Communication								
e) Postage & telegram	-	6,51,669.00	6,51,669.00	-	5,48,508.00	5,48,508.00		
f) Telephone, Fax and Internet Charges	-	3,16,597.00	3,16,597.00	-	2,39,500.00	2,39,500.00		
C) Others								
g) Printing and Stationary	-	18,46,815.00	18,46,815.00	-	11,13,948.00	11,13,948.00		
h) Traveling and Conveyance Expenses	-		-	-	-	-		
i) Hospitality	-	7,71,396.00	7,71,396.00	-	24,52,215.00	24,52,215.00		
j) Auditors Remuneration	-	1,38,210.00	1,38,210.00	-	1,32,790.00	1,32,790.00		
k) Professional Charges	-	-		-	-	-		
I) Advertisement and Publicity		17,08,908.00	17,08,908.00	-	3,75,983.00	3,75,983.00		
m) Magazines & Journals	-	-		-	-	-2		
n) Legal charges	-	6,18,025.00	6,18,025.00	-	11,88,308.00	11,88,308.00		
o) Hospital contingencies	-	26,62,817.00	26,62,817.00		27,33,956.00	27,33,956.00		
p) Deparment Operating Charges (DOC)	-	1,47,31,663.75	1,47,31,663.75	-	3,61,72,749.00	3,61,72,749.00		
q) Others (OE&Misc.,T&P,Hindi translation)	-	20,50,164.00	20,50,164.00	-	28,42,986.30	28,42,986.30		
Total	- 1	5,00,25,448.75	5,00,25,448.75	-	9,54,53,658.30	9,54,53,658.30		

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## SCHEDULE 18 - TRANSPORTATION EXPENSES

					(Am	ount in Rupees)
		Current Yea	ar		Previous Yea	r
Particulars	Plan	Non plan	Total	Plan	Non plan	Total
1. Vehicles (owned by educational institution)						and a set of the fundament
a) Running expenses	-	9,24,958.00	9,24,958.00	-	12,22,098.00	12,22,098.00
b) Repairs & maintenance			-	-	-	-
c) Insurance expenses	-	2,07,463.00	2,07,463.00	-	90,088.00	90,088.00
2. Vehicles taken on rent/lease						
a) Rent/lease expenses	-		1 1 1 A 1	-		-
3. Vehicle (Taxi) hiring expenses	-			-		-
Total	-	11,32,421.00	11,32,421.00	-	13,12,186.00	13,12,186.00

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## **SCHEDULE 19 – REPAIRS & MAINTENANCE**

Dentioulans		<b>Current Year</b>		Previous Year		
Particulars	Plan	Non plan	Total	Plan	Non plan	Total
a) Building					-	
1. Institute building	-	81,34,654.00	81,34,654.00	-	1,07,54,196.00	1,07,54,196.00
2. Guest house	-	1,31,203.00	1,31,203.00		1,65,085.00	1,65,085.00
3. Hostels	-	286.00	286.00	-	10,763.00	10,763.00
4. Pump & filter house	-	7,10,089.00	7,10,089.00	-	12,78,751.00	12,78,751.00
5. Quarters	-	1,68,713.00	1,68,713.00	-	24,28,107.00	24,28,107.00
b) Furniture & Fixture	-	-	-	-	-	!-
c) Plant & Machinery (Major)	-	11,00,019.00	11,00,019.00	-	74,66,184.00	74,66,184.00
d) Office Equipments	-	19,854.00	19,854.00		-	-
e) Computers		-45,527.00	-45,527.00	-	21,05,698.00	21,05,698.00
f) Laboratory & Scientific equipments (Minor)	-	40,906.00	40,906.00	· -	38,173.00	38,173.00
g) Cleaning Material & Services	-			-	-	-
h) Book binding charges	-	-		-	-	
i) Gardening			-	-	-	-
f) Others						
1. Campus		5,67,73,660.00	5,67,73,660.00	-	6,14,21,739.00	6,14,21,739.00
2. Water supply		1,00,369.00	1,00,369.00		9,251.00	9,251.00
3. Electrical installations		2,87,242.00	2,87,242.00	-	14,72,779.00	14,72,779.00
4. Play fields	-	-		-	0.00	0.00
5. Campus Road	-	1,657.00	1,657.00		0.00	0.00
7. Staff Club		18,988.00	18,988.00	-	-	
Total	-	6,74,42,113.00	6,74,42,113.00	-	8,71,50,726.00	8,71,50,726.00

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# SCHEDULE 20 - FINANCE COSTS

		Current Year		Previous Year			
Particulars	Plan	Non plan	Total	Plan	Non plan	Total	
a) Bank charges	-	1,37,247.00	1,37,247.00	-	93,399.00	93,399.00	
b) Others (HEFA Interest)		39438217.00	39438217.00	-	2,08,91,991.00	2,08,91,991.00	
Total	-	3,95,75,464.00	3,95,75,464.00	-	2,09,85,390.00	2,09,85,390.00	

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## SCHEDULE 21 - OTHER EXPENSES

		Current Yea	r	Previous Year			
Particulars	Plan	Non plan	Total	Plan	Non plan	Total	
a) Provision for Bad and Doubtful Debts/Advances	-	-		-	-	-	
b) Irrecoverable Balances Written-off		-	-	-	1,14,21,85,426.00	1,14,21,85,426.00	
c) Grants/Subsidies to other institutions/organizations	-		-	-	-	-	
d) Others-Actuarial Valuation cost components					-		
i) Interest Costs				-	2,95,51,814.00	2,95,51,814.00	
ii) Current Service Costs	-			-	2,87,21,602.00	2,87,21,602.00	
iii) Net Actuarial Gain	-		-	-	1,93,87,864.00	1,93,87,864.00	
	-	-		-	the second second second	-	
Total	-	0.00	0.00	-	1,21,98,46,706.00	1,21,98,46,706.00	

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## SCHEDULE 22 - PRIOR PERIOD EXPENSES

Particulars		Current Year		Previous Year			
	Plan	Non plan	Total	Plan	Non plan	Total	
1. Establishment expenses		•		-	-		
2. Academic expenses	-	-	-	-	-	-	
3. Administrative expenses			-	-	-	-	
4. Transportation expenses			-	-	-	-	
5. Repairs and Maintenance	-			-	-	-	
6. Others		0.00		-	28,757.00	28,757.00	
Total	-	-	-		28,757.00	28,757.00	

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## NATIONAL INSTITUTE OF TECHNOLOGY, CALICUT Cash Flow Statement for the year ended 31.03.2021

Cash Flow from Operating Activities:	Amount(Rs.)
Increase/(Decrease) in Current Assets	(1,22,34,586.00
Increase/(Decrease) in Current Liabilities	(3,68,18,331.50
Net Cash from Operating Activities	(2,45,83,745.50
Cash Flow from Investing Activities:	
(Purchase)/Sale of fixed assets	(22,79,70,102.99
(Purchase)/Sale of investments	37,28,02,805.30
Interest received	
Dividend received	· · · · · · · · · · · · · · · · · · ·
Net Cash from Investing Activities	14,48,32,702.31
	Contd
Cash Flow from Financing Activities:	Amount (Rs.)
Additions to general fund during the year	22,66,54,006.80
Grants/funds in nature of founders'/promoters'	
contribution	
Grants/funds related to assets not requiring	
fulfillment of any obligation	
Endowment fund (principal sum)	6,82,71,841.00
Cpf &Gpf	3,88,87,847.00
Proceeds from long term borrowings	22,79,96,863.00
(Repayment of long-term borrowings)	(8,80,00,000.00
Interest paid on loans	
Net Cash Flow From Financing Activities	47,38,10,557.80
Net Increase /(Decrease) in Cash equivalents	59,40,59,514.60
Cash and Cash equivalent at the beginning of the period	2,80,66,94,635.64
Cash and Cash equivalent at the end of the period	3,40,07,54,150.24
Cash and Cash equivalent represented by:-	Amount (Rs.)

Cash and Cash equivalent represented by:-	Amount (Rs.)
Cash in Hand	7,94,449.50
Cash in Bank	
- In Current Accounts	4,63,88,638.04
- In Savings Accounts	2,22,46,83,377.22
- In Term Deposits	1,05,19,97,664.96
- EEFC Account	7,37,73,359.52
Cash in Treasury	31,16,661.00
Total	3,40,07,54,150.24

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#### NATIONAL INSTITUTE OF TECHNOLOGY, CALICUT RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR 2020-21

		and the second second second second	and a sub-				(Amount in Rupees)
RECEIPTS	Sch No.	Current Year	Previous Year	PAYMENTS	Sch No.	Current Year	Previous Year
Opening Balances				I. Expenses			1212702 21292 PAGE
a) Cash in Hand		8,83,785.50	7,90,488.50	a) Establishment expenses	37	1,09,94,34,591.00	93,71,43,740.00
b) Bank balances	1 1			b) Academic expenses	38	28,31,12,491.00	24,76,65,345.00
i) In Current accounts	1.5	(28,97,37,018.16)	(22,07,55,394.40)	c) Administrative expenses	39	5,42,93,953.75	9,27,80,811.30
ii) In Savings accounts		1,24,44,59,473.37	1,35,85,17,074.99	d) Transportation expenses	40	11,32,421.00	13,12,186.00
iii) In Deposit accounts		2,95,29,82,668.26	2,56,10,26,268.96	e) Repairs and Maintenance	41	6,87,71,443.00	8,89,66,236.00
iv) EEFC Accounts		10,67,58,953.97	(47,76,525.91)	f) Finance Costs	20	3,95,75,464.00	2,09,85,390.00
c) Treasury		31,16,661.00	31,16,661.00	g) Prior period expenses	1		-
I. Grants received			and the second second	II. Payment against earmarked funds,gpf&cpf	34	14,04,16,982.00	18,78,46,338.40
a) From GOI	25	1,41,36,59,216.00	1,20,02,67,991.00				
b) From State Govt.	SHOP C						
c) From Other sources							
cyrroin other sources	1.00		n en per part				
III. Academic Receipts	9	37,43,22,743.55	41,93,69,252.46	III. Payment against sponsored Projects/Schemes	3A	6,75,87,150.00	5,47,29,744.00
				IV. Payment against sponsored			
V. Receipts against Earmarked Endowment Funds,gpf&cpf	26	17,32,43,839.00	23,61,96,476.00	Fellowships/Scholarships	3B	3,70,02,085.00	5,63,65,172.56
V. Receipts against Sponsored Projects/Schemes	3A	8,19,58,803.00	6,90,06,112.00	V. Investments and Deposits made			
the cope of an a second s				a) Out of Earmarked/ Endowment funds			-
	Sec. Sec.			b) Out of own funds		•	•
	38	3,47,00,386.00	6 41 10 977 00	VI. Term Deposits with Scheduled Banks			
VI. Receipts against Sponsored Fellowships and Scholarships	38	5,47,00,588.00	0,41,13,322.00	VII. Expenditure on fixed Assets and Capital Works-in-			
				Progress			
VII. Income on Investments from		7,43,32,831.00	1,83,42,411.00	a) Fixed Assets	1 k	6,47,95,434.00	7,51,35,530.00
a) Earmarked/Endowment funds	27	7,45,52,651.00	1,03,42,411.00	b) Capital Work-in-Progress	4	23,39,89,106.00	51,64,03,120.00
b) Other investments	-		the second second	VIII. Other payments including Statutory payments	42	33,90,83,194.00	28,46,05,628.00
VIII. Interest received on		(2 02 24 147 00)	4 57 50 752 00	Vin. Other payments inclouing statutory payments			
a) Bank Deposits	28	(2,02,34,115.00)	4,57,59,753.00				
b) Loans and Advances			2 70 01 201 00				1
c) Savings Bank Accounts	29	2,17,86,461.00	2,79,01,391.00	IX. Refund of Grants	++		
IX. Investments encashed				X. Deposits and Advances repaid	35	67.88.221.00	60,88,421.00
X. Term Deposits with Scheduled Banks encashed		-	2 02 07 591 40	XI. Deposits made (Cash Security Deposit with KSEB)		01,00,000	
XI. Other income (Including Prior Period Income)	30	49,80,560.00		XIII. Loans and Advances given	36	1,24,23,093.00	1,99,13,629.00
XII. Deposits and Advances Received	31	74,78,362.50		XII. Closing balances		2,2 ,,20,000,00	-111
XIII. Loans and Advances given repaid	32	1,24,17,466.00	75.04.44.200.00			7,94,449.50	8,83,785.50
XIV. Miscellaneous Receipts including Statutory receipts	33	49,10,15,785.00	/5,04,44,200.00	b) Bank balances		.,,	-,,
XV. Any other receipts				i) In Current accounts		4,63,88,638.04	(28,97,37,018.16
					7	2,22,46,83,377.22	1,24,44,59,473.37
				ii) In Savings accounts		1,89,09,64,747.96	2,95,29,82,668.26
				iii) In Deposit accounts		7,37,73,359.52	10,67,58,953.97
				iv) EEFC Accounts		31,16,661.00	31,16,661.00
A second s		•	-	c) Treasury TOTAL		6,68,81,26,861.99	6,60,84,05,814.20
TOTAL		6,68,81,26,861.99	6,60,84,05,814.20	IDIAL		0,00,01,20,001.93	0,00,04,00,014.20

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# NATIONAL INSTITUTE OF TECHNOLOGY CALICUT

# SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR 2020-21

#### 25. GRANTS RECEIVED

		(Amount in Rupees)
Particulars	Current Year	Previous Year
1. Plan	5,00,00,000.00	3,62,56,000.00
2. Non Plan	1,36,36,59,216.00	1,16,40,11,991.00
2. (1011 Fidi)	1,41,36,59,216.00	1,20,02,67,991.00
Less: Current year Grants Receivable	_	-
Plan		_
Non Pian	•	_
Add: Previous year Grants receivded		
Plan		
Non Plan		-
Net Receipt	1,41,36,59,216.00	1,20,02,67,991.00

#### 26. RECEIPTS AGAINST EARMARKED ENDOWMENT FUNDS, GPF&CPF

P     P	Current Year	Previous Year
L. TEQIP I	0.00	-
2. TEQIP II	0.00	0.00
3. TEQIP III	51,43,511.00	5,54,84,274.00
I, GPF	5,70,58,642.00	4,65,74,444.00
5. CPF	7,61,13,743.00	4,91,99,749.00
5. FBS	-	-
7. Growth Fund	1,20,45,024.00	1,34,53,307.00
3. Students Fund	1,24,04,021.00	1,24,18,5 <b>9</b> 8.00
а. тві	74,59,164.00	2,67,16,987.00
10. TBI II	0.00	-
10. TEQIP II modernisation fund	0.00	-
11. Teqip reserves	-	-
12. Gymkhana	0.00	3,43,050.00
13. HWD	0.00	0.00
14. TBI Nidhi Prayas	30,19,734.00	3,20,06,067.00
ess: non_cash items		-
Net Receipt	17,32,43,839.00	23,61,96,476.00
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#### 27. INCOME ON INVESTMENTS EARMARKED FUNDS ,GPF&CPF

Particulars	Current Year	Previous Year
1. TEQIP I	-	-
2. TEQIP II	-	
3. TEQIP III		-
4. GPF	2,20,12,661.00	1,71,21,705.00
5. CPF	10,87,878.00	1,15,743.00
6. FBS	-	-
7. Growth Fund	5,03,88,137.00	42,575.00
8. Students Fund	4,69,814.00	6,75,946.00
9. TBI	3,74,341.00	3,86,442.00
10. TEQIP II modernisation fund		
11. Teqip reserves	-	-
12. Gymkhana		-
13. HWD	-	
	7,43,32,831.00	1,83,42,411.00
Add: Interest accrued in the previous year and realised in the current year	A	
Less: Interest accrued not yet received	-	
Net Receipt	7,43,32,831.00	1,83,42,411.00

## 28. INTEREST ON BANK DEPOSITS

	(Amount in Rupees)		
Particulars	Current Year	Previous Year	
1. Interest on fixed deposit of Plan Fund	-93,65,486.00	84,30,436.00	
2. Interest on other Fixed Deposits	-1,92,40,153.00	4,06,50,514.00	
	-2,86,05,639.00	4,90,80,950.00	
Add: Interest accrued in the previous year and realised in the current year	14,98,23,590.00	14,65,02,393.00	
Less: Interest accrued not yet received	14,14,52,066.00	14,98,23,590.00	
Net Receipt	-2,02,34,115.00	4,57,59,753.00	

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#### 29. INTEREST ON SAVINGS BANK DEPOSITS

		(Amount in Rupees)
Particulars	Current Year	Previous Year
1. Interest on SB A/c of Plan Fund	27,61,614.00	38,28,490.00
2. Interest on other SB Accounts	1,90,24,847.00	2,40,72,901.00
3. Interest on SB Accounts of Earmarked Funds		
	2,17,86,461.00	2,79,01,391.00
Less: Interest accrued not yet received		
Net Receipt	2,17,86,461.00	2,79,01,391.00

#### 30. OTHER INCOME INCLUDING PRIOR PERIOD INCOME

		(Amount in Rupees)
Particulars	Current Year	Previous Year
1. Prior period Income	3,50,004.00	
2. Other Income	1,69,78,665.00	5,01,41,137.40
3. Interest on cash security deposit with KSEB		24,524.00
	1,73,28,669.00	5,01,65,661.40
Add: Interest accrued on cash security deposit with KSEB in the previous year realised		
Less: Non Cash Items	1,23,48,109.00	1,97,78,080.00
Net Receipt	49,80,560.00	3,03,87,581.40

#### 31. DEPOSITS AND ADVANCES RECEIVED

		(Amount in Rupees)
Particulars	Current Year	Previous Year
1. EMD	20,48,330.00	22,89,923.00
2. Security Deposit & Bank Guarantee	23,98,532.50	11,14,866.00
3. Caution Deposit	30,31,500.00	73,92,400.00
Net Receipt	74,78,362.50	1,07,97,189.00

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#### 32. LOANS AND ADVANCES GIVEN RECEIVED BACK

11	Amo	unt in	Ru	pees)	
	11101		11114		

	Particulars	Current Year	Previous Year
1. Advances given to employee	S	1,14,95,265.00	1,95,32,953.20
2. Other Advances		9,22,201.00	1,83,62,009.00
	Net Receipt	1,24,17,466.00	3,78,94,962.20

33. MISCELLANEOUS RECEIPTS INCLUDING STATUTORY RECEIPTS (Amount in Rupees)		
Particulars	Current Year	Previous Year
1. Statutory Receipts 2. Other Miscellaneous receipts 3. All other misc receipts	15,15,09,841.00 33,95,05,944.00	14,11,71,027.00 60,92,73,173.00
Net Receipt	49,10,15,785.00	75,04,44,200.00

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# NATIONAL INSTITUTE OF TECHNOLOGY CALICUT

## SCHEDULES FORMING PART OF RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR 2020-21

		(Amount in Rupees)
Particulars	Current Year	Previous Year
1. TEQIP I	0.00	0.00
2. TEQIP II	0.00	1,01,480.00
3. TEQIP III	58,18,404.00	5,27,71,738.00
4. GPF	4,10,21,893.00	3,28,78,584.00
5. CPF	7,63,63,184.00	5,23,80,545.00
6. FBS	0.00	0.00
7. Growth Fund	99,132.00	76,999.60
8. Students Fund	72,95,475.00	1,79,33,032.80
9. TBI	34,92,897.00	2,80,21,515.00
10. TEQIP II modernisation fund	0.00	1,02,048.00
11. Teqip reserves	0.00	0.00
12. Gymkhana	0.00	0.00
13. HWD	2,02,178.00	53,711.00
14. TBI Nidhi Prayas	61,23,819.00	35,26,685.00
Net Payment	14,04,16,982.00	18,78,46,338.40

34. PAYMENTS AGAINST EARMARKED ENDOWMENT FUNDS, GPF & CPF

#### **35. DEPOSITS REPAID**

		(Amount in Rupees)
Particulars	Current Year	Previous Year
1. EMD	26,97,077.00	38,02,316.00
2. Security Deposit	17,11,644.00	16,73,105.00
3. Caution Deposit	23,79,500.00	6,13,000.00
Net Payment	67,88,221.00	60,88,421.00

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#### 36. LOANS AND ADVANCES GIVEN

		(Amount in Rupees)
Particulars	Current Year	Previous Year
1. Advances given to employees	67,24,481.00	1,93,83,831.00
2. Other Advances	56,98,612.00	5,29,798.00
Net Payment	1,24,23,093.00	1,99,13,629.00

#### 37. ESTABLISHMENT EXPENSES

	·	(Amount in Rupees)
Particulars	Current Year	Previous Year
Expense as per the Income and Expenditure Account	1,04,39,61,530.00	99,48,65,443.00
Less: Establishment expenses payable at the year end	44,64,401.00	5,99,37,462.00
Add: Establishment Expenses of previous year paid in the current year	5,99,37,462.00	22,15,759.00
Net Payment	1,09,94,34,591.00	93,71,43,740.00

#### 38. ACADEMIC EXPENSES

		Amount in Rupees)
Particulars	Current Year	Previous Year
Expense as per the Income and Expenditure Account	28,58,06,739.00	26,96,03,499.00
Less: Academic expenses payable at the year end	26,94,248.00	2,19,38,154.00
Add: Academic Expenses of previous year paid in the current year	2,19,38,154.00	36,36,047.00
Net Payment	28,31,12,491.00	24,76,65,345.00

#### 39. ADMINISTRATIVE EXPENSES

	(Amount in Rupees		
Particulars	Current Year	Previous Year	
Expense as per the Income and Expenditure Account	5,00,25,448.75	9,54,53,658.30	
Less: Administrative Expenses payable at the year end	2,14,87,822.00	2,57,56,327.00	
Add: Administrative Expenses of previous year paid in the current year	2,57,56,327.00	2,30,83,480.00	
Net Payment	5,42,93,953.75	9,27,80,811.30	

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## **40. TRANSPORTATION EXPENSES**

(Amount in Rupees)

Particulars	Current Year	Previous Year
Expense as per the Income and Expenditure Account	11,32,421.00	13,12,186.00
Less: Transportation expense payable at the year end	0.00	0.00
Add: Transportation expense of previous year paid in the current year	0.00	0.00
Net Payment	11,32,421.00	13,12,186.00

# 41. REPAIRS AND MAINTENANCE

	(Amount in Rupees)		
Current Year	Previous Year		
6,74,42,113.00	8,71,50,726.00		
57,38,730.00	70,68,060.00		
70,68,060.00	88,83,570.00		
6,87,71,443.00	8,89,66,236.00		
	Current Year 6,74,42,113.00 57,38,730.00 70,68,060.00		

## 42. OTHER PAYMENTS INCLUDING STATUTORY PAYMENTS

(Amount in Ru		
Particulars	Current Year	Previous Year
1. Statutory Payments	14,18,75,930.00	14,03,02,060.00
2. Other Payments	19,72,07,264.00	14,43,03,568.00
Total	33,90,83,194.00	28,46,05,628.00

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# NATIONAL INSTITUTE OF TECHNOLOGY CALICUT PROVIDENT FUND ACCOUNT BALANCE SHEET AS AT MARCH 31,2021

Amount	Liabilities	Amount	Amount	Assets	Amoun
	GPF	11,82,17,312.00		Investment	35,73,42,203.00
	Opening Balance	11,02,17,512.00		Interest accrued as on 31/03/2020	
1	Less: Subscription for March			Subscription due for March 2020	
		5,70,58,642.00		GPF	
	Add: Subscription in the year	5,70,30,042.00		CPF	
	Add: Subscription for March 2019			UC due to CPF	
	Add: Interest credited	4,10,21,893.00		NPSI	
	Less: Advance/Withdrawal	4,10,21,695.00	13,42,54,061.00		
	Closing balance		13,42,34,001.00		
				Tax recovered from interest on	
	car.			Investments	
	CPF				
	Opening Balance	1,06,05,699.00		pending refund from Income Tax Dept.	
	Less: Subscription for March 2017	_,,			
				Cash at Bank	
	Add: Subscription in the year	7,61,13,743.00		SBI Branch	
	Add: Subscription for March 2018	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Others	-
	Add: Interest credited	-43,97,772.35			
	Less: Advance/Withdrawal	7,63,63,184.00			
	Closing balance	.,,	59,58,485.65		
	University Contribution (CPF)				
	Opening Balance				
	Less: Subscription for March 2017				
	Add: Subscription in the year				
	Add: Subscription for March 2018				
	Add: Interest credited				
	Less: Advance/Withdrawal				

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Total		35,73,42,203.00	Total	35,73,42,203.00
Closing Balance				
Add: Excess of income over expenditure	2,31,00,539.00	21,71,29,656.35		
Opening Balance	19,40,29,117.35			
Interest Reserve				
Closing balance				
Less: Advance/Withdrawal				
Add: Interest credited				
Add: Subscription for March 2018				
Add: Subscription in the year				
Less: Subscription for March 2017				
Opening Balance				
NPS Tier-II Account			-	
Closing balance				

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# NATIONAL INSTITUTE OF TECHNOLOGY CALICUT PROVIDENT FUND ACCOUNT INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31/03/2021

(Amount in Rs.)

Expenditure	Amount	Income	Amount	
Interest credited to:		Interest earned on Investment	2,31,00,539.00	
GPF account	-	Add: Interest accrued on 03/21		
		Add: Tax recovered on interest- Refund to		
CPF account	-	be obtained		
University Contribution (CPF)		Adjustment (Prior period income)	-	
NPS Tier-II account	- 10			
Excess of Income over Expenditure	2,31,00,539.00	Excess of Expenditure over Income		
Total	2,31,00,539	Total	2,31,00,539	

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# NATIONAL INSTITUTE OF TECHNOLOGY CALICUT **PROVIDENT FUND ACCOUNT RECEIPTS AND PAYMENTS ACCOUNTS FOR 2020-21**

Receipts	Amount	Payments	Amount
Opening Balance:		GPF Adv/Withdrawal	12,92,70,140.00
Savings Bank Accounts	(17,95,898.00)	CPF Adv/Withdrawal	12,70,56,664.00
Term Deposits	28,49,92,176.00		
MOD Balances	4,75,53,617.00	NPS Tier II	-
GPF Subscription	18,66,22,302.00	University Contribution Withdrawal	
CPF Subscription	13,94,74,504.00		
CPF University Contribution		Investments during the year	
NPS Tier II account		Others	-
Investments encashed	-	Closing Balance	
Interest received	-	Savings Bank Accounts	6,79,74,104.00
Other receipts	(4,31,77,694.00)	Term Deposits	28,93,68,099.00
na di na desente della		MOD Balances	-
Total	61,36,69,007.00	Total	61,36,69,007.00

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(Amount in Rs.)

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# Schedule 23

# **Significant Accounting Policies**

### 1. Basis for preparation of accounts

The annual financial statements have been prepared and presented under historical cost convention on accrual basis in accordance with the Indian Generally Accepted Accounting Principles (GAAP), which comprises of Accounting Standards issued by the Institute of Chartered Accountants of India and other guidelines notified by Central Government from time to time. The financial statements for the year ended 31 March 2021 have been prepared and presented in the **Revised Format of Accounts of Central Educational Institutions**, as approved by the Comptroller & Auditor General of India and notified by the Ministry of Education (formerly MHRD), Government of India *vide* letter no. 29-4/2012-IFD dated 17 April 2015. The figures for previous financial year have been regrouped and recast, wherever necessary, for conformity with the revised format.

#### 2. Use of estimates

The preparation of the financial statements in conformity with Indian GAAP requires making estimates and assumptions that affects the reported balances of assets and liabilities and disclosures relating to contingent liabilities as at the date of the financial statements and reported amounts of income and expenses during the period. Examples of such estimates include computation of percentage of completion of Capital Work-in-progress, which requires the Institute to estimate the efforts or costs expended to date as a proportion of the total efforts or costs to be expended, future obligations under employee retirement benefit plans and the useful lives of tangible and intangible assets. Accounting estimates could change over a period of time and actual results could differ from those estimates. Appropriate changes in estimates are made as the management becomes aware of changes in circumstances surrounding the estimates. Changes in estimates are reflected in the financial statements in the period in which changes are made and, if material, their effects are disclosed in the notes to the financial statements.

#### 3. Revenue recognition

Revenue is recognized to the extent that it is probable that the economic benefits will flow to the Institute and the revenue can be reliably measured.

Revenue from Plan (Non-recurring) grants is accounted on accrual basis and Plan (Non-recurring) grant is earmarked for the acquisition of the fixed assets and capital works. Income received on these funds by way of interest on Term Deposits and Savings Bank accounts in banks are added to the Capital Fund. Interest received on the Term Deposits held as security for opening Letters of Credit for import of fixed assets is accounted as addition to the respective earmarked funds. Non-Plan (Recurring) grant received from Government of India is recognized as income on accrual basis.

Fees received from students are accounted on cash basis. Interest on Term Deposits, Savings Bank accounts, income from land and buildings and sale of application forms, tender forms, RTI fees, breakage charges and grants from other bodies are accounted on accrual basis. Interest on advances made to employees are calculated on reducing balances of loan and recognized on accrual basis.

Electricity charges recovered in respect of staff quarters and hostels are accounted as revenue and subsequently adjusted/ netted off against the electricity charges of the Institute as a whole.

#### 4. Government grants-in-aid

The Institute is funded by grants-in-aid received from Ministry of Education (formerly MHRD), Government of India for meeting its annual Plan (Non-recurring) and Non-Plan (Recurring) expenditure. Government grants and other grants are accounted on realization basis. However, where a sanction order for release of grant pertaining to the financial year is received before 31 March and the grant is actually received in the next financial year, the grant is accounted on accrual basis.

Capital grants received from Government, which are related to acquisition of fixed assets, are treated as deferred income and recognized in the Income and Expenditure Account on systematic and rational basis over the useful life of the assets, *i.e.*, Capital grants are allocated to Income over a period and depreciation charged in proportion thereto. Grants

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other than Capital grants from Government are treated as income of the Institute. Unutilized part of government grant is treated as liability to the Institute.

### 5. Inventory

Stationery, consumables, stores and spares are valued at cost or net realizable value, whichever is less. Net realizable value is the estimated selling price in the ordinary course of business less estimated cost necessary to make the sale.

## 6. Tangible assets and Capital Work-in-progress

Fixed assets are stated at historical cost less accumulated depreciation and impairment, if any. The cost comprises cost of acquisition including inward freight, duties and taxes and incidental and direct expenses related to acquisition, installation and commissioning. Security Deposit for performance of warranty services are included in the cost of assets only after the expiry of the warranty period and after a formal claim is made by the respective suppliers to release the security deposit.

Gifted/ donated assets are valued at declared value, where available; if unavailable, the value is estimated based on the present market value adjusted with reference to the physical condition of the asset.

Books received as gifts are valued at the selling price printed on books and where the price is unavailable; the value is based on assessment.

Assets created out of Earmarked funds and funds of sponsored projects, where the ownership of such assets vests in the Institute, are treated as fixed assets of the Institute.

Capital Work-in-progress comprises of the cost of fixed assets that are not yet ready for their intended use at the reporting date. Advances paid to C.P.W.D. towards completion of works/ fixed assets are shown as addition to capital work-in-progress.

Subsequent expenditure related to an item of fixed assets is added to its book value only if it increases the future benefits from the existing asset beyond its previously assessed standard of performance. All other expenses on existing fixed assets, including day-to-day repairs and maintenance and the cost of replacing parts, are charged to revenue for the period during which such expenses are incurred.

# 7. Intangible assets

Research costs are expensed as incurred. Development costs are expensed as incurred unless the technical and commercial feasibility of the project is demonstrated, future economic benefits are probable, the Institute has an intention and ability to complete the project, use it or sell off the project findings and the costs can be measured reliably. Expenditure incurred on obtaining patents is not shown as Intangible assets and charged to Revenue.

Electronic Journals (e-Journals) are expensed every year considering the value of benefit derived and the cost incurred therefore. The payment for e-Journals towards subscription normally expires in one year and does not qualify as Intangible assets.

Expenditure on acquisition of software is included in the cost of acquisition of computer as a whole at the time of the purchase of computers.

# 8. Depreciation and amortization

The institute was following the Written down value method of depreciation till (2018-19)as per the Income tax act 1961, but due to CAG audit objection No.B.1 in Separate Audit Report(SAR) for the Financial Year 2018-19 the straight-line method is been adopted by the institute from the F.Y 2019-20. Depreciation is provided for the whole year on additions made to assets during the year. Where an asset is fully depreciated, it will be carried at a residual value of Re.1 and will not be further depreciated.

Security Deposit money released becomes part of the asset after the expiry of warranty period and claim made by the supplier. Depreciation is charged prospectively when it becomes part of the fixed assets. Depreciation is charged on assets created out of funds of sponsored projects and earmarked funds except for TEQIP – II, TEQIP - III and TBI. No depreciation is provided on freehold land.

# 9. Impairment of assets

The Institute does not assess at each balance sheet date whether there is any indication that an asset including any goodwill may be impaired.

#### 10. Leases

Leases, on which the lessor effectively retains substantially all the risks and benefits of ownership of the leased item, are classified as operating leases. Operating lease payments are recognized as an expense in the Statement of Income and Expenditure on Straight Line Method over the lease term.

### 11. Retirement benefits

### New Pension Scheme

Employees, who joined the Institute after 2004, are eligible for New Pension Scheme of the Central Government, which is a defined contribution plan. Matching monthly contribution to the plan, equal to 10% of the covered employee's basic salary, grade pay and dearness allowance, are paid by the employees while 14% is paid by employer. The Institute's NPS fund is managed by National Securities Depository Ltd. (NSDL). The Institute has no obligations to the Plan beyond its monthly contributions.

## **General Provident Fund**

Eligible employees receive benefits from a provident fund, which is a defined benefit plan as per the AS-15 (Revised) issued by ICAI. The provident fund is managed by the Institute with guarantee of minimum return/ interest as specified by the Government from time to time on similar provident fund schemes. The contribution is made by the employees only. The fund is invested in term deposits with nationalized banks in a manner to yield maximum interest to cover the minimum guaranteed return as notified. Provision for the interest shortfall is provided for in the Income and Expenditure Account.

#### **Contributory Provident Fund**

It is a defined contribution plan. The employee and the Institute each make monthly contribution to the plan equal to 10% of the covered employee's basic salary and grade pay. The Institute maintains CPF fund by investing in approved manner as specified. Provision for the shortfall in interest payable, if any, is provided in the Income and Expenditure Account.

## Gratuity

The Institute provides for gratuity, covering eligible employees. Liabilities with regard to the Gratuity Plan are determined by actuarial valuation, performed by an independent actuary, at the Balance Sheet date. The Institute recognizes the net obligation of the gratuity plan in the Balance Sheet as an asset or liability, in accordance with Accounting Standard-15 (Revised) issued by the Institute of Chartered Accountants of India. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are recognized in the Income and Expenditure Account for the period in which they arise.

#### Leave Encashment

The employees of the Institute are entitled to Leave Encashment. The employees can carry forward a portion of the unutilized accrued leave and utilize it in future periods or receive cash compensation at retirement or termination of employment for the unutilized accrued leave (subject to a maximum of 300 days so earned). The Institute records an obligation for Leave encashment in the period in which the employee renders the services that increases this entitlement. Actuarial valuation is done to ascertain the expected cost of leave encashment as the additional amount that the Institute expects to pay as a result of the unused entitlement that has accumulated at the balance sheet date.

## Family Benefit Scheme

The Family Benefit Scheme is a defined contribution plan for eligible employees. The contributions are made by the employees only and the Institute has no obligations for matching contribution other than repayment of employee's contribution with accumulated interest after attainment of 55 years of the age of the employees.

## 12. Foreign currency transactions

The Institute is exposed to currency fluctuations on foreign currency transactions. The gains or losses resulting from foreign currency denominated monetary assets and liabilities and non-monetary assets and liabilities translated at prevailing exchange rates are not included in the books of account.

Transaction gains or losses realized upon in settlement of foreign currency transactions are not included in determining surplus for the period in which the transaction is settled.

#### 13. Provisions and contingent liabilities

The Institute creates a provision when there is a present obligation as a result of an obligating event that probably requires an outflow of resources and a reliable estimate can be made of the amount of the outflow. A disclosure for a contingent liability is made when there is a possible obligation or a present obligation that may, but probably will not, require an outflow of resources. Where there is a possible obligation or a present obligation of a present obligation obligation of a present obligation of a present obligation of a present obligation obligation obligation obligation obligation obligation obligation oblig

# 14. Income tax

The income of the Institute is exempt from Income Tax under Section 10(23C)(iiiab) of the Income Tax Act, 1961. Therefore, no provision is required to be made in books of accounts towards Income Tax.

# 15. Earmarked/ Endowment funds

The following long term funds are earmarked for specific purpose, each having a separate bank account. The income from investments is accounted on accrual basis and interests on Savings Bank Accounts are credited to respective funds and not treated as income of the Institute. The assets created out of Earmarked funds where ownership vests in the Institute are merged with the assets of the Institution except TEQIP – II, TEQIP - III and TBI.

- a. Technical Education Quality Improvement Program (TEQIP)
- b. TEQIP II
- c. Technology Business Incubator (TBI)
- d. Family Benefit Scheme
- e. Growth Fund (Corpus Fund)
- f. Students Fund
- g. Harijan Welfare Fund

#### 14 (a) GPF and CPF

General Provident Fund and Contributory Provident Fund are separated from Earmarked / Endowment fund as per the observation and suggestion by CAG Audit in SAR for F.Y 2018-19 (para no. A.1.2). Hence it is shown as separately in the books of accounts.

#### 16. Investments

Investments, which are readily realizable and intended to be held for not more than one year from 31 March of the financial year on which such investments are made, are classified as short term investments. All other investments are classified as long term investments. Long term investments are stated at cost less provision for diminution in the value of such investments. Diminution in value is provided for where the Institute is of the opinion that the diminution is of permanent nature. Short term investments are valued at lower of cost and net realizable value.

#### 17. Sponsored projects

In respect of new projects and ongoing projects, the amount received from the sponsors and funding agencies towards the projects are credited to the respective project accounts and the expenses are recorded by debiting the project accounts. The assets purchased for the projects are accounted as fixed assets of the Institute.

#### 18. Cash and cash equivalents

Cash and cash equivalents comprise cash and cash on deposit with banks. The Institute considers all highly liquid investments with a remaining maturity at the date of investments of three months or less and that are readily convertible to known amounts of cash to be cash equivalents.

#### 19. Cash flow statement

Cash flows are reported using direct method, whereby surplus is adjusted for the effects of transactions of a non-cash nature and any deferrals or accruals of past or future cash receipts or payments. The cash flows from regular revenue generating, investing and financing activities of the Institute are segregated.

# Schedule 24

# Notes to Accounts

## **1. RECEIPT OF GOVERNMENT GRANTS**

The opening balance of Plan (Non-recurring) grants-in-aid and Non-Plan (Recurring) grants-in-aid shown in the current financial year is adjusted for the internal revenue generated in previous financial years. The internal revenue comprises of tuition fees received, interest received on Fixed Deposits and Savings Bank accounts and other miscellaneous receipts. The internal revenue added to the unutilized balance of grants in previous financial years is not segregated. For Plan grants, the actual expenditure incurred for acquisition of fixed assets and capital work-in-progress is shown as deduction from the total of grants received during the year and the opening balance of grants consists of internal revenue of past financial years. Similar treatment is done for Non-Plan grants by deducting all the items of expenditure in the Income and Expenditure Account except for depreciation.

(Refer Schedule 3C- Unutilized Grants from UGC, Government of India and State Governments and Schedule 10- Grants/Donations/Subsidies).

## 2. CAPITAL FUND

This includes grants received from Ministry of Education (formerly MHRD) to the extent incurred for capital expenditure and assets procured out of sponsored projects. It also includes interest on Fixed Deposits and Savings Bank Accounts of Plan funds and interest received on Fixed Deposits created for opening the Letter of Credit during the current financial year. Bank charges incurred on Plan Fund Savings Bank account is deducted therefrom.

(Refer Schedule 1- Capital Fund).

# 3. CURRENT LIABILITIES AND PROVISIONS

These include:

- a) Deposits from students representing refundable caution deposits.
- b) Payment for stamps worth Rs.41,463/- shown under "Sundry Creditors for goods and services".
- c) Rs. 9,82,683/- represents amount payable to NIT Employees Multipurpose Cooperative Society and is shown under "Sundry Creditors - Others".

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- d) Deposits includes Earnest Money Deposit (EMD) of Rs. 47,99,150.70 /- and Security Deposit of Rs.1,17,79,693.50/- towards retention charges for the performance warranty in respect of new fixed assets. Unclaimed amounts, if any, lying as security deposits are not considered as income during the current year. It also includes the bank guarantee from ERA Infra amounting to Rs. 4,43,93,272.
- e) Statutory liabilities payable as on 31March 2020 are as:

(Amount in Rupees)

Sl. No.	Particulars	2020-21	2019-20
1	TDS payable		58,08,000
2	Sales Tax payable	15	15
3	Service Tax payable	(2,41,937)	(2,41,937)
4	GST Payable	3,84,889	9,49,698
5	Professional Tax Payable	1250	1250
6	Forest Department Tax	7750	
	Total	1,51,967	65,17,026

*Figures in bracket indicate debit balance.

f) Receipts against sponsored projects and sponsored fellowships and scholarships are shown in Schedule 3A and 3B. The credit balance at the end of financial year 2020-21 are shown as "other current liabilities" under Schedule 3- Current Liabilities and Provisions and debit balances are shown as "current assets receivable from sponsored projects and sponsored fellowships and scholarships" under Schedule 8-Loans, Advances & Deposits.

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g) Other Liabilities as shown below:

SI. No.	Particulars	Remarks	2020-21	2019-20
1	Pension and GPF contribution from other Institutions		36,92,706	36,92,706
2	Golden Jubilee		(2,39,853)	(2,39,853)
3	Plan Grant- Sikkim		(4,44,249)	(4,44,249)
4	Medical Exam Fees	Share payable to RMO	1,40,084	1,70,092
5	Research & Consultancy refundable monies		51,00,716	28,72,296
6	Time-barred cheques cancelled		2,93,801	2,93,801
7	Advance Money for Centre and Admissions		3,00,000	3,00,000
8	Medical claim for Students		99,10,671	1,09,81,457
9	AMTID (Advances for Materials and Techniques for Infrastructure Development)		1,17,000	1,17,000
10	MBA Programs and alumni-related activities		(15,09,058)	(15,09,058)
11	International Conference (ICCSP)		3,50,000	3,50,000
12	Refund Account No. IV		77,870	77,870
13	Suspense Account No. II	Includes erroneous accounting	10,45,96,774.42	10,42,58,190.42
14	Suspense Account No. 1	entries made in	4,96,98,860	4,96,98,860
15	Suspense Account No. 1 (NIT Sikkim)	past years, which could not be rectified	42,50,877	42,50,877
16	Suspense Account No. II (Tuition Fees)	during the reporting	3,32,212	3,32,212
17	Transfer (Refunds)	period	(45,68,754)	(45,68,754
18	Departmental suspense accounts		83,95,327	1,10,16,03′
19	Convocation fee		24,35,359	7,36,550
20	Group Insurance	,-	(2,17,332)	(2,17,332
21	RD Commission NSO		15,533	15,53
22	PG Diploma course in construction		(34,415)	(34,415

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	Total	20,57,58,743	20,52,47,202
24	Other miscellaneous items	2,28,72,912.68	2,38,05,480.68
23	Interest on account (Refunds)	1,91,701	1,91,701

Figures in bracket indicate debit balance, i.e., assets carried over from previous years.

h) Accounts Payable for other expenses for March 2021 as shown below:

Sl. No.	Particulars	2020-21	2019-20
1	Salary payable	44,64,401	5,41,29,462
	Total	44,64,401	5,41,29,462

(Amount in Rupees)

(Refer Schedule 3- Current Liabilities and Provisions).

## 4. FIXED ASSETS

Total addition to the assets during the FY 2020-21 was Rs. 29,87,84,540/-. Total depreciation on assets up to the period 2020-21 was Rs. 2,12,97,72,504 and that includes depreciation for the FY 2020-21 amounted to Rs. 7,08,14,435

(Refer Schedule 4- Fixed Assets)

# 5. FIXED DEPOSITS

Disclosure for Fixed Deposits with nationalized banks shown in books of accounts is as follows:

(Amount in Rupees)

SI. No.	Particulars	2020-21	2019-20
51. 110.	1 al ticulai s	2020-21	2017-20
1	Fixed Deposits made out of Earmarked/ Designated Funds ## and GPF, CPF	128,42,29,965	163,47,71,754
2	Fixed Deposits made out of Plan Funds (includes FD of Rs. 1,89,41,657 pledged with Hon'ble Additional Sub-Judge, Kozhikode)	11,64,13,818	13,00,35,547.40
3	Fixed Deposits from Other Funds (Revenue Funds)	44,05,23,428	101,54,96,230
4	Fixed Deposits for Letters of Credit	44,92,000	44,92,000
5	Fixed Deposits for Bank Guarantee (in favor of KSEB)	20,50,840	20,50,840
6	Fixed Deposits from ERA BG	4,43,93,272	4,43,93,272
	Total	189,21,03,323	283,12,39,643

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(Refer Schedule 5 – Investments from Earmarked/Endowment Funds and Schedule 7-Current Assets- Cash in Bank in Term Deposits Accounts).

## The details of Fixed Deposits made out of Earmarked/ Designated Funds, GPF & CPF shown hereinabove is provided below:

		(Amount in Rupees)	
Sl. No.	Particulars	2020-21	2019-20
1	Growth Fund	83,89,67,082	106,97,68,927
2	General Provident Fund	28,38,19,107	31,57,95,661
3	Contributory Provident Fund	55,48,992	1,67,50,132
4	Technology Business Incubator (TBI)	31,60,489	31,60,489
5	Students Fund	-	1,50,46,608
6	Refund	15,27,34,295	21,42,49,937
	Total	128,42,29,965	163,47,71,754

The fixed deposits created during the financial year 2020-21 and the fixed deposits for past financial years are shown in Balance Sheet as at 31March 2021 at their principal value only.

The principal amount of all fixed deposits in the name of the Institute as on 31/03/2021 amounts to Rs. 189,21,03,323/-.

### 6. CASH IN BANK

Certificate for confirmation of balances of all its bank accounts held in nationalized banks as on 31 March 2021 has been obtained from the bankers. The Institute has also obtained certificate for the interest amount accrued and received on its bank accounts from the bankers as on 31 March 2021. Reconciliation of all major accounts (except Suspense Accounts) was undertaken and completed for the year 2020-21.

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(Amount in Rupees)

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#### **Current Accounts**

The Institute has shown twelve current accounts in its books including two current accounts for project, as compared to fifteen current accounts certified by the banks as on 31 March 2021. The balance of ten disclosed current accounts in the Institute's books of accounts is Rs.4,63,88,638/- while their certified bank balance as on 31 March 2021 is Rs. 27,63,50,625.39/- [Annexure A(ii)]. Other two current accounts in respect of projects have a balance of Rs.-14,549/- as against the certified balance of Rs.38,786/-.

The certified closing balance of remaining three current accounts not shown in the Institute's books of accounts as on 31 March 2021 was Rs. 18,66,42,977.43/- [Annexure C (ii)]. These accounts have not been included in the financial statements as the particulars of transactions therein are not known and no relevant documents/ details other than the bank-certified balance is available with the Institute in respect of the three current accounts.

#### Savings Bank Accounts

The Institute held 43 Savings Bank accounts in nationalized banks as on 31 March 2021. Only 36 of these bank accounts are included in the books. [Annexure A (i)]. The balance of the 36 disclosed Savings accounts as per Institute's books of accounts is Rs. 201,43,01,621.52-/- while their certified bank balance as on 31 March 2021 is Rs. 173,75,33,988.05/-

The certified bank balance of the remaining seven Savings Bank accounts as on 31March 2021 was Rs.12,89,833.5/- [Annexure C (i)]. These have not been included in the books due to lack of sufficient information on the source of their creation and the particulars of transactions therein for the past periods.

#### **Project Accounts**

The Institute maintains separate bank accounts for each project funded by various government agencies. A balance confirmation certificate has been obtained for 152 project bank accounts including two current account for the financial year 2020-2021. The certified closing balance of these bank accounts as on 31 March 2021 was Rs. 11,81,96,491.03/- [Annexure B].

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The books of accounts of the Institute shows 222 project bank accounts which are inclusive of both operative and in-operative project accounts. Of these 222 project bank accounts shown in books of accounts, Bank has confirmed the balance as on 31st March 2021 for only 152 project bank accounts. Bank certification for the remaining 70 project accounts shown in the books of accounts was not made available by the respective Bank.

Bank Reconciliation Statement in respect of project accounts has been prepared for 2020-2021. However, the existence of un-reconciled opening balances for several previous financial years renders the reconciliation of some accounts with the bank-certified balances as on 31 March 2021 difficult. Due to lack of sufficient information on some bank accounts, which were opened in the distant past and the transaction details of which are not known (these were not shown in the books of account during the previous years), such accounts have not been included in the current financial year as well. The details of such bank accounts are disclosed in **Annexure C**.

(Refer Schedule 7- Current Assets- Cash in Bank).

## 7. TREASURY ACCOUNTS

The Institute held three accounts with District Treasury, Kozhikode, *viz.*, TPA No.809, PD Account (419/1-HWD) and PD Account (419/2-NMS). The un-reconciled ledger balance of these accounts as on 31 March 2021 was Rs.10,76,413/-, Rs.20,10,398/- and Rs.29,850/- respectively. At present, the Institute operates only two of these accounts (419/1-HWD and 419/2-NMS) for receipt and disbursement of scholarship amount received from the Government of Kerala. As on 31 March 2021, the correct certified balance could not be obtained from District Treasury for want of sufficient information on old transactions for previous years (the balance shown in Pass Book was Rs. 37,849/- as of May 2006). No grant/ aid are being received in the other account, *viz.*, TPA No.809 since FY 2003-2004.

As per the guidelines issued by Government of Kerala, the scholarship amount should be distributed to the students at the earliest and unclaimed balance, if any, should be returned to Government of Kerala together with interest earned thereon. The un-reconciled closing balance in treasury accounts as on 31 March 2021 might comprise such unclaimed amounts for previous years.

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Government of Kerala has demanded the refund of amount lying in PD Account (419/.2-NMS) *vide* letter no. C4/626/2015 dated 19 August 2015. However, no liability is recognized in the Balance Sheet as on 31 March 2021 for the demand raised due to nonconfirmation of certified balance in the aforesaid Treasury account.

(Refer Schedule 7- Current Assets- Cash in Treasury).

#### 8. INVENTORY

The stock purchased and issued to various departments is shown under the respective departmental operating cost ledger heads.

(Refer Schedule 7- Current Assets- Stock).

Physical verification of fixed assets for the year 2020-21 is yet to be carried out. Stocktaking of library books is conducted once in three years in accordance with Rule 215 of GFR 2017.

#### 9. ADVANCES TO EMPLOYEES

Loans and advances include loans given to staff for various purposes, which are recovered in installments along with interest from the salary of employees. The Institute does not recognize the interest receivable on such loans and advances. The amount recovered for each loan together with interest is credited to the loan account. The advances made during the financial year 2020-21 are given below:

(Amount	in Ru	pees)
(		

Sl. No.	Particulars	2020-21	2019-20
1	Festival advance	(1,13,185)	(48,535)
2	Computer advance	(1,60,689)	(1,85,489)
3	Marriage advance	(66,184)	(66,184)
4	House Building Advance	(35,17,805)	(33,20,799)
5	Vehicle advance	1,68,244	3,28,365
6	Plan advance	(1,60,213)	(1,35,733)
7	Advance payment A/c No I	1,22,213	14,57,952

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	Total	1,21,29,440	1,26,12,835
14	Medical advance		
13	Gymkhana	(42,967)	(42,967)
12	Other advances	69,720	1,11,202
11	Department advances	15,46,314	37,70,858
10	Travelling allowance advance	12,58,148	20,02,500
9	LTC advance	62,39,834	18,49,532
8	Advance payment A/c No II	67,86,010	68,92,133

Figures in bracket indicate credit balance, *i.e.*, liability carried over from previous years.

(Refer Schedule 8- Loans, Advances and Deposits)

## **10. INTEREST ACCRUED ON FIXED DEPOSITS**

The total interest certified as accrued on fixed deposit accounts as on 31 March 2021 was Rs.14,14,52,066 /-. Interest accrued on fixed deposits comprises of interest accrued on Earmarked Funds. Interests accrued on Plan funds are shown as additions to the Capital Fund.

(Refer Schedule 2- Designated/Earmarked/Endowment Funds-, CPF and GPF and Schedule 11- Income from Investments).

## 11. BANK GUARANTEE WITH KERALA STATE ELECTRICITY BOARD

The Institute executed a Bank Guarantee for Rs.20,50,840/- in favor of KSEB towards security deposit for its HT electric connections, by opening fixed deposit account with SBI, NIT Calicut Branch.

## **12. PREPAID EXPENSES**

There is Rs. 6,74,806/- prepaid expenses for the financial year 2020-21.

(Refer Schedule 8- Loans, Advances and Deposits-Prepaid expenses)

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### **13.TUITION FEES AND OTHER RECEIPTS**

The income earned by way of tuition fees and other receipts for the financial year 2020-21 is Rs.35,95,92,904. The tuition fees and other fees remitted by students are transferred to various ledger accounts on the basis of itemized fee structure notified by the Institute from time to time.

The remittance receipt flow directly into four designated bank accounts, *viz.*, A/c No. 10401158082 (Non-Plan Recurring), A/c No. 10401159314 (Refunds), A/c No. 10401159802 (Growth Fund) and A/c No. 10401158106 (Students Fund). The respective tuition fee ledger accounts are credited on the income side and the aforesaid bank accounts are debited on the assets side (after obtaining confirmation from the bank) by the Institute's accounting software (NITC-DSS). The actual tuition fee bank accounts/ ledger accounts, into which the tuition fee is remitted by the students, remain untouched. Because of this, the tuition fees received directly in the bank accounts are not originally recorded in the books of accounts of the Institute. This has been followed consistently for the past several years.

Till financial year 2013-2014, there was a practice of passing an adjustment entry by debiting the respective tuition fee bank account and crediting bank A/c no. 10401158082 only on receipt of tuition fees though the amount of tuition fees was transferred initially and automatically to four different bank accounts as stated above. This distorts the actual balance of the bank accounts and has been a major reason for the difference noticed in the bank balance certified by the bankers and the bank balance shown in Institute's ledger accounts. Rectification at this stage is a challenging task in view of the number of transactions involved and the need to identify each fee component therefore.

(Refer Schedule 9- Academic Receipts).

#### 14. INCOME FROM INVESTMENTS AND INTEREST EARNED

Income from other investments represents interest on investments made out of Non-Plan Fund, Tuition Fees, Refund (Savings Bank) Account and Fixed Deposits (including those held as security for Bank Guarantee in favor of Kerala State Electricity Board) with nationalized banks. Interest earned represents interest received on Savings Bank accounts except for the Bank accounts held for Earmarked/Designated fund and Plan Fund. *(Refer Schedule 11- Income from investments and Schedule 12- Interest Earned).* 

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#### **15. LICENSE FEES RECEIPT**

Disclosure relating to license fees for financial year 2020-21 is as under:

SI. No.	Particulars	2020-21	2019-20
1	Staff Quarters	37,01,558	29,93,854
2	SBI building		35,85,145
3	Punjab National Bank ATM room	20,601	36,627
4	Service charges for the above structures	21,889	29,403
5	BSNL Building Rent		
	Total	37,44,048	66,45,029

(Amount in Rupees)

(Refer Schedule 13- Other Income- Income from Land and Buildings- License fee).

## **16.INCOME FROM CONSULTANCY**

Income from consultancy services represents the Institute's share of income received by its various departments for rendering services to external parties.

(Refer Schedule 13- Other Income- Others).

## **17.MISCELLANEOUS RECEIPTS**

The miscellaneous receipts during the financial year are shown below:

		(Amount in Rupees)	
Sl. No.	Particulars	2020-21	2019-20
1	Sale of tender/ registration forms	43,700	1,18,400
2	Breakage Charges	(19,470)	22,039
3	Conveyance receipts	1,28,400	2,23,450
4	Overhead Charges (Project Share)	15,22,719	46,25,116
5	Other Miscellaneous receipts	25,73,976	16,35,283
	Total	42,49,325	66,24,288

(Refer Schedule 13- Other Income- Others- Misc. Receipts & income from consultancy).

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## **18.CONTRIBUTION TO VARIOUS FUNDS**

The Institute's contribution towards leave salary, Provident Fund and New Pension Scheme is shown below:

		(Amount in Rupees)	
Sl. No.	Particulars	2020 - 21	2019-20
1	Contribution to New Pension Scheme	4,14,39,532	2,35,98,950
2	Leave Salary & Pension Contribution	25,81,295	2,75,710
	Total	4,40,20,827	2,38,74,660

(Refer Schedule 15- Staff payments and Benefits [Establishment Expenses]).

### **19.RETIREMENT AND TERMINAL BENEFITS**

This includes pension, pension commutation and Death-cum-Retirement-Gratuity (DCRG) paid to employees, who retired from the service. The details for the financial year 2020-21 are as follows:

(Amount in Rupees)

SI. No.	Particulars	2020-21	2019-20
1	Pension	17,82,24,109	15,44,98,691
2	Death-cum-Retirement-Gratuity (DCRG)	1,52,54,996	1,13,55,897
3	Pension Commutation	43,69,894	65,76,805
	Total	19,78,48,999	17,24,31,393

(Refer Schedule 15- Staff payments and Benefits [Establishment Expenses]).

## **20. PROVISION FOR EMPLOYEE BENEFITS**

#### **Defined Benefit Plan**

The employees of the Institute are entitled to Pension, Gratuity and Leave Encashment benefits on their retirement/ separation in accordance with the applicable Central Government rules. Actuarial valuation for employee benefits has been done for the first



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time in respect of Gratuity and Leave Encashment and disclosed as per AS-15 (Revised) issued by Institute of Chartered Accountants of India. Separate disclosure has been made for teaching staff and non-teaching staff owing to differences in their retirement age, attrition rate and leave encashment regulations. The actuarial valuation for leave encashment benefit has been built upon the data available for the calendar year 2020 (1 January 2020 to 31 December 2021). Actuarial valuation has not been done for pension benefits and no provision is recognized in the Income and Expenditure Account for the financial year 2020-2021.

#### (Refer Schedule 15A-Employees Retirement and Terminal Benefits).

The following tables provide an abstract of the expenses recognized and the provision made for 2019-2020 based on actuarial valuation.

## I. Teaching Staff

 a) Expenses recognized in Income and Expenditure Account during financial year 2019-2020.

SI. No.	Particulars	Gratuity	Leave Encashment
1	Current Service Cost	1,37,00,492	1,46,12,637
2	Interest Cost	1,04,63,560	1,12,16,175
3	Expected Return on Assets	Nil	Nil
4	Curtailment Costs	Nil	Nil
5	Settlement Costs	Nil	Nil
6	Past Service Costs	Nil	Nil
7	Net Actuarial (Gain)/Loss	(1,10,90,977)	(1,35,86,922)
8	Others	Nil	Nil
9	Employee expense recognized in Income and Expenditure Account	1,30,73,075	1,22,41,891

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b) Amount recognized in Balance Sheet as at 31 March 2021

Sl. No.	Particulars	Gratuity	Leave Encashment
1	Present Value of Defined Benefit Obligation	16,26,97,709	17,25,06,174
2	Fair Value of Plan Assets	Nil	Nil
3	Funded Status [ Surplus/ (Deficit)]	(16,26,97,709)	(17,25,06,174)
4	Unrecognized Past Service Costs	Nil	Nil
5	Net Assets/ (Liability) recognized in Balance Sheet	(16,26,97,709)	(17,25,06,174)
6	Present Value of Encashment Obligation	Not Applicable	17,17,37,183
7	Present Value of Availment Obligation	Not Applicable	7,68,991

c) Changes in present value of defined benefit obligations during the financial year

2020-2021.

Sl. No.	Particulars	Gratuity	Leave Encashment
1	Present value of Defined Benefit Obligations (Opening)	15,72,24,634	16,86,55,819
2	Current Service Cost	1,37,00,492	1,46,12,637
3	Interest Cost	1,04,63,560	1,12,16,175
4	Plan Amendments	Nil	Nil
5	Prior Service Costs	Nil	Nil
6	Curtailments	Nil	Nil
7	Settlements	Nil	Nil
8	Actuarial (Gains)/Loss	(1,10,90,977)	(1,35,86,922)
9	Benefits Paid	(76,00,000)	(83,91,536)
10	Acquisition/ Divestures	Nil	Nil
11	Present Value of Defined Benefit Obligation (Closing)	16,26,97,709	17,25,06,174

(Amount in Rupees)



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d) Reconciliation of opening and closing value of Plan assets for the financial year 2020-2021.

(Amount in Rupees)

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SI. No.	Particulars	Gratuity	Leave Encashment
1	Fair value of Plan Assets (Opening)	Nil	Nil
2	Expected return on Assets	Nil	Nil
3	Employer contribution	76,00,000	83,91,536
4	Plan participant's contribution	Nil	Nil
5	Settlements by Fund Manager	Nil	Nil
6	Benefit payouts	(76,00,000)	(83,91,536)
7	Actuarial Gains/(Loss)	Nil	Nil
8	Fair Value of Assets at the End	Nil	Nil
9	Actual return on Plan Assets	Nil	Nil

 e) Reconciliation of Net Assets/ (Liabilities) recognized in Balance Sheet as at 31 March2021

Sl. No.	Particulars	Gratuity	Leave Encashment
1	Net Asset/ (Liability) recognized at the beginning of the period	(15,72,24,634)	(16,86,55,819)
2	Employer expense	(1,30,73,075)	(1,22,41,891)
3	Employer Contribution	76,00,000	83,91,536
4	Acquisition/ Divestures	Nil	Nil
5	Effect of the Limit in Para 59(b)	Nil	Nil
6	Net Asset/ (Liability) recognized at the end of the period	(16,26,97,709)	(17,25,06,174)

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f) Components of the experience adjustments for financial year 2020-2021.

		(Ame	ount in Rupees)	
Sl. No.	Particulars	Gratuity	Leave Encashment	
1	Actuarial (Gains)/ Losses due to Demographic Assumption changes in DBO	0	(0)	
2	Actuarial (Gains) and Losses On Obligation Due to Financial Assumption change in DBO	(29,32,520)	(41,79,574)	
3	Actuarial (Gains)/ Losses due to Experience Adjustment	(81,58,457)	(94,07,348)	
4	Total Gains/ Losses for the year	(1,10,90,977)	(1,35,86,922)	
5	Actuarial (Gains)/ Losses recognized in the year	(1,10,90,977)	(1,35,86,922)	

# II. Non-Teaching Staff

g) Expenses recognized in Income and Expenditure Account during current financial year 2020-2021.

Sl. No.	Particulars	Gratuity	Leave Encashment
1	Current Service Cost	31,80,994	21,41,169
2	Interest Cost	47,08,626	31,55,252
3	Expected Return on Assets	Nil	Nil
4	Curtailment Costs	Nil	Nil
5	Settlement Costs	Nil	Nil
6	Past Service Costs	Nil	Nil
7	Net Actuarial (Gain)/Loss	5,87,294	23,21,182
8	Others	Nil	Nil
9	Employee expense recognized in Income and Expenditure Account	84,76,914	76,17,602



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h) Amount recognized in Balance Sheet as at 31 March 2021

Sl. No.	Particulars	Gratuity	Leave Encashment
1	Present Value of Defined Benefit Obligation	7,62,09,075	5,16,93,955
2	Fair Value of Plan Assets	Nil	Nil
3	Funded Status [Surplus/ (Deficit)]	(7,62,09,075)	(5,16,93,955)
4	Unrecognized Past Service Costs	Nil	Ni
5	Net Assets/ (Liability) recognized in Balance Sheet	(7,62,09,075)	(5,16,93,955)
6	Present Value of Encashment Obligation	Not Applicable	5,16,05,395
7	Present Value of Availment Obligation	Not Applicable	88,560

(Amount in Rupees)

i) Changes in present value of defined benefit obligations during the financial year 2020-2021.

Sl. No.	Particulars	Gratuity	Leave Encashment
1	Present value of Defined Benefit Obligations (Opening)	7,53,87,157	5,18,27,970
2	Current Service Cost	31,80,994	21,41,169
3	Interest Cost	47,08,626	31,55,252
4	Plan Amendments	Nil	Nil
5	Prior Service Costs	Nil	Nil
6	Curtailments	Nil	Nil
7	Settlements	Nil	Nil
8	Actuarial (Gains)/Loss	5,87,294	23,21,182
9	Benefits Paid	(76,54,996)	(77,51,617)
10	Acquisition/ Divestures	Nil	Nil
11	Present Value of Defined Benefit Obligation (Closing)	7,62,09,075	5,16,93,955

(Amount in Rupees)

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j) Reconciliation of opening and closing value of Plan assets for the financial year 2020-2021.

	(Amount in Rupees		
Sl. No.	Particulars	Gratuity	Leave Encashment
1	Fair value of Plan Assets (Opening)	Nil	. Nil
2	Expected return on Assets	Nil	Nil
3	Employer contribution	76,54,996	77,51,617
4	Plan participants contribution	Nil	Nil
5	Settlement by Fund Manager	Nil	Nil
6	Benefit payouts	(76,54,996)	(77,51,617)
7	Actuarial Gains/(Loss)	Nil	Nil
8	Fair Value of Assets at the End	Nil	Nil
9	Actual return on Plan Assets	Nil	Nil

k) Reconciliation of Net Assets/ (Liabilities) recognized in Balance Sheet as at 31 March 2021.

(Amount in Rupees)

SI. No.	Particulars	Gratuity	Leave Encashment
1	Net Asset/ (Liability) recognized at the beginning of the period	(7,53,87,157)	(5,18,27,970)
2	Employer expense	(84,76,914)	(76,17,602)
3	Employer Contribution	76,54,996	77,51,617
4	Acquisition/ Divestures	Nil	Nil
5	Effect of the Limit in Para 59(b)	Nil	Nil
6	Net Asset/ (Liability) recognized at the end of the period	(7,62,09,075)	(5,16,93,955)

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I) Components of the experience adjustments for the financial year 2020-2021

Sl. No.	Particulars	Gratuity	Leave Encashment
1	Actuarial (Gains)/ Losses due to Demographic Assumption changes in DBO	Nil	Nil
2	Actuarial (Gains) and Losses On Obligation Due to Financial Assumption change in DBO	98,530	94,847
3	Actuarial (Gains)/ Losses due to Experience Adjustment	4,88,764	22,26,335
4	Total (Gains)/ and Losses for the year	5,87,294	23,21,182
5	Actuarial (Gains) / Losses recognized in the year	5,87,294	23,21,182

#### (Amount in Rupees)

## m) Actuarial Assumptions

Principal assumptions made for Actuarial valuation are:

Sl. No.	Particulars	Gratuity		Leave Encashment	
		Teaching	Non- Teaching	Teaching	Non- Teaching
1	Method Used		Projected Unit (	Credit Method	
2	Discount rate	7.06%	6.55%	7.06%	6.55%
3	Expected Return on Assets	0.00%	0.00%	0.00%	0.00%
4	Salary Escalation	6.00%	6.00%	6.00%	6.00%
5	Attrition Rate	3.00%	3.00%	3.00%	3.00%
	Demographic Assumptions:				
	a) Mortality	Indian as	sured lives Mort	ality (2012-14)	Ultimate
	b) Disability		5% of Mort	ality rates	
	c) Withdrawal	3.00%	3.00%	3.00%	3.00%
	d) Retirement age	65	60	65	60

# **Defined Contribution Plan**

Employer's (Institute's) contribution to New Pension Scheme and Contributory Provident Fund has been recognized as an expense for the financial year 2020-21.

## **General Provident Fund**

The Fund balance as on 31 March 2021 amounting to Rs.13,42,54,061/-. The Institute has obligation to pay the dues along with the interest notified by the Government of India

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from time to time. The aforesaid amount is sufficient to cover any interest shortfall during the current financial year; hence, no provision is made for interest difference, if any, in the current year's financial statements.

## **21.HONORARIUM**

Honorarium paid to experts/faculty/ staff during the financial year 2019-20 is as follows:

Sl. No.	Particulars	2020-21	2019-20
1	Faculty Recruitment	NIL	NIL
2	Thesis Evaluation	16,56,705	14,44,448
3	Others	NIL	
	Total	16,56,705	14,44,448

(Amount in Rupees)

(Refer Schedule 15- Staff payments and Benefits [Establishment Expenses])

## 22.E-JOURNALS

The Institute spent Rs.2,70,40,286/- on subscription of e-journals in the financial year. As per Accounting Standard 26 issued by the Institute of Chartered Accountants of India, intangible assets on which the benefit extends beyond one year can be capitalized else the expenditure should be expensed in the year in which the benefits are derived. As the subscriptions to e-journals made in 2020-21 are valid for one year, the whole amount is written off as an expense in the current year 2020-21.

(Refer Schedule 16- Academic Expenses)

## 23.DEPARTMENTS OPERATING COST

The details of operating cost (DOC) for different departments are as follows:

		(Amount in Rupees)	
Sl. No.	Particulars (DOC)	2020-21	2019-20
1	Architecture	(38,54,599)	48,62,713
2	Civil Engineering	14,68,365	20,49,468
3	Computer Science & Engineering	12,09,611	18,92,655
4	Electronics & Communication Engineering	10,29,615	24,11,627
5	Electrical & Electronics Engineering	12,12,230	35,30,055

(Amount in Rupees)

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	Total	1,47,31,663	3,61,72,749
22	Other	41,300	
21	Main computer centre	(3,79,279)	13,94,096
20	Bio-Mech		43,097
19	General	90,29,256	38,17,446
18	Training & Placement	21,318	5,41,645
17	Campus Networking Centre	4,55,989	4,92,320
16	Chemistry	14,80,980	14,27,200
15	School of Management Studies	5,47,249	4,61,057
14	Nano-technology	1,51,457	10,52,630
13	Bio-Technology	8,75,092	10,02,168
12	Physics	11,57,432	10,05,992
11	Chemical Engineering	5,51,594	16,56,317
10	Physical Education		(47,358)
9	Mechanical Engineering	(8,67,673)	73,40,662
8	Mathematics	3,32,912	8,53,984
7	Library	2,40,595	2,63,369
6	Hospital	28,219	1,21,606

(Refer Schedule 17- Administrative and General Expenses).

# 24. OPERATING LEASE

The details with regard to operating lease are given below:

	(	Amount in Rupee	es)
SI. No.	Particulars	2020-21	2019-20
1	Not later than one year	NIL	NIL
2	Later than one year and not later than five years	NIL	NIL
3	Later than five years	NIL	NIL

(Refer Schedule 18- Transportation Expenses).



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## 25.PRIOR PERIOD INCOME

Prior period income for the current financial year is Rs. 3,50,004. (Refer Schedule 14-Prior Period Income).

# 26. PRIOR PERIOD EXPENSES

Disclosure for prior period expenses for financial year 2020-21 is as under:

(Amount in Rupees)

Sl. No.	Particulars	2020-21	2019-20
1	Depreciation	NIL	NIL
2	Others	NIL	28,757
	Total	0	28,757

(Refer Schedule 22-Prior Period Expenses).

# 27.TRANSFERS FROM CAPITAL GRANT (PLAN FUND)

As per the Income Approach of AS-12 issued by the Institute of Chartered Accountants of India, an amount equal to the proportion of the current year's depreciation on fixed assets that were purchased using Government grants has to be transferred from the Capital Grant account to Income and Expenditure Account every year.

(Refer Schedule 1- Capital Fund and Schedule 4- Fixed Assets-Total Depreciation).

# 28. CONTINGENT LIABILITIES AND CONTINGENT ASSETS

- In respect of Central Academic Block constructed in 2013-2014, the contractor has filed a suit in the court of law (Case number O.S. 611/2011), which is *sub judice*; therefore, no quantification of the claim, if any, is made as on Balance Sheet date.
- ii. In respect of Central Library Building, the contractor has filed three suits in the court of law. The first case (No. OS.839/2009) is towards claiming of extra rate for TMT steel used in construction of the building while the second suit (No. OS 805/2011) relates to revoking of penalty imposed by the Institute and the third case (No. OS.659/2012) pertains to termination of the construction contract at the risk and cost of the contractor. The amount in dispute is approx. Rs.2,50,00,000/- which

is pending adjudication before Hon'ble Sub Court, Kozhikode. The Institute has not made any provision towards the possible liability that may arise on this account. The contractor has also filed two Writ Petitions (WP(C) 33865/2014 and WP(C) 12347/2015) for undertaking the balance construction work at the prevailing rate; the petitions are pending before the Hon'ble High Court of Kerala at Ernakulam.

- iii. The Institute has filed an appeal (RFA No. 435 of 2014) against the judgment in Case No. OS 259/2010 in connection with the construction of building for Chemical Engineering Department and pledged a Fixed Deposit Receipt for Rs.50,00,000/- made out of Plan Fund towards additional security before the Hon'ble First Additional Sub-Judge, Kozhikode. No provision has been made in the accounts.
- iv. As on 31 March 2019, some court cases filed against the Institute by contractors, employees, etc., are sub judice in various courts of law. The quantum of the claims is not ascertainable at that date and hence, no liability is recognized in the Balance Sheet.
- 29. Schedules 1 to 24 herein above are annexed to and form an integral part of the Balance Sheet as at 31 March 2020 and the Income and Expenditure Account for the year ended on that date.
- **30.** Schedules 25 to 42 annexed forms an integral part of the Receipts and Payments account for the year ended on that date.
- 31. The General Provident Fund account is owned by the members of the fund and not by the Institute. As such, this account is disclosed separately from the Institute's accounts from 1 April 2014. A Receipt and Payment Account, an Income and Expenditure Account (on accrual basis) and a Balance Sheet of the Provident Fund account for the financial year 2019-20 have been appended to the Institute's annual accounts.
- 32.All subscribers of New Pension Scheme (NPS) are allotted with PRA numbers and the Institute does not maintain data regarding their subscriptions and matching contributions. Therefore, separate set of accounts are not required for NPS.

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		ANNEXURE A	
Cer	tified balances of Bank Ac		ts shown in the
	Institute	's books of accounts	
-			
(i)		Savings Accounts	la la secondada a
			(Amount in Rupees)
S. No	Bank & Branch Details	A/c No	Amount
1	PNB ,LINK ROAD	1423000105436300	56,46,776.50
2	PNB,MKV	4312000100731440	19,081.00
3	PNB,KPK MENON	4258000105056900	52,054.00
4	HDFC, CALICUT	12551450000070	2,21,019.00
5	UCO, CALICUT	1470100010215	7,28,025.00
6	SBI,NIT	10401159325	45,329.47
7	SBI,NIT	10401160396	57,744.86
8	SBI,NIT	10401160454	1,22,59,851.23
9	SBI,NIT	30583579511	1,05,129.00
10	SBI,NIT	30705794534	2,24,342.00
11	SBI,NIT	30971545390	40,50,872.25
12	SBI,NIT	31064842240	594.00
13	SBI,NIT	31098052035	24,41,207.00
14	SBI,NIT	31444243085	3,09,681.00
15	SBI,NIT	31994129466	17,53,507.75
16	SBI,NIT	32399109132	20,62,841.75
17	SBI,NIT	33413466990	52,86,144.00
18	SBI,NIT	35570283919	6,80,114.50
19	SBI,NIT	35582060998	1,83,188.00
20	SBI,NIT	35730420414	28,88,163.00
21	SBI,NIT	35730420822	28,88,163.00
22	SBI,NIT	35730421214	28,88,163.00
23	SBI,NIT	35730436537	28,88,163.00
24	SBI,NIT	35981271500	4,90,46,279.78
25	SBI,NIT	37090485326	7,34,788.00
26	SBI,NIT	37838333933	12,16,94,098.85
27	SBI,NIT	38224161112	51,09,301.25
28	SBI,NIT	38224161622	2,58,19,645.75
20	the second s	38297554301	43,17,18,622.4
30	SBI,NIT SBI,NIT	10401159303	1,10,01,355.55
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31	SBI,NIT	10401159314	5,23,25,028.27
32	SBI,NIT	10401159530	5,38,18,843.9
33	SBI,NIT	10401159802	29,60,50,286.70
34	SBI,NIT	10401160578	6,26,39,538.14
35	SBI,NIT	30261390339	56,54,83,191.09
36	SBI,NIT	39140066916	1,44,12,854.00
a la surda de	T	otal	1,73,75,33,988.0

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(ii)		<b>Current Accounts</b>	
1	SBI,NIT	30846292747	1,17,02,357.00
2	SBI,NIT	36379213387	4,26,594.48
3	SBI,NIT	36379215839	27,268.86
4	SBI,NIT	36379216015	2,011.20
5	SBI,NIT	10401158082	19,59,08,785.74
6	SBI,NIT	10401158106	1,80,50,443.36
7	SBI,NIT	34899799867	12,21,386.50
8	CANARA,CLT	839201000560	4,40,06,792.20
9	CANARA,CLT	839201000561	6,344.00
10	CANARA,CLT	839201000567	49,98,642.05
		otal	27,63,50,625.39
(iii)		Term Deposits	21,00,00,020,020
	CDI NUT		1 12 12 120 00
1	SBI NIT	37161047237	1,12,42,130.00
2	SBI NIT	37161047282	1,12,42,130.00
3	SBI NIT	37161047328	1,12,42,130.00
4	SBINIT	36043107039	30,62,050.00
5	SBI NIT	36042749067	12,29,099.00
6	SBI ,NIT	36312000910	10,12,439.00
7	SBI NIT	37158510893	5,26,24,992.00
8	SBI NIT	37158545237	1,07,66,374.00
9	SBI ,NIT	35397552993	99,60,818.00
10	SBI ,NIT	32808580270	99,58,843.00
11	SBI ,NIT	35420944340	83,48,808.00
12	SBI ,NIT	35791056509	1,03,00,973.00
13	SBI ,NIT	35307800580	83,74,614.00
14	SBI ,NIT	35791081229	44,85,787.00
15	SBI ,NIT	35791081150	1,03,00,973.00
16	SBI ,NIT	36234482323	39,89,780.00
17	SBI ,NIT	36234470190	29,99,803.00
18	SBI ,NIT	36234470474	39,80,375.00
19	SBI ,NIT	36231819395	32,97,676.00
20	SBI ,NIT	36231788478	1,13,13,734.00
21	SBI ,NIT	36231787269	1,13,13,734.00
22	SBI ,NIT	36231785137	1,13,13,734.00
23	SBI ,NIT	36231782216	1,13,13,734.00
24	SBI ,NIT	36231776007	1,13,13,734.00
25	SBI ,NIT	36231774725	1,13,13,734.00
26	SBI ,NIT	36231772036	1,13,13,734.00
27	SBI ,NIT	36231773299	1,13,13,734.00
28	SBI ,NIT	36231766736	1,13,13,734.00
29	SBI ,NIT	36234504405	98,88,595.00
30	SBI ,NIT	36714003255	1,07,89,235.00
31	SBI ,NIT	35211095348	3,18,58,577.00
32	SBI,NIT	36714003277	1,07,89,235.00
33	SBI ,NIT	36812083014	1,07,74,806.00
34	SBI ,NIT	36812085873	1,07,74,806.00

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Carl I and a second second			
35	SBI ,NIT	36812086128	1,07,74,806.00
36	SBI ,NIT	36812108053	50,72,156.00
37	SBI ,NIT	36812108122	92,87,281.00
38	SBI ,NIT	32797684133	1,10,96,859.00
39	SBI ,NIT	32793896072	4,25,72,359.00
40	SBI ,NIT	35385766396	98,79,122.00
41	SBI ,NIT	35385766884	1,14,58,429.00
42	SBI ,NIT	32775839242	99,82,770.00
43	SBI ,NIT	35079068695	95,03,419.00
44	SBI ,NIT	35079067443	95,03,419.00
45	SBI ,NIT	35079069586	95,03,419.00
46	SBI ,NIT	35079055642	94,34,646.00
47	SBI ,NIT	36455246010	1,12,98,023.00
48	SBI ,NIT	36455249667	1,12,98,023.00
49	SBI ,NIT	36455249725	the second se
50	SBI ,NIT		1,12,98,023.00
51		36455249792	53,07,351.00
52	SBI ,NIT	36234525482	1,23,29,729.00
	SBI ,NIT	36234525119	1,23,29,729.00
53	SBI ,NIT	36234523745	1,23,29,729.00
54	SBI ,NIT	36234523348	1,23,29,729.00
55	SBI ,NIT	36234522742	1,23,29,729.00
56	SBI ,NIT	36234521432	1,23,29,729.00
57	SBI ,NIT	36234499835	40,60,287.00
58	SBI ,NIT	36234517379	1,23,29,729.00
59	SBI ,NIT	36234519536	1,23,29,729.00
60	SBI ,NIT	36234525674	1,23,29,729.00
61	SBI ,NIT	36234525845	1,23,29,729.00
62	SBI ,NIT	36234526032	1,23,29,729.0
63	SBI ,NIT	36234526214	1,23,29,729.0
64	SBI ,NIT	36234536506	1,23,29,729.0
65	SBI ,NIT	36234515429	68,74,850.00
66	SBI ,NIT	36234536743	1,23,29,729.0
67	SBI ,NIT	36234536889	1,23,29,729.00
68	SBI ,NIT	36234513001	67,99,740.0
69	SBI ,NIT	36234538694	1,23,29,729.0
70	SBI ,NIT	36234536970	1,23,29,729.0
71	SBI ,NIT	36234505895	1,08,17,298.0
72	SBI ,NIT	36331596395	86,17,400.0
73	SBI ,NIT	36231790442	1,13,13,734.0
74	SBI ,NIT	36231792734	1,13,13,734.0
75	SBI ,NIT	36231795407	1,13,13,734.0
76	SBI ,NIT	36231795677	1,13,13,734.0
77	SBI ,NIT	36231801999	1,13,13,734.0
78	SBI ,NIT	36231803985	1,13,13,734.0
79	SBI ,NIT	36231805985	
80	SBI ,NIT	36231808192	1,13,13,734.00
81	and the second		1,13,13,734.00
01	SBI ,NIT	36231807185	1,13,13,734.00

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82	SBI ,NIT	36231783945	1,13,13,734.0
83	SBI ,NIT	36231770152	1,13,13,734.0
84	SBI,NIT	36231819703	92,48,581.0
85	SBI,NIT	35293809903	7,06,850.0
86	SBINIT	38002158419	61,93,017.0
87	SBI NIT	38002378161	4,37,15,099.0
88	SBI,NIT	38947580787	1,05,85,683.0
89	SBI,NIT	38947580346	2,01,12,796.0
90	SBI,NIT	38947580028	2,01,12,796.0
91	SBI,NIT	38947579680	2,01,12,796.0
92	SBI,NIT	38947579374	2,01,12,796.0
93	SBI,NIT	38947579192	2,01,12,796.0
94	SBI,NIT	38947578905	2,01,12,796.0
95	SBI,NIT	38947578632	2,01,12,796.0
96	SBI,NIT	38947578382	2,01,12,796.0
97	SBI,NIT	38947578064	2,01,12,796.0
98	SBI,NIT	38947577559	2,01,12,796.0
99	SBI,CLT	32457363478	1,03,00,072.0
100	SBI,CLT	32457358254	
101	PNB ,LINK ROAD	142300DP00009337	1,03,00,072.0
102	PNB ,LINK ROAD		92,16,561.0
102	PNB ,LINK ROAD	142300DP00009434	97,84,559.0
103	PNB ,LINK ROAD	142300DP00009601	55,95,784.0
104	PNB ,LINK ROAD	142300DP00009878	97,19,829.0
105	The second se	142300DP00009887	97,19,828.0
100	PNB ,LINK ROAD	142300DP00009896	97,19,829.0
107	PNB ,LINK ROAD PNB ,LINK ROAD	142300DP00009902	97,19,830.0
108		142300DP00009911	97,19,829.0
110	PNB ,LINK ROAD	142300DP00009920	97,19,829.0
111	PNB ,LINK ROAD PNB ,LINK ROAD	142300DP00009939	97,19,829.0
112		142300DP00009948	25,55,549.0
	PNB ,LINK ROAD	142300DP00010122	1,06,72,355.0
113	PNB ,LINK ROAD	142300DP00010131	1,02,89,458.0
114	PNB ,LINK ROAD	142300DP00010344	96,72,716.0
115	PNB ,LINK ROAD	142300DP00010353	96,72,716.0
116	PNB ,LINK ROAD	142300DP00010362	57,50,236.0
117	PNB ,LINK ROAD	142300DP00011255	1,01,36,554.0
118	PNB ,LINK ROAD	142300DP00011264	80,89,218.0
119	PNB ,LINK ROAD	142300DP00011273	1,01,35,112.0
120	PNB ,LINK ROAD	142300DP00011282	1,01,35,112.0
121	PNB ,LINK ROAD	142300DP00011291	1,01,35,111.0
122	PNB ,LINK ROAD	142300DP00011307	93,86,119.0
123	PNB ,LINK ROAD	142300DP00011556	1,00,79,847.0
124	PNB ,LINK ROAD	142300DP00011565	1,00,79,846.0
125	PNB ,LINK ROAD	142300DP00011574	1,00,79,846.0
126	PNB ,LINK ROAD	142300DP00011583	1,00,79,847.0
127	PNB ,LINK ROAD	142300DP00011592	1,00,79,846.0
128	PNB ,LINK ROAD	142300DP00011608	1,00,79,845.0

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	and the second sec		
129	PNB ,LINK ROAD	142300DP00012360	96,90,438.00
130	PNB ,LINK ROAD	142300DP00012379	96,90,439.00
131	PNB ,LINK ROAD	142300DP00012388	96,90,439.00
132	PNB ,LINK ROAD	142300DP00012397	90,88,216.00
133	PNB ,LINK ROAD	142300DP00012591	4,61,842.00
134	PNB ,LINK ROAD	142300DP00012607	4,98,698.00
135	PNB ,LINK ROAD	142300DP00012616	4,98,698.00
136	PNB ,LINK ROAD	142300DP00012625	4,98,697.00
137	PNB ,LINK ROAD	142300DP00012634	4,98,882.00
138	PNB ,LINK ROAD	142300DP00012786	11,73,144.00
139	PNB ,LINK ROAD	142300DP00012795	12,16,797.0
140	PNB ,LINK ROAD	142300DP00012801	6,54,223.0
141	PNB ,LINK ROAD	142300DP00012810	11,00,497.0
142	PNB ,LINK ROAD	142300DP00012829	11,00,497.0
143	PNB ,LINK ROAD	142300DP00012935	6,56,543.0
144	PNB ,LINK ROAD	142300DP00012944	6,56,499.0
145	PNB ,LINK ROAD	142300DP00012953	6,56,497.0
146	PNB ,LINK ROAD	142300DP00012962	6,56,499.0
147	PNB ,LINK ROAD	142300DP00012971	6,07,985.0
148	PNB ,LINK ROAD	142300DP00012971	
149	PNB ,LINK ROAD	142300PU00003503	1,58,859.0
150	PNB ,LINK ROAD	142300PU00003910	44,79,408.0
151	PNB ,LINK ROAD		8,01,851.0
152	PNB ,LINK ROAD	142300PU00003929	7,42,478.0
152		142300PU00003938	8,01,728.0
	PNB ,LINK ROAD	142300PU00003947	8,01,726.0
154	PNB ,LINK ROAD	142300PU00003956	8,01,726.0
155	PNB ,LINK ROAD	142300PU00004955	4,91,126.0
156	PNB ,LINK ROAD	142300PU00004964	4,91,129.0
157	PNB ,LINK ROAD	142300PU00004973	4,91,127.0
158	PNB ,LINK ROAD	142300PU00004982	4,91,127.0
159	PNB ,LINK ROAD	142300PU00004991	4,91,126.0
160	PNB ,LINK ROAD	142300PU00005006	4,91,128.0
161	PNB ,LINK ROAD	142300PU00005112	4,50,721.0
162	PNB ,LINK ROAD	142300PU00005219	4,29,367.0
163	PNB ,LINK ROAD	142300PU00005228	4,72,986.0
164	PNB ,LINK ROAD	142300PU00005237	4,72,986.0
165	PNB ,LINK ROAD	142300PU00005246	4,72,986.0
166	PNB ,LINK ROAD	142300PU00005255	4,72,988.0
167	PNB ,LINK ROAD	142300PU00005264	4,72,984.0
168	PNB ,LINK ROAD	142300PU00005273	4,72,987.0
169	PNB, LINK ROAD	142300PU00005644	11,09,643.0
170	PNB ,LINK ROAD	142300PU00005653	11,09,642.0
171	PNB ,LINK ROAD	142300PU00005662	11,09,642.0
172	PNB, LINK ROAD	142300PU00005671	11,09,641.0
173	PNB, LINK ROAD	142300PU00005680	11,09,647.0
174	PNB ,LINK ROAD	142300PU00005699	11,09,640.0
175	PNB ,LINK ROAD	142300PU00005705	11,09,642.0

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176	PNB ,LINK ROAD	142300PU00005714	2,91,751.00
177	PNB ,LINK ROAD	142300PU00006360	6,54,268.00
178	PNB ,LINK ROAD	142300PU00006379	6,54,274.00
179	PNB ,LINK ROAD	142300PU00006388	6,54,269.00
180	PNB ,LINK ROAD	142300PU00006397	6,54,274.00
181	PNB ,LINK ROAD	142300PU00006403	6,54,271.00
182	PNB ,LINK ROAD	142300PU00006412	6,54,271.00
183	PNB ,LINK ROAD	142300PU00006430	1,91,268.00
184	PNB ,LINK ROAD	142300PU00006573	28,439.00
185	PNB ,LINK ROAD	142300PU00006582	42,81,853.00
186	PNB ,LINK ROAD	142300PU00006591	2,06,301.00
187	PNB ,LINK ROAD	142300PU00003327	98,20,994.00
188	PNB ,LINK ROAD	142300PU00004283	7,63,004.00
189	PNB ,LINK ROAD	142300PU00003345	98,20,994.00
190	PNB ,LINK ROAD	142300PU00004308	7,63,000.00
191	PNB ,LINK ROAD	142300PU00003336	98,20,995.00
192	PNB ,LINK ROAD	142300PU00004292	7,63,003.00
193	PNB ,LINK ROAD	142300PU00003354	98,20,995.00
194	PNB ,LINK ROAD	142300PU00004317	7,63,005.00
195	PNB ,LINK ROAD	142300PU00003363	98,20,994.00
196	PNB ,LINK ROAD	142300PU00004326	7,63,003.00
197	PNB ,LINK ROAD	142300PU00003372	98,20,994.00
198	PNB,LINK ROAD	142300PU00004335	7,63,003.00
199	PNB ,LINK ROAD	142300PU00003381	89,15,303.00
200	PNB ,LINK ROAD	142300PU00004274	6,92,640.00
201	PNB ,LINK ROAD	142300PU00003390	93,18,542.00
202	PNB ,LINK ROAD	142300PU00006494	5,88,012.00
203	PNB ,LINK ROAD	142300PU00003406	98,43,969.00
204	PNB ,LINK ROAD	142300PU00003831	7,88,740.00
205	PNB ,LINK ROAD	142300PU00004849	5,20,198.00
206	PNB ,LINK ROAD	142300PU00006175	6,11,595.00
207	PNB ,LINK ROAD	142300PU00003415	98,43,969.00
208	PNB ,LINK ROAD	142300PU00003789	9,05,112.00
209	PNB ,LINK ROAD	142300PU00003840	7,88,740.00
210	PNB ,LINK ROAD	142300PU00003965	9,03,600.00
211	PNB ,LINK ROAD	142300PU00004858	5,20,197.00
212	PNB ,LINK ROAD	142300PU00004876	39,81,717.00
213	PNB ,LINK ROAD	142300PU00006166	6,11,596.00
214	PNB ,LINK ROAD	142300DP00012883	3,95,347.00
215	PNB , LINK ROAD	142300PU00004052	7,47,822.00
216	PNB , LINK ROAD	142300PU00004061	7,47,823.00
217	PNB, LINK ROAD	142300PU00004070	7,96,460.00
218	PNB ,LINK ROAD	142300PU00003424	86,08,766.00
219	PNB ,LINK ROAD	142300DP00012874	1,50,848.00
220	PNB ,LINK ROAD	142300PU00003433	32,84,725.00
221	PNB ,LINK ROAD	142300PU00003974	19,29,308.00
222	PNB ,LINK ROAD	142300PU00004089	7,47,822.00

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223	PNB ,LINK ROAD	142300PU00004098	7,47,823.00
224	PNB ,LINK ROAD	142300PU00004104	7,96,460.00
225	PNB ,LINK ROAD	142300PU00006449	48,534.00
226	PNB ,LINK ROAD	142300PU00006458	48,535.00
227	PNB ,LINK ROAD	142300PU00006467	48,536.00
228	PNB ,LINK ROAD	142300PU00006476	48,536.00
229	PNB ,LINK ROAD	142300PU00003442	1,04,14,521.00
230	PNB ,LINK ROAD	142300DP00012865	85,079.00
231	PNB ,LINK ROAD	142300DP00013165	8,602.00
232	PNB ,LINK ROAD	142300DP00013174	4,851.00
233	PNB ,LINK ROAD	142300PU00003451	18,52,637.00
234	PNB ,LINK ROAD	142300PU00003983	37,34,652.00
235	PNB ,LINK ROAD	142300PU00004256	7,23,332.00
236	PNB ,LINK ROAD	142300PU00007439	22,541.00
237	PNB,MKV	431200PU00010677	1,15,40,059.00
238	ΡΝΒ,ΜΚΥ	431200PU00010686	1,15,40,057.00
239	PNB,MKV	431200PU00010695	25,64,456.00
240	ΡΝΒ,ΜΚΥ	431200PU00006018	13,08,845.00
241	PNB,MKV	431200PU00011861	41,30,706.00
242	PNB,MKV	431200PU00011852	1,11,10,436.00
243	PNB,MKV	431200PU00011834	1,11,10,436.00
244	PNB,MKV	431200PU00011843	1,11,10,435.00
245	PNB,MKV	431200PU00011816	1,11,10,435.00
246	PNB,MKV	431200PU00011825	1,11,10,438.00
247	PNB,MKV	431200PU00006027	96,99,057.00
248	PNB,MKV	431200PU00009778	1,27,50,366.00
249	PNB,MKV	431200PU00005736	96,87,221.00
250	PNB,MKV	431200PU00010039	80,19,820.00
251	PNB,MKV	431200PU00009839	1,27,50,367.00
252	PNB,MKV	431200PU00009848	1,27,50,365.00
253	PNB,MKV	431200PU00009857	1,27,50,368.00
254	PNB,MKV	431200PU00009866	1,27,50,367.00
255	PNB,MKV	431200PU00009875	1,27,50,366.00
256	PNB,MKV	431200PU00009884	1,27,50,366.00
257	PNB,MKV	431200PU00006036	1,20,26,276.00
258	PNB,MKV	431200PU00009893	1,27,50,366.00
259	PNB, KPK MENON	425800DP00011236	96,22,978.00
260	PNB, KPK MENON	425800DP00011227	96,22,980.00
261	PNB, KPK MENON	425800DP00011245	96,22,980.00
262	PNB, KPK MENON	425800DP00011254	96,22,965.00
263	PNB, KPK MENON	425800DP00011263	96,22,962.00
264	PNB, KPK MENON	425800DP00010662	85,53,746.00
265	PNB, KPK MENON	425800DP00010671	85,53,749.00
266	PNB, KPK MENON	425800DP00010680	85,53,746.00
267	PNB, KPK MENON	425800DP00010699	36,35,343.00
268	UCO ,BANK	1470310049006	1,04,38,941.00
269	UCO ,BANK	1470310049037	1,04,37,583.00

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1	T	otal	3,73,113.89
1	SBI, CALICUT	35350525917	3,73,113.89
S. No	Bank & Branch Details	A/c No	(Amount in USD)
(iv)	Forex Accounts		
	T	otal	2,18,86,87,269.00
283	CANARA,CLT	0839303000302/6	1,40,21,764.00
282	CANARA,CLT	0839303000302/5	1,90,29,536.00
281	CANARA,CLT	0839303000302/7	1,10,17,099.00
280	UCO ,BANK	1470310049204	1,15,74,980.00
279	UCO ,BANK	1470310046630	65,53,944.00
278	UCO ,BANK	1470310046586	1,17,96,443.00
277	UCO ,BANK	1470310049136	1,04,16,465.00
276	UCO ,BANK	1470310049143	1,04,15,107.00
275	UCO ,BANK	1470310049112	1,04,28,073.00
274	UCO ,BANK	1470310049105	1,04,29,431.00
273	UCO ,BANK	1470310049082	1,04,30,790.00
272	UCO ,BANK	1470310049068	1,04,33,507.00
271	UCO ,BANK	1470310049051	1,04,34,866.00
270	UCO ,BANK	1470310049044	1,04,36,224.00

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	1	ANNEXURE B		
Bank Accounts for Projects shown in Books of Accounts (Savings)				
	T T		(Amount in Rupees)	
5.No	Bank & Branch Details	A/c No	Amount	
1	SBI,NIT	30428621431	6,34,085.00	
2	SBI,NIT	30458848311	17,17,366.00	
3	SBI,NIT	30506640444	35,96,794.00	
4	SBI,NIT	30808033649	15,281.00	
5	SBI,NIT	30948537262	12,327.00	
6	SBI,NIT	31091558694	568.44	
7	SBI,NIT	31130641093	20,48,321.00	
8	SBI,NIT	31735759406	-	
9	SBI,NIT	31735764063	-	
10	SBI,NIT	31762778358	214.12	
11	SBI,NIT	31789866710	22,64,406.00	
12	SBI,NIT	31789868139	46,322.00	
13	SBI,NIT	31915181691	2,423.00	
14	SBI,NIT	32015957716	3,910.00	
15	SBI,NIT	32101535934	1,847.00	
16	SBI,NIT	32246641696		
17	SBI,NIT	32563027683	2,551.00	
18	SBI,NIT	32579164962	-	
19	SBI,NIT	32954434797	1,83,486.00	
20	SBI,NIT	33015477472	1,798.85	
21	SBI,NIT	33049806044	30,993.00	
22	SBI,NIT	33067690208	38,97,234.00	
23	SBI,NIT	33175087386	22,139.50	
24	SBI,NIT	33187581587	21,227.00	
25	SBI,NIT	33301926627	8,881.00	
26	SBI,NIT	33301927326	-	
27	SBI,NIT	33368719830	37,785.00	
28	SBI,NIT	33368722037	980.00	
29	SBI,NIT	33368731461	468.00	
30	SBI,NIT	33627227608	401.52	
31	SBI,NIT	33869260955	1,980.25	
32	SBI,NIT	34055770847	372.00	
33	SBI,NIT	34743361812	69,555.00	
34	SBI,NIT	34922458279	80,532.50	
35	SBI,NIT	34984625589	13,03,877.50	
36	SBI,NIT	35105587080	2,82,678.00	
37	SBI,NIT	35108714120	25,47,695.75	
38	SBI,NIT	35256507611	14,234.50	
39	SBI,NIT	35260115754	47,154.50	
40	SBI,NIT	35373645311	1,10,548.00	
41	SBI,NIT	35531852511	6,321.50	

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42	SBI,NIT	35547110999	1,70,171.50
43	SBI,NIT	34781526032	17,570.00
44	SBI,NIT	32276182737	6,835.00
45	SBI,NIT	32785641568	70,246.00
46	SBI,NIT	32785878304	1,52,285.00
47	SBI,NIT	35601784856	433.68
48	SBI,NIT	35707855365	14,95,903.50
49	SBI,NIT	35712118085	12,563.50
50	SBI,NIT	35724132844	8,91,600.35
51	SBI,NIT	35760309489	8,80,686.50
52	SBI,NIT	35909407299	14,80,769.08
53	SBI,NIT	35977962286	66,472.20
54	SBI,NIT	36028528852	6,06,478.75
55	SBI,NIT	36076948949	3,06,832.25
56	SBI,NIT	36273863935	
57	SBI,NIT	36374406306	19,838.50
58			1,556.00
59	SBI,NIT	36598636298	4,790.35
60	SBI,NIT	36697532901	2,39,414.00
	SBI,NIT	36697545105	2,683.00
61	SBI,NIT	36699462861	1,64,027.50
62	SBI,NIT	36826070008	1,64,878.50
63	SBI,NIT	36826070213	47,374.50
64	SBI,NIT	36950958352	26,334.02
65	SBI,NIT	37096085388	3,84,488.50
66	SBI,NIT	37186010229	4,762.25
67	SBI,NIT	37241357431	6,209.75
68	SBI,NIT	37251562506	1,85,993.72
69	SBI,NIT	37286864074	13,25,379.25
70	SBI,NIT	37324305638	57,626.50
71	SBI,NIT	37481542974	1,17,587.00
72	SBI,NIT	37520426749	36,58,718.50
73	SBI,NIT	37618269594	15,95,380.25
74	SBI,NIT	37720597560	16,67,973.00
75	SBI,NIT	37747553259	3,84,313.85
76	SBI,NIT	37779456678	76,449.00
77	SBI,NIT	37814761399	2,13,207.00
78	SBI,NIT	37849942885	99,803.70
79	SBI,NIT	38017800860	3,06,695.60
80	SBI,NIT	38030653645	4,055.25
81	SBI,NIT	38030654242	35,482.00
82	SBI,NIT	38044293551	4,22,702.75
83	SBI,NIT	38103882462	2,57,627.75
84	SBI,NIT	38103882983	9,03,488.50
85	SBI,NIT	38132483430	5,50,327.50
86	SBI,NIT	38180891032	13,54,611.75
87	SBI,NIT	38259781306	49,074.25
88	SBI,NIT	38276476234	5,52,680.35

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89	SBI,NIT	38297555305	16 132 00
90	SBI,NIT	38302334688	16,132.00 2,53,866.25
91	SBI,NIT	38340306789	
92		38340307057	6,88,565.75
93	SBI,NIT		1,42,017.50
	SBI,NIT	38358757972	2,98,314.50
94	SBI,NIT	38399582550	10,75,541.25
95	SBI,NIT	38399582684	22,131.00
96	SBI,NIT	38399582924	3,78,836.25
97	SBI,NIT	38415705045	18,54,666.50
98	SBI,NIT	38441229277	1,45,278.00
99	SBI,NIT	38441229539	625.00
100	SBI,NIT	38446714927	4,39,730.00
101	SBI,NIT	38446715137	3,79,759.25
102	SBI,NIT	38475444194	3,66,646.35
103	SBI,NIT	38475444445	3,52,474.60
104	SBI,NIT	38543741053	3,14,548.35
105	SBI,NIT	38550040182	2,54,668.00
106	SBI,NIT	38590885678	3,01,464.85
107	SBI,NIT	38603503929	18,198.85
108	SBI,NIT	38711830160	3,25,126.60
109	SBI,NIT	38882570452	9,91,290.35
110	SBI,NIT	39022693751	2,77,010.75
111	SBI,NIT	39022694530	20,09,523.75
112	SBI,NIT	39022694697	6,74,164.75
113	SBI,NIT	39075298670	294.25
114	SBI,NIT	39075299209	1,38,618.00
115	SBI,NIT	39075299844	5,91,348.75
116		39075304469	
1000000000	SBI,NIT		5,97,707.75
117	SBI,NIT	39075304899	6,39,496.00
118	SBI,NIT	39075305418	44,007.25
119	SBI,NIT	39106480976	1,91,078.75
120	SBI,NIT	39106481288	6,44,202.25
121	SBI,NIT	39106481539	15,55,459.00
122	SBI,NIT	39125726125	11,84,281.25
123	SBI,NIT	39169217888	5,82,550.75
124	SBI,NIT	39219255091	61,533.25
125	SBI,NIT	39506731880	43,655.00
126	SBI,NIT	39506730808	1,54,802.35
127	SBI,NIT	39553813917	3,90,654.00
128	SBI,NIT	39532201910	17,41,361.00
129	SBI,NIT	39022694857	6,82,957.25
130	SBI,NIT	39597928075	3,42,134.75
131	SBI,NIT	39532201273	27,19,145.35
132	SBI,NIT	39639368562	4,25,260.00
133	SBI,NIT	39639369112	2,62,444.00
134	SBI,NIT	39639368255	5,46,570.00
135	SBI,NIT	39682643050	6,39,580.00

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	1	otal	38,786.00
2	SBI,NIT	37021855472	28,393.00
1	SBI,NIT	37154522972	10,393.00
S.No	Bank & Branch Details	A/c No	Amount
			(Amount in Rupees)
	<b>Bank Accounts for Project</b>	s shown in Books of Acc	ounts (Current)
	Total		11,81,57,705.03
150	SBI,NIT	40032780802	-
149	SBI,NIT	39975740517	29,31,707.00
148	SBI,NIT	39961040736	2,40,639.0
147	SBI,NIT	39961039639	7,61,835.0
146	SBI,NIT	39972423874	8,87,932.00
145	SBI,NIT	39975741077	24,35,572.00
144	SBI,NIT	39972423477	1,40,32,104.00
143	SBI,NIT	39961041242	9,91,754.00
142	SBI,NIT	39961041945	29,14,240.00
141	SBI,NIT	39972424277	17,95,924.00
140	SBI,NIT	39820592642	2,01,27,225.00
139	SBI,NIT	39798625732	22,77,647.00
138	SBI,NIT	39798626054	20,66,737.00
137	SBI,NIT	39691957189	3,19,325.00
136	SBI,NIT	39691957043	5,54,202.0

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	ANNEXURE C					
List of Bank accounts and Fixed Deposits not shown in the Institutes books of accounts						
			(Amount in Rupees)			
S.No	Bank & Branch Details	A/c No	Amount			
(i)	Savings Accounts					
1	SBI,NIT	31317481538	14,734.00			
2	SBI,NIT	31725977448	487.00			
3	SBI,NIT	32385609903	4,35,328.50			
4	SBI,NIT	33605148992	20.00			
5	SBI,NIT	30013264671	3,371.00			
6	SBI,NIT	30013250817	68.00			
7	SBI,NIT	39506732329	8,35,825.00			
6	Tota	al	12,89,833.50			

(ii)		Current Accounts	
1	SBI,NIT	33950524246	18,61,60,709.59
2	SBI,NIT	35725957831	2,75,806.84
3	SBI,CLT	31039642229	2,06,461.00
	Tota		18,66,42,977.43

(iii)		Term Deposit A/c	
1	PNB,MKV	431200PU00004551	15,81,407.00
2	PNB,MKV	431200PU00014150	4,82,383.00
3	SBI,NIT	32807026844	18,69,855.00
4	SBI,NIT	36824037290	67,22,280.00
5	SBI,NIT	38380267786	39,75,232.00
6	SBI,NIT	36574989128	90,445.00
7	SBI,NIT	37572024812	95,593.00
8	SBI,NIT	39161790427	53,884.00
9	SBI,NIT	39162445119	15,849.00
10	SBI,NIT	39180588755	7,17,433.00
11	SBI,NIT	39202041712	1,51,099.00
12	SBI,NIT	40024214600	460.67
13	SBI,NIT	38764167969	49,122.00
14	SBI,NIT	39542471714	3,29,697.00
	Т	otal	1,61,34,739.67

(iv)	MOD A/c		
1	PNB,KPK MENON	425800DP00025404	1,00,000.00
2	PNB,KPK MENON	425800DP00025440	32,20,000.00
3	PNB,KPK MENON	425800DP00025486	80,000.00
4	PNB,KPK MENON	425800DP00025510	20,90,000.00
5	PNB,KPK MENON	425800DP00025556	2,50,000.00
6	PNB,KPK MENON	425800DP00025608	37,80,000.00

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	Tota	al	4,72,05,000.00
40	PNB,KPK MENON	425800DP00029598	1,30,000.00
39	PNB,KPK MENON	425800DP00029561	19,10,000.00
38	PNB,KPK MENON	425800DP00029525	5,000.00
37	PNB,KPK MENON	425800DP00028809	75,000.00
36	PNB,KPK MENON	425800DP00028678	10,000.00
35	PNB,KPK MENON	425800DP00028483	70,000.00
34	PNB,KPK MENON	425800DP00028368	27,70,000.00
33	PNB,KPK MENON	425800DP00028298	21,25,000.00
32	PNB,KPK MENON	425800DP00028146	1,60,000.0
31	PNB, KPK MENON	425800DP00027952	38,25,000.0
30	PNB,KPK MENON	425800DP00027855	2,50,000.0
29	PNB,KPK MENON	425800DP00027758	21,10,000.0
28	PNB, KPK MENON	425800DP00027679	80,000.0
27	PNB,KPK MENON	425800DP00027545	32,30,000.0
26	PNB,KPK MENON	425800DP00027420	1,00,000.0
25	PNB,KPK MENON	425800DP00027378	1,30,000.0
24	PNB,KPK MENON	425800DP00027314	16,75,000.0
23	PNB,KPK MENON	425800DP00027280	2,25,000.0
22	PNB,KPK MENON	425800DP00026582	75,000.0
21	PNB, KPK MENON	425800DP00026537	10,000.0
20	PNB,KPK MENON	425800DP00026494	27,50,000.0
19	PNB, KPK MENON	425800DP00026421	21,10,000.0
18	PNB,KPK MENON	425800DP00026333	1,60,000.0
17	PNB,KPK MENON	425800DP00026218	38,05,000.0
16	PNB,KPK MENON	425800DP00026157	2,50,000.0
15	PNB,KPK MENON	425800DP00026111	21,00,000.0
14	PNB,KPK MENON	425800DP00026069	80,000.0
13	PNB,KPK MENON	425800DP00025981	1,00,000.0 32,25,000.0
12	PNB,KPK MENON	425800DP00025981	16,60,000.0
11	PNB,KPK MENON	425800DP00025918	2,20,000.0
10	PNB,KPK MENON		
9	PNB,KPK MENON	425800DP00025769	20,90,000.0 10,000.0
7 8	PNB,KPK MENON PNB,KPK MENON	425800DP00025653 425800DP00025714	1,60,000.0

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# AUDIT CERTIFICATE AND AUDIT REPORT

2020-2021

#### SEPARATE AUDIT REPORT OF THE COMPTROLLER & AUDITOR GENERAL OF INDIA ON THE ACCOUNTS OF NATIONAL INSTITUTE OF TECHNOLOGY, CALICUT FOR THE YEAR ENDED 31 MARCH 2021

We have audited the attached Balance Sheet of National Institute of Technology, Calicut as at 31 March 2021, the Income & Expenditure Account and Receipts & Payments Account for the year ended on that date, under Section 19 (2) of the Comptroller & Auditor General's (Duties, Powers & Conditions of Service) Act, 1971 read with Section 22(2) of the National Institutes of Technology Act 2007. These financial statements are the responsibility of the Institute's management. Our responsibility is to express an opinion on these financial statements based on our audit.

2. This Separate Audit Report contains the comments of the Comptroller & Auditor General of India (CAG) on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms. Audit observations on financial transactions with regard to compliance with the Law, Rules & Regulations (Propriety and Regularity) and efficiency –cum – performance aspects, etc., if any, are reported through Inspection Reports /CAG's Audit Reports separately.

3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidences supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.

4. Based on our audit, we report that:

i. We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit;

ii. The Balance Sheet, Income & Expenditure Account and Receipts & Payments Account dealt with by this report have been drawn up in the format approved by the Ministry of Education (erstwhile Ministry of Human Resource Development), Government of India;

iii. In our opinion, proper books of accounts and other relevant records have been maintained by the National Institute of Technology, Calicut as required under Section 22(1) of the National Institutes of Technology Act, 2007 relating to the establishment of NIT, Calicut in so far as it appears from our examination of such books; and

iv. We further report that:

A. Balance sheet

#### A.1 Sources of funds

#### A.1.1 GPF & CPF (Schedule 2A) ₹36.17 crore

As per Format of Financial Statements for Central Higher Educational Institutions issued by the MHRD, the GPF and CPF Accounts should be separated from the main accounts of the Institute and these accounts should be shown separately along with Annual Accounts of the Institute. However, the Institute has included the GPF & CPF Accounts in Schedule 2A of the Balance Sheet of Main Accounts for the year 2020-21. This has resulted in overstatement of Liabilities by ₹36.17 crore in the Balance Sheet under GPF & CPF (Schedule 2A) and corresponding overstatement of Investment from Earmarked/Endowment funds in Schedule 5 by the same amount.

## A.1.2 (i) Current Liabilities and Provisions (Schedule 3) ₹158.83 crore Significant Accounting Policies- Schedule 23

As per significant accounting policy number 7 adopted by Institute, the e-journal are expensed every year considering the value of benefits derived and cost incurred therefore.

The accounting policy adopted by the Institute was in contravention of the Format of Accounts prescribed by Ministry of Education which provided that e-journal should be treated as intangible assets and depreciation at the rate of 40 percent should be provided on the same.

This has resulted into understatement of Current Liabilities & Provisions by ₹ 2.25 crore, Fixed Assets by ₹ 1.35 crore and Depreciation by ₹ 89.84 lakh. Consequently, Surplus was overstated by ₹ 89.84 lakh.

## A.1.2 (ii) Current Liabilities and Provisions (Schedule 3) ₹158.83 crore

An amount of ₹ 7.83 crore has been transferred from Central Seat Allocation Board (CASB) to the Institute's account in March 2021 being the fee paid by the UG students admitted through JEE-Main during the academic year 2020-21. Out of this, ₹ 4.19 crore belongs to the Institute and the remaining ₹ 3.64 crore is refundable to the students being excess amount paid by them during admission. The Institute had not created any provision for refund of ₹ 3.64 crore resulting in understatement of Current Liabilities & Provision (Schedule 3) and overstatement of Academic Receipts (Schedule 9). Consequently, surplus was also overstated by ₹ 3.64 crore.

#### **A.2** Application of Funds

# A.2.1 Loans, Advances & Deposits ₹70.78 crore (Schedule 8)

i. The Schedule 8 Loans, Advances and Deposits contains 5 items of credit balances (negative balances) amounting to ₹42.66 lakh. The irregular inclusion of credit balances in Schedule 8 Loans, Advances and Deposits has resulted in understatement of Schedule 8 for ₹ 42.66 lakh with corresponding understatement of Schedule 3 Current Liabilities and Provisions. Incorrect practice of accounting was pointed out in the previous audit report also.

ii. The Schedule 8 Loans, Advances and Deposits shows a debit balance of
 ₹ 70.78 crore which includes the Advance to CPWD amounting to ₹ 42.22 crore.
 However, as per the statements of balance received from CPWD Division, there was a net balance of ₹16.51 lakh only with CPWD. The differences need to be reconciled.

#### **B. GENERAL**

#### **B.1** Non-accounting of Fixed Deposits.

At the time of finalization of accounts, NIT, Calicut has noticed shortage in the Fixed Deposits amounting to ₹ 3.53 crore. Instead of keeping this unexplainable shortage in a suspense account for eventual clearance, adjustments were made in the following accounts which resulted in

i. Capital Fund (Schedule 1) was understated for ₹ 66 lakh.

- Current Liabilities and Provisions (Schedule 3) was understated for ₹ 70 lakh being the Interest on fixed deposit made out of grants to be repayable to Government.
- iii. Income from Investment (Schedule 11) was understated for ₹ 2.17 crore.

### B.2 Current Assets ₹340.34 crore (Schedule 7) - Difference in Cash in hand

Even though there was no physical cash balance as on 31-03-21 and no certification of physical verification of cash balance has been recorded, ₹ 2.02 lakh was shown as Cash in hand against the item 3(i) in Schedule 7 Current Assets. Though similar observation was made in the previous year SAR, no corrective action has been taken yet.

#### B.3 Current Assets ₹340.34 crore (Schedule 7) - Differences in Savings accounts

Savings account balance as per Schedule 7 is ₹ 222.47 crore, while the bank has confirmed the balance as on 31st March, 2021 for ₹ 173.75 crore only. Thus ₹ 48.72 crore was shown in excess without confirmation from bank.

Though the Banks have given certificate in respect of seven Savings bank accounts amounting to ₹ 12.89 lakh, the same were not included in the books for want of sufficient information.

Out of 265 SB Accounts, bank has confirmed balances in 195 accounts only.

Bank Reconciliation Statements prepared by the NIT, Calicut cannot be considered as complete. In 15 bank reconciliation statements, there were unexplained items classified as "Difference in opening balance" having a total difference amounting to ₹ 17.98 crore.

Thus, the SB account balance does not show correct picture of the availability of funds in these accounts.

#### B.4 Differences in Term Deposits (Schedule 5 &7)

The total of Term deposits with bank as on 31st March 2021 as per Schedule 5 & 7 is  $\gtrless$  189.10 crore. Though the Banks have given certificate in respect of 14 Term deposit accounts having a balance of  $\gtrless$  1.61 crore and 40 MOD accounts having a balance of  $\gtrless$  4.72 crore, these amounts were not included in the accounts.

Thus, the Term deposit account balance does not show an accurate picture of the funds in these accounts.

#### B.5 Current Assets ₹340.34 crore (Schedule 7) - Difference in Current Accounts

The current account as per schedule-7 of Balance Sheet shows a balance of ₹ 4.64 crore. But three Current accounts having a total balance of ₹18.66 crore were not included in the accounts resulting in understatement of current accounts. Thus, Current Account balance shown in the accounts does not show a correct picture of the funds available with the institute.

#### B.6 Current Assets ₹340.34 crore (Schedule 7) - Difference in EEFC Accounts

NITC is maintaining an EEFC Account for collection of fee in foreign exchange. As per Schedule 7 there is a balance of ₹7.38 crore in this account. However, as per the balance figures furnished by State Bank of India, closing balance as on 31.3.21 is US \$ 3,73,113.89 only which is equal to INR 2.73 crore. The difference of

₹ 4.65 crore is yet to be reconciled. Thus, balance shown in the accounts does not show a correct view of the funds available with the institute.

#### B.7 Current Assets ₹340.34 crore (Schedule 7) - Difference in Cash in Treasury

It is observed that the District Treasury officer has confirmed the balance of ₹22.9 lakh only whereas the Cash in treasury as per Schedule – 7 shows a balance of ₹ 31.2 lakh. The difference is yet to be reconciled. Thus, balance in Treasury shown in the accounts does not show a true and fair view of the funds available with the Treasury.

# B.8 Current Liabilities and Provisions – Maintenance of Suspense Heads (Schedule 3)

Analysis of Suspense Head Accounts for the year 2020-21 shows that 14 heads of Suspense Accounts have been retained for the past financial years and a new account was opened during the accounting year as shown in the table. For the year 2020-21 the Suspense accounts show a balance of ₹16.72 crore which was included under item (g) Other Liabilities in Schedule 3 under the head Current Liabilities & Provisions in Balance Sheet.

SL No:	Suspense Account No:1	Closing Balance as on 31-03-20	Closing Balance as on 31-03-21
1	60853 Suspense Account No:I	-49698860.00	-49698860.00
2	60554 Suspense Account No:II	-104258190.42	-104596744.42
3	60859 Suspense Account No:I (NIT Sikkim)	-4250877.00	-4250877.00
4	60596 Suspense Account No:II (Tuition Fees)	-332212.00	-332212.00
5	60535 R&D SUSPENSE ARCH	-3447669.00	+1377200
6	60537 R&D SUSPENSE CED	-4458421.68	-6044126.68
7	60538 R&D SUSPENSE CSED	-753272.00	-753272.00
8	R&D SUSPENSE ECED	-7850.00	-7850.00
9	60542 R&D SUSPENSE EED	-724063.00	-845463
10	60544 R&D SUSPENSE MED	-511764	-874819
11	R&D SUSPENSE SNST	-480157.00	-480157.00
12	60601 R&D SUSPENSE PHYSICS	+8991.00	-36009
13	60603 R&D SUSPENSE CHEMISTRY	-675516.00	-771266
14	60607 R&D SUSPENSE CSED (CONSULTANCY)	+68585.00	+68585
15	R&D SUSPENSE BIO- MECHANICS(CONSULTANCY)	0	-28150
	Total	16,95,21,276.10	16,72,74,021.10

The huge amounts under Suspense Account were commented upon in previous SAR But no corrective action has been taken by the Institute for clearance of the Suspense Account so far. Keeping of huge amounts in Suspense Accounts without identifying the nature of items in suspense as income/liability or asset/expense for prolonged period, will depict an incorrect picture of the Accounts of the Institute.

# B.9 Maintenance of accounts of Designated/Earmarked/Endowment funds – Schedule 2

As per Schedule 2 – Designated earmarked/endowment funds, the closing balance is  $\gtrless$  135.07 crore. But as per Schedule 5 – Investment from Earmarked/Endowment fund the balance is  $\gtrless$  83.90 crore. Difference between these two figures works out to  $\gtrless$  51.17 crore. Similar point was included in SAR for previous year also but corrective measures are yet to be taken.

#### B.10 Non-exhibition of Hostel running expenses along with accounts

Hostel fees collected and the hostel running expenses should have been accounted under the head Academic Receipt (Schedule 9) and Academic Expenses (Schedule 16) respectively. Moreover, details of hostel running expenses should have been disclosed separately in the notes to the Income and Expenditure account as stated in the Format of Financial Statements. However, this has not been complied with.

#### **B.11 Comments on GPF & CPF Accounts**

(i) As per Format of Financial Statements for Central Higher Educational Institutions issued by the MHRD, the GPF and CPF Accounts should be separated from the main accounts of the institute and these accounts should be shown separately along with Annual Accounts of the institute. However, the institute has included the GPF & CPF Accounts in Schedule 2A of the Balance sheet of Main Accounts for the year 2020-21. Another annual accounts of PF was prepared with entirely different figures. Though the Institute had agreed to rectify the mistakes, same was not complied with this year.

#### **B.12** Utilization Certificates issued to the Ministry

The figures furnished to the Ministry through utilization certificates do not match with Annual Accounts prepared by NITC as detailed below:

(₹ in lakh)

Particulars	Opening Balance	Grants received during the year	Grants utilized during the year	Closing Balance
As per Accounts	(3944.50)	14136.59	15579.11	(5387.02)
As per UCs	5949.98	14136.59	15561.77	4524.80

#### C. Grant-in-Aid

The Institute received Plan grant of  $\gtrless$  5 crore from the GoI during 2020-21. The unspent balance carried forward from previous year was  $\gtrless$  51.51 crore¹ (including interest of  $\gtrless$  34.30 lakh). Institute accounted  $\gtrless$  93 lakh as interest on Investment made out of Plan grant. Thus, the total Plan grant available during 2020-21 was  $\gtrless$  57.44 crore of which the Institute utilized an amount of  $\gtrless$  7 crore leaving a balance of  $\gtrless$  50.44 crore.

The revenue expenditure of the Institute was more than the non-Plan grant received and hence the entire grant of ₹ 136.37 crore received during 2020-21 was utilized for meeting the revenue expenditure.

#### D. Management Letter

The deficiencies which have not been included in the Audit Report have been brought to the notice of National Institute of Technology, Calicut through a Management Letter issued separately for remedial/corrective action.

¹Based on Schedule 3 and Schedule 24, Opening Balance includes internal revenue generated during previous financial years which cannot be segregated now

v. Subject to our observations in the preceding paragraphs, we report that the Balance Sheet, Income & Expenditure Account and Receipts& Payments Account dealt with by this report are in agreement with the books of accounts.

vi. In our opinion and to the best of our information and according to the explanations given to us, because of the effects of the observations discussed above in the preceding paragraphs, the said financial statements read together with the Accounting Policies and Notes on Accounts, and other matters mentioned in Annexure I to this Audit Report, **do not give a true and fair view** in conformity with accounting principles generally accepted in India.

a. In so far as it relates to the Balance Sheet, of the state of affairs of the National Institute of Technology, Calicut as at 31 March 2021 and

b. In so far as it relates to Income & Expenditure Account of the surplus for the year ended on that date.

For and on behalf of the C& AG of India

DIMBIN 18MM

Principal Director of Audit (Central) Chennai

Place: Chennai Date: |& April 2022

#### Annexure I

## 1. Adequacy of Internal Audit System

Though an Internal Audit wing is functioning with an Officer on Special Duty (Audit) and an Ad-hoc Assistant, the duties and functions of the wing have not been defined. Now the audit is limited to pre-check of sanctions and pass orders related to works and procurements. The Internal audit does not cover the activities of all the wings/departments of the Institute. A system of reporting of internal audit findings to the Head of Institute for taking corrective measures is not in practice.

### 2. Adequacy of Internal Control System

Internal control system is inadequate. There is no proper system of reconciliation of bank figures with that of figures in Institute's Books of Accounts. Huge difference in balance of bank accounts and Institute's Accounts still persists. Many of the Savings bank Accounts maintained at the Banks do not find places in the Books of Accounts of the Institute. The Institute is keeping, in the Books of Accounts, the balances of Savings Bank Accounts, which had already been closed / inoperative.

# 3. System of Physical Verification of Assets

Annual physical verification of assets has not been conducted for the year 2020-21.

## 4. System of Physical Verification of Inventory

Annual physical verification of inventory, library, etc. has not been conducted for the vear 2020-21.

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### 5. Regularity in payment of statutory dues

The NITC is regular in payment of statutory dues.

Deputy Director (DT) II





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