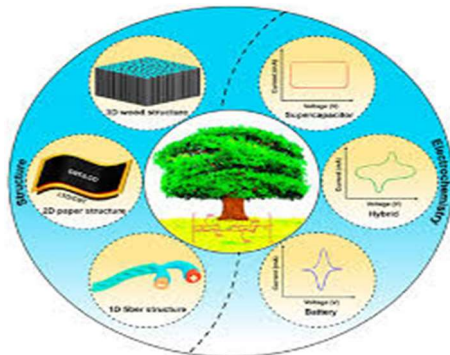


*TEQIP-III Sponsored  
Faculty Development Programme*

## Recent Innovations and Developments in Electrochemical and Chemical Process Optimization

**RIDECPO-2019**

**June 17<sup>th</sup>-22<sup>nd</sup> 2019**



**Organized by  
Department of Chemical Engineering  
National Institute of Technology Calicut  
Kozhikode - 673601  
Kerala**

### **About the Department**

Established in 2006, the Department of Chemical Engineering of National Institute of Technology Calicut offers programmes leading to Bachelor's Degree, Master's Degree as well as Ph.D. In addition to these regular programmes, this Department is also actively involved in conducting International Conferences, Faculty Development Programmes, Job-oriented Short-term Training Programmes and Continuing Education Programmes for Engineering professionals and academic faculty. The R&D projects undertaken in the past were sponsored by various agencies like the Ministry of Human Resource Development (MHRD), Department of Science & Technology (DST) and the Kerala State Council for Science, Technology and Environment (KSCSTE).

### **About NIT Calicut**

National Institute of Technology Calicut (NITC) is an Institution of National Importance, centrally funded by MHRD and is governed by the NIT Act 2007. Institute has ten departments, three schools and nine research centres. It offers ten UG and thirty PG programmes along with the Ph.D. programme in various fields of Science, Technology and Engineering. Faculties in the various Departments have active with Universities and elite institutions within and outside India for research and have active consultancy for industries. For details see the website: [www.nitc.ac.in](http://www.nitc.ac.in)

### **About Calicut**

Calicut is a major knowledge Hub of Kerala and is the hometown of Institutions of National Importance including NITC, IIMK, DOEACC, CWRDM etc. Calicut is connected by direct trains/road/air to all major cities in India. NITC is located about 22 kilometers north-east of Calicut City. Calicut (Kozhikode), is known as the city of spices. Kozhikode beach, Kappad beach where Vasco Da Gama landed, Thusharagiri Waterfalls, Pazhassiraja Museum, Tali Temple and Kuttichira Masjid are some of the local attractions.

### **Preamble**

Preservation of water resources is one of the biggest challenges in the present era. Hence there is a need to develop efficient technologies and approach for treating and managing wastewater. Electrochemical processes are gaining much attention for the treatment of drinking water and waste water. The exigency for greener energy technology has arisen as an alternate for fossil fuel. Fuel cell is one among the possible alternative to this state of condition as a standard energy source. The present FDP focuses on present developments on electrochemical systems including fuel cells, membranes, reactor design, and control and process optimization. Further, the computational methods used to simulate multiphase flows with applications such as CO<sub>2</sub> capture and storage (CCS) and biofuel production from biomass will be discussed.

### Topics of the programme

The training programme will briefly cover the following topics:

- Electrochemical systems and Fuel cells
- Chemical Process Optimization
- Polymer Process Optimization
- Membrane separation
- Wastewater treatment
- Computational Fluid Dynamics

### Laboratory facilities available for the course:

- Aspen Plus, Matlab Simulation
- Analytical Lab: GC, BET, HPLC etc

### Resource Persons

Experts from CSIR-CERI Karakkudi, NIT Warangal, ISRO and NIT Calicut will be delivering lectures, practical sessions. Invited experts from Academic/ Research Institutions.

### Eligibility

Faculty members, Ph.D scholars, students from various AICTE approved Engineering Colleges/Institutions, working professionals and practicing engineers from various Research Organizations and Industries and Research Scholars working in chemical/ environmental engineering/ electrochemistry field can apply. Certificate of participation will be issued to participants who have registered and attended the entire course.

No refund policy of registration charges.

### IMPORTANT DATES

Last date for receiving applications: 5 June 2019  
Intimation to Participants by email: 7 June 2019  
Course Dates: 17- 22 June 2019

### Registration Fee

Course Fee	Total Fees Per Participant for Entire Course (TEQIP Institutions)	Per for	Total Fees Per Participant for Entire Course (Non-TEQIP Institutions)
Faculty	5000 (18%GST)	+	3000+ (18%GST)
Technical staff & Scholars	3000+ (18%GST)		1000+ (18%GST)
Students	2000 (18%GST)	+	500+ (18%GST)
Industry	8000 + (18%GST)		

This includes only registration materials. Boarding and lodging will be extra. No TA/DA will be paid for any participant. The registration fee has to be paid through online transfer. The bank details are given below for online transfer. Extra GST is applicable for outside candidates.

**Account Name:** Director NIT Calicut,  
Continuing education programme

**Account No:** 37618269594

**Branch:** SBI NIT Calicut

**IFSC code:** SBIN0002207

### Boarding & Lodging

All faculty and research scholars may be accommodated in the hostel/international hostel on payment basis if they request for it, subjected to availability.

Participants from industry/ research organizations may be provided lodging in the Institute Guest house on payment basis, subject to availability.

Charges:

International hostel : Rs.500/Room/day  
Ladies hostel : Rs.250/Room/day  
Boys hostel : Rs.250/Room/day  
Guest house : Rs.350/Room/day

### Endorsement of the

### Head of the Institution/Department

Certified that Mr./ Ms./ Dr.....

..... is an employee of this institution and is hereby sponsored for the training programme on Recent Innovations and Developments in Electrochemical and Chemical Process Optimization during ..... He/she will be permitted to attend the course, if selected.

Place:

Date:

Name and Signature  
of the approving authority  
Seal of the institution

For Registration, fill the online registration form <https://docs.google.com/forms/d/e/1FAIpQLScwxfIBZNEKTJhwNU1a8t4OQRu2jmf9BbOvxDxZuCJ0RsKfpg/viewform> and mail the scanned copy of the endorsement form to [ridecpo2019fdp@gmail.com](mailto:ridecpo2019fdp@gmail.com) on or before 5<sup>th</sup> June 2019. All selected candidates will be informed through e-mail on or before 7<sup>th</sup> June 2019.

### Co-ordinators

**Dr. V. Sivasubramanian, Professor**  
**Dr. Dhanya Ram V, Assistant Professor**

**Department of Chemical Engineering**  
**National Institute of Technology Calicut**  
**NIT Campus P.O. - 673601, Kozhikode**

### Contact

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**91-495-2285464, 9447229598**

**Email: [siva@nitc.ac.in](mailto:siva@nitc.ac.in),  
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