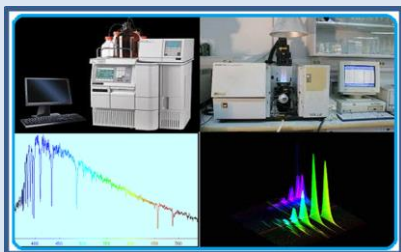


Faculty Development Programme
Monitoring Environmental Quality
(MEQ-2018)

6th – 11th August, 2018



Under

**Government of India, Ministry of Human
Resources Development (MHRD) Technical
Education Quality Improvement Programme**
(TEQIP) - III

Organized by



National Institute of
Technology – Calicut
Kerala



Govt. Engineering
College Bharatpur

Coordinators

Dr. GEORGE K. VARGHESE **Dr. M. K. RAVI VARMA**
National Institute of Technology – Calicut (NITC)

&

Mr. AMIT DAIYA
Government Engineering College Bharatpur

Venue: NIT Calicut

About National Institute of Technology Calicut

National Institute of Technology Calicut (NITC) is one of the premier technical institutions in India. NITC has twelve academic Departments, eight Centers and three Schools together offering ten undergraduate and thirty-one postgraduate programmes apart from Ph. D programme. The institute has good infrastructure in computing, information technology, laboratories and central library including digital library.

About Govt. Engineering College Bharatpur

Established in 2007, GEC, Bharatpur is an autonomous institute under Bharatpur society, Rajasthan, India and is the first government college in the Bharatpur division. The college is affiliated to the Rajasthan Technical University and is approved by the All India Council for Technical Education, New Delhi. Since inception, the college has constantly grown at a very fast pace. The campus is spread over an area of 40 acres. More information can be obtained from www.ecbharatpur.ac.in.

About Calicut City

Calicut is a major center for higher education, learning and research in Kerala. It is the hometown for institutions of national importance including NITC, Indian Institute of Management Kozhikode (IIMK). 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, also known as Kozhikode, is known as the city of spices. Kozhikode beach, Kappad beach, Kadalundy bird sanctuary, Tusharagiri Waterfalls, Pazhassiraja Museum, Tali Temple and Kuttichira Masjid are some of the local attractions.

About the programme

Assessment of environmental quality is the backbone of an environmental monitoring programme because activities on quality improvement rely on the accurate and reliable information regarding the current environmental conditions. The objectives of the proposed training programme are to discuss the necessity for environmental assessment, principles behind techniques and measurements, hands-on training and opportunities for industry involvement. Topics covered will be Science and Technology for instrumentation and numerical modelling for environmental assessments and avenues where industry involvement is possible. The programme is supported by the Applied Optics and Instrumentation group (AOI) of Physics Department and Environmental Engineering Research Laboratory of the Civil Engineering Department.

**About Applied Optics and Instrumentation
group (AOI)**

The AOI laboratory is one of the laboratories in the Department of Physics, NITC, where spectroscopic instrumentation and analysis algorithms are developed for optical sensing of air pollution. The primary goal of this group is the design and development of instruments for optical spectroscopy targeting the monitoring of atmospheric trace gases and airborne particulate matters. The instruments developed in the laboratory incorporate techniques based on Cavity Enhanced Absorption Spectroscopy and Integrating Sphere Nephelometry. Applications of the instrumentation include in-situ monitoring of trace gaseous species, and aerosol optical depth in polluted environment. Noted field campaign participation is during the CAREBEIJING-NCP 2014 studies at the Wangdu supersite, southwest of Beijing, China.

About Environmental Engineering Research Laboratory

Environmental Engineering Laboratory is one of the major laboratories in the Civil Engineering Department. The lab carries out research, testing and consultancy works in most areas of Environmental Engineering. The laboratory is equipped with many analytical instruments like, GC-MS, HPLC, AAS, TOC Analyser, FTIR, UV-Vis. Spectrometer and MiniLAS. The current researches undertaken by the lab includes environmental forensic investigation method developments, exposure and risk studies, etc.

Topics to be covered

- An overview of various instrumental techniques and numerical modelling for environmental assessment, their applicability and limitations.
- Theory and working principles of spectroscopic instrumentation.
- Application of techniques and Case Studies
- Hands on training on analytical instruments and numerical modelling.
- Avenues for academic-industry-compliance partnership for environmental assessment and technology development.

Resource Persons

- Dr. Claudio Mazzoleni, Physics, Michigan Technological University, USA
- Dr. Lynn Mazzoleni, Chemistry, Michigan Technological University, USA
- Dr. Jun Chen, University of Shanghai for Science and Technology, Shanghai, P.R.China
- Eminent personalities from different Indian organizations including academic institutions, Industry and Compliance agencies.

Eligibility

Faculties from all AICTE approved Engineering Colleges/Institutions and officials from various Research Organizations and Industries, Research Scholars and Students from NITC and other Engineering Colleges.

Registration fee

- Participants from Industry / Research Organization:
₹. 6000+18% GST
- Faculty from academic institutions*: ₹. 3000+18% GST
- Research Scholar: ₹. 1500+18% GST

The registration fee includes only the course registration, boarding and lodging will be extra. (Note: For selected 20 participants under **TEQIP III Scheme** the registration is free and the selection of applicants to this is on first come first serve basis from the AICTE/UGC approved colleges / Polytechnic institutions. Refund will be made after eligibility is ascertained). For registration, fill the online form available in the following link: <https://goo.gl/forms/HuoyvLM2yn4m52sJ2> and upload the scanned copy of the signed endorsement form. The bank details for the payment of registration fees are given below:

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

Account No.: **37618269594**

Branch: **SBI NIT Calicut, IFSC: SBIN0002207**

Last date for registration: 20th July 2018

Boarding and Lodging

Working lunch and refreshments shall be provided to all the participants. Limited accommodation is available in the NITC guest house and hostel/international hostel which may be reserved on payment basis if prior request is received.

Charges: International hostel – ₹. 450/Room/day
Ladies/Men's hostel – ₹.250/Room/day
Guest house – ₹.350/Room/day

Endorsement of the Head of the Institution/Department

Certified that Sri/Smt/Dr. _____

_____ is an employee of this institution and is hereby sponsored for the training programme titled "MEQ – 2018" at NIT Calicut during August 6th – 11th, 2018. He/She will be permitted to attend the course if selected.

Place: _____

Date: _____

Name and Signature of
The Head of the Institution/Dept.
(With seal)

Contact details

Dr. George K Varghese / Dr. M. K. Ravi Varma

Coordinator

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