

Centre for Indian Knowledge Systems

National Institute of Technology Calicut





In line with the National Education Policy 2020, NITC has established the Centre for Indian Knowledge Systems (CIKS, Bharatheeya Gyana Parampara Kendram) to promote education, training and research in traditional Indian Knowledge Systems (Science, Mathematics, Economics, Astronomy, Astrology).

Mission

Enable students, faculty and staff to engage in education and research on Indian Knowledge Systems for developing appropriate technologies/practices and products for sustainable growth.

Vision

Intellectuals empowered with Indian Knowledge Systems to address technological challenges.

ADVISORY BOARD

Dr. B. Mahadevan

Academic Member
Professor, Operations Management
IIM Bangalore

Dr. K. Ramasubramanian

Academic Member
Professor
Department of Humanities and Social Sciences
IIT Bombay

Dr. Joy Sen

 Academic Member
Chairperson, CoEIKS IIT Kharagpur
Chairman, NMST (National Museum of Science & Technology) IIT Kharagpur
Professor of Architecture and Regional Planning IIT Kharagpur

Dr. P. Venkatasubramanian

Member (R & D organization)
Co-founder & COO, Vyoma Labs
Bangalore

Dr. B. Venkatraman

Member (R & D organization) Director Indira Gandhi Centre for Atomic Research Kalpakkam, Chennai

Ms. Rama Sivaraman

Industry Member
President (India Operations)
MAGE, New York

Mr. Kranthi Kiran Ramireddy

- Alumni Member Senior Software Engineer, Nurture.Farm Bengaluru

INITIATIVES OF THE CENTRE

MoUs signed with the following institutions:

- Chanakya University, Bengaluru
- Central Sanskrit University, New Delhi

Collaboration

- NIT Calicut is a centre for Non Formal Sanskrit Education of Central Sanskrit University, New Delhi to offer Certificate Program (Level 1) and Diploma Program (Level 2) in Sanskrit
- Central Sanskrit University, New Delhi has deputed one faculty to offer the Certificate Program in Sanskrit
- The Certificate Program (Level 1) started on 18th August with 61 participants. Classes are held on all Mondays, Tuesdays and Thursdays from 6 to 7 pm.

Elective Courses

The following 3-credit open elective courses for Under Graduate Programmes are offered in Monsoon 2022-23

- IK3001D Basic Sanskrit
- IK3002D Introduction to Indian Knowledge System

Co-teaching initiatives

- The following faculty from the Centre for Indian Knowledge Systems, Chanakya University, Bengaluru are the Guest Faculty for the Open Elective Course IK3002D Introduction to Indian Knowledge System
- Dr. Vinayak Rajat Bhat, Associate Professor
- Dr. Venkata Raghavan, Assistant Professor
- Dr. Ramakrishna Pejathaya, Associate Professor



TRAINING PROGRAMMES/WORKSHOPS ORGANISED

Expert Lectures Organzied

- Expert Lecture on Introduction to Indian Knowledge Systems: concepts and applications by Dr. B. Mahadevan, Professor, IIM Bangalore on 5th April 2022, 06.00 – 7.30 p.m. Online Mode – Cisco Webex Platform.
- Expert Lecture on Contribution of Kerala to the World of Mathematics by Dr. K. Rama Subramanian, Institute Chair Professor, Cell for Indian Science and Technology in Sanskrit & Professor, Department of Humanities and Social Sciences, IIT Bombay, on 23rd June 2022, 4.00 – 6.30 p.m., Aryabhatta Hall, NITC.

Workshops organised

- Workshop on "Introduction to Indian Knowledge Systems", 20-08-2022, MED Seminar Hall Resource Person: Dr. Vinayak Rajat Bhat, Chanakya University, Bengaluru.
- Workshop on "Indian Philosophical Systems and Knowledge Framework", 27-08-2022, MED Seminar Hall
- *Resource Person:* Dr. R. Venkata Raghavan, Chanakya University, Bengaluru.
- Workshop on "Linguistics", 15-10-2022, MB110 Resource Person: Dr. Vinayak Rajat Bhat, Chanakya University, Bengaluru.

Achievements of Students

Ms. Athira S. B. Research Scholar, Department of Architecture and Planning had completed the AICTE's IKS Internship during July – September, 2022. The project title is "Assessing the cultural dimensions in the sustainable built environment: development of a framework based on Indian Knowledge Systems with specific reference to residential architecture".

Research Proposals Submitted

Submitted the following research proposals to the IKS Division of Ministry of Education @ AICTE in September–October 2022:

 Title: IKS Centre, NITC: Indian Knowledge Systems Approach to Deep Ecology: Integrating Sacred Geography and Sustainability

PI: Dr. Anjana Bhagyanathan, Asst. Professor, Department of Architecture and Planning, NITC, Co-PIs: Dr. Ramesh Krishnamurthy, WII

Dr. A. Srivatsan, CEPT

Dr. Chithra K, Associate Professor, Department of Architecture and Planning, NITC,

Dr. Deepak Dhayanithy, IIMK

Dr. Gauri Mahulikar, Chinmaya International Foundation

Dr. M D Subashchandran, IISc

 Title: Developing a framework for residential buildings based on the cultural dimensions and Traditional Architectural Knowledge System-a case of the south Indian Context

PI: Dr Amritha P.K., Asst. Professor, Department of Architecture and Planning, NITC,

Co-PI: Dr Chithra K, Associate Professor, Department of Architecture and Planning, NITC, *Collaborators:* Athira S.B., Research Scholar, Department of Architecture and Planning, NITC, Dr Balagopal T.S. Prabhu

 Title: Exploring the self-purificatory capability of River Ganga and its medicinal significance
PI: Dr. Ravindra Kumar, Asst. Professor, School of Biotechnology, NITC

Co-PI: Dr. Cecil Antony, Asst. Professor, School of Biotechnology, NITC

Collaborator: Dr. Vinayak Rajat Bhat, Associate Professor, Centre for Indian Knowledge Systems, Chanakya University, Bengaluru





Title: IKS based approaches for water conservation and Management
PI: Dr. Sandip Rudha Budhe, Asst. Professor, Mechanical Engineering Department, NITC
Co-PI: Dr. Chandan Yadav, Electronics and Communication Engineering Department, NITC
Co-PI: (Dr. Devendra Yadav), Asst. Professor, Mechanical Engineering Department, NITC

Future Plan

- Conduct short duration "Spoken Sanskrit", "Spoken Hindi" and "Spoken Malayalam" courses
- Disseminate knowledge and training on Indian Knowledge System (IKS) among the teachers and students in the engineering colleges of Kerala.
- Conduct research studies on development of chemicals from Indian herbal plants for medicinal/therapeutic applications
- Develop technologies/practices/materials based on IKS
- Enable faculty and students to pursue multidisciplinary research on IKS at under graduate and post graduate level
- Conduct workshops on Indian Mathematics and Indian Contributions to Science, Mathematics, Economics, Astronomy and Astrology
- Offer Ph.D. programme in IKS
- Undertake scientific studies on Kerala Architecture and heritage structures
- Establish a Facility for Research on Cow Products (FRCP) that can be used to undertake projects supported by the Department of Science and Technology on Scientific Utilization through Research Augmentation-Prime Products from Indigenous Cows (SUTRA-PIC) India Program.
- Establish an Indian Heritage Museum
- Conduct National and International Conferences/Seminars/Webinars
- Conduct Certificate Programmes on Indian contributions to science, technology and management, Indian architecture, Indian arts, Global footprints of Indian diaspora, Political science and Arthasastra, Indian culture and tradition and Indian classical literature

Faculty associated with CIKS

Dr. R. Sridharan, Professor, Department of Mechanical Engineering Department(Chairperson) sreedhar@nitc.ac.in

Dr. Kasthurba A K, Professor, Department of Architecture and Planning | kasthurba@nitc.ac.in

Dr. G. Unnikrishnan, Professor, Department of Chemistry | unnig@nitc.ac.in

Dr. V. Siva Subramanian, Professor, Department of Chemical Engineering | siva@nitc.ac.in

Dr. Sindhu T K, Professor, Department of Electrical Engineering |tk_sindhu@nitc.ac.in

Dr. Sunitha S, Associate Professor, School of Management Studies | sunita@nitc.ac.in

Dr. Ashish Awasthi, Associate Professor, Department of Mathematics | aawasthi@nitc.ac.in

Dr. K V Anand, Assistant Professor, Department of Civil Engineering | kvanand@nitc.ac.in

Dr. Jayachandran K, Assistant Professor, Department of Civil Engineering | jk@nitc.ac.in

Dr. Ram Ajor Maurya, Assistant Professor, Department of Physics ramajor@nitc.ac.in

Dr. Devendra K. Yadav, Assistant Professor, Department of Mechanical Engineering | devendrak@nitc.ac.in

Dr. Ravindra Kumar, Assistant Professor, School of Biotechnology | ravindra@nitc.ac.in

Sri. Arya Devgop, Lecturer, Central Sanskrit University, New Delhi. | aryadevgop@nitc.ac.in

Dr. Vinayak Rajat Bhat, Associate Professor, Centre for Indian Knowledge Systems, Chanakya University, Bengaluru (Guest Faculty) | vinayak.rb@chanakyauniversity.edu.in

Dr. Venkata Raghavan, Assistant Professor, Centre for Indian Knowledge Systems, Chanakya University, Bengaluru (Guest Faculty) |

 $venkat\,raghavan.rv@chanakyauniversity.edu.in$

Dr. Ramakrishna Pejathaya, Associate Professor, Centre for Indian Knowledge Systems, Chanakya University, Bengaluru (Guest Faculty) | rk.pejathaya@chanakyauniversity.in

Centre for Indian Knowledge Systems National Institute of Technology Calicut NIT Campus P.O., Kozhikode 673601 CONTACT Dr. R. Sridharan, Chairperson ciks@nitc.ac.in (Chairperson email ID) +91 495 2286406 / 9495788136