

The registration fee includes the instructional materials, refreshments between sessions and working lunch. Accommodation will be provided to the outstation participants on payment basis, subject to the availability within the campus. Separate request is to be submitted in prior, by participants for the accommodation arrangement. TA/DA will not be paid for any participants.

SELECTION AND MODE OF PAYMENT

Selected candidates will be intimated through e-mail. They have to remit the necessary course fee to the bank as per the details given below.

Participants from abroad : US\$ 100

Participants from India:

Industry/ Research organizations : Rs. 5000/-

Faculty from Academic Institutions : Rs. 2000/-

Research Scholars/Students : Rs. 1000/-

Account Name DIRECTOR NIT CALICUT
Account No. 35909407299
Bank State Bank of India
Branch CREC, Chathamangalam,
Kozhikode

Branch Code 002207
IFSC SBIN0002207
MICR Code 673002012
SWIFT Code SBINPN BB392

Candidates registering early will be given preference in the short-listing process. For any queries, please contact the host faculty.

ABOUT GIAN COURSE

MHRD, Govt. of India has launched an innovative program titled “Global Initiative of Academic Networks (GIAN)” in higher education, in order to garner the best international experience. As part of this, internationally renowned academicians and scientists are invited to augment the country’s academic resources, accelerate the pace of quality reforms and elevate India’s scientific and technological capacity to global excellence.

ABOUT THE INSTITUTE

Set in a picturesque landscape at the foothills of Western Ghats, National Institute of Technology Calicut (NITC) is located about 22 kilometers north-east of Calicut city. The institute is a higher level technical institution of national importance, set up by the NITSER Act 2007. The institution runs on non-profitable basis and is fully funded by the Government of India under the MHRD. NITC offers 10 U.G. and 30 P.G. programs apart from Ph.D. programs in various disciplines.

ABOUT THE DEPARTMENT

The Department of Mechanical Engineering is the largest department in the Institute which offers B.Tech. (Mechanical Engineering), B.Tech. (Production Engineering) programs and M.Tech. programs in Thermal Sciences, Energy Engineering & Management, Industrial Engineering & Management, Manufacturing Technology, Materials Science & Technology and Machine Design apart from the Doctoral Degree programs on various research topics.

CONTACT DETAILS

Dr. M. Srinivas / Dr. S. Jayaraj
Department of Mechanical Engineering
National Institute of Technology
Calicut Kozhikode - 673 601, Kerala
Phone: +91 495 2286452 / 2286416
Mob.: +91-7736532985 / 9400487134
msrinivas@nitc.ac.in | sjayaraj@nitc.ac.in



GIAN Course on

Micro-Renewable Energy Architecture: Towards Rural Energy Independence

24 July – 5 Aug. 2017

Call for Registration and Participation

International Faculty

Dr. Narayanan M. Komerath

Professor

Daniel Guggenheim School of Aerospace Engineering
Georgia Institute of Technology, Georgia, USA

Host Faculty

Dr. S. Jayaraj and Dr. M. Srinivas

Department of Mechanical Engineering
National Institute of Technology Calicut
Kozhikode, Kerala, India

GIAN Local Coordinator

Dr. Abraham T. Mathew

Dean (Research & Consultancy)
National Institute of Technology Calicut
Kozhikode, Kerala, India

Organised by

DEPARTMENT OF MECHANICAL ENGINEERING

National Institute of Technology Calicut

NIT Campus P.O. Kozhikode - 673601, Kerala, India
www.nitc.ac.in

OVERVIEW OF THE COURSE

The course “Micro Renewable Energy Architecture: Towards Rural Energy Independence” is adapted from a 3-semester-credit special topics cross-disciplinary course offered at Georgia Institute of Technology, Atlanta, USA and Kennesaw State University. It is intended for those who will develop the entrepreneurial, public policy and technology base for a massively-distributed, grassroots-level architecture for clean, sustainable energy independence. The intent is to place Engineering/ Science students in teams with Management/ Public Policy students. This was tried at Kennesaw State University’s Coles Business College, Fall 2013, and has led to one startup company, “Tree of Life Systems LLC”. The course considers how engineers and business people can devise effective micro-power solutions for people around the world. The course has content from aerospace and other engineering disciplines, as well as economics, finance and public policy.

COURSE CONTENT

- Introduction
- Thermodynamics Survey
- Distributed Generation
- Smart Grid and Micro-Distributed Generation
- Global Needs for Renewable Energy
- Sustainability Issues
- System Design Process
- Economics of Micro-Renewable Energy
- Micro-Renewable Business Planning
- Technology Survey
- Towards Rural Energy Independence
- Discussion/Reserve for Needed Topics

COURSE FACULTY



Dr. Narayanan M. Komerath is a Professor in the Daniel Guggenheim School of Aerospace Engineering, Georgia Institute of Technology, Georgia, USA. He did his Ph.D. in Turbulent Combustion from G.I.T., Atlanta. Prof. Komerath

has taught over 3000 aerospace engineers in over 20 courses across several disciplines. He has performed over 100 sponsored research projects for various US government agencies and industry sponsors. He has developed concepts on space economy development leading to constructing large habitats in orbit, and on an evolutionary path to Space Solar Power. He was an invited witness before the US Presidential Commission on the Future of the US Space Program, 2004. He has won GT’s Outstanding PhD advisor award (1994), Leadership award for student guidance (1993), Most Valuable Professor Award (GTAE, Class of 1989), and the ASEE/AIAA John Leland Atwood Award for sustained excellence as an aerospace engineering educator, 2015.

WHO CAN PARTICIPATE?

This course will benefit students and teachers in familiarizing the state of the art energy technologies. For working engineers and scientists, this program will open up new vistas to the problems in advanced renewable energy technologies that are currently faced. Internationally acclaimed academician cum researcher with proven knowledge, expertise and demonstrable ability in teaching, consultancy, research and training in the field of renewable energy technology will deliver lectures in the course. Students of all levels (B.Tech./M.Sc./M.Tech./ Ph.D.) are encouraged to attend. Faculty members from academia, engineers

and researchers from service/ government organizations/ R&D laboratories are welcome to attend.

HOW TO REGISTER?

Stage-1: Web Portal Registration:

Visit GIAN Website at the link: <http://www.gian.iitkgp.ac.in/GREGN/index> and create login User ID and Password. Fill up the blank registration form and do web registration by paying **Rs.500/-** online through **Net Banking/ Debit/ Credit Card** as per instructions given there in. This provides the user with lifetime registration to enroll in any number of GIAN courses offered.

Stage-2: Course Registration:

Login to the GIAN portal again with the user ID and password already created in Step1. Click on **course registration** option at the top of registration form. Select the course titled “**Micro-Renewable Energy Architecture: Towards Rural Energy Independence**” from the list and click on ‘**Save**’ option. Confirm your registration by clicking on **Confirm Course**. Also, **send** the filled-in registration form to the **contact address**.

IMPORTANT DATES

Last date for receiving the scan copy of above forms: 19 June 2017

Last date for receiving the hard copy of above forms: 26 June 2017

Intimation to participants: 30 June 2017

Course dates: 24 July – 5 Aug. 2017

Maximum 50 participants are allowed for this course. Selection will be as per the eligibility, and on First-Come-First-Served basis.



GLOBAL INITIATIVE OF ACADEMIC NETWORKS (GIAN)



Ministry of Human Resource Development
Government of India



राष्ट्रीय प्रौद्योगिकी संस्थान कलिकट
NATIONAL INSTITUTE OF TECHNOLOGY CALICUT

Micro-Renewable Energy Architecture: Towards Rural Energy Independence 24 July – 5 Aug. 2017

REGISTRATION FORM

Name (In Block Letters): _____

Designation: _____

Qualification: _____

Institution: _____

Address: _____

Email address _____ Phone: _____

Accommodation Required: YES/NO

Details of payment of course registration fees:

DD No.: _____ Date: _____ Bank: _____ Amount Rs: _____

If paid through NEFT:

Transaction Number: _____ Date: _____ Bank: _____

Date:

Place:

Signature of the Candidate