

AICTE Sponsored Two Weeks FDP

on

The Role of Smart Materials in Digital Manufacturing and Fourth Industrial Revolution (Factories for Future)

October 10 to 23, 2019

REGISTRATION FORM

Name :
Designation :
Department :
Institution/Organization :
Institution approved by AICTE : Yes/No
Qualification :
Specialization :
Mailing Address :

Mobile No. :
Email Id :
Accommodation required : Yes/No

Payment Details

DD No. :
Bank :
Amount :
Date :
Place :

Applicant's Signature

Sponsorship Certificate

Certified that Dr./Mr./Mrs. _____ is a faculty of our institute and is hereby nominated to attend the AICTE sponsored two weeks FDP on "The Role of Smart Materials in Digital Manufacturing and Fourth Industrial Revolution (Factories for Future)" from October 10 to 23, 2019.

Signature with Seal of Sponsoring Authority

Registration Fee

There is no registration fee for the participants from AICTE approved Engineering Colleges. However, shortlisted participants need to pay refundable deposit of Rs. 1000. This amount shall be paid through a demand draft drawn in favour of "The Principal, KCG College of Technology, Chennai", payable at Chennai. This deposit will be refunded to the course participants at the end of the course.

Eligibility

Faculty members from AICTE approved colleges are eligible to apply. In particular, faculty members with teaching/research interest in Smart Materials are encouraged to apply. Furthermore, young faculty members with the goal of pursuing Ph.D. are particularly encouraged.

Participation Certificate

Certificate of participation will be issued to all the participants only after successful completion of the course.

Travel

The train fare (only two way 3-Tier AC train fare by the shortest route from your institute to Chennai and back) will be provided to the selected participants as per AICTE guidelines.

Boarding and Lodging

Boarding and lodging facilities will be provided for the outstation participants in College Hostel.

Important Dates

Last date for receipt of registration forms with DD:

September 28, 2019

Intimation of selection: **September 29, 2019 (By email)**

Confirmation of participation: **October 1, 2019**

Address for Communication

Duly filled registration forms with demand draft should be sent to the Course Coordinator on or before the last date.

Mr. L. Prince Jeya Lal, M.E., (Ph.D.,)

Assistant Professor

Department of Mechanical Engineering

Contact No.: +91 9940137263

Email Id.: hodmech@kcgcollege.com

prince.mech@kcgcollege.com



AICTE Sponsored Two Weeks
Faculty Development Programme

on

The Role of Smart Materials in
Digital Manufacturing and Fourth
Industrial Revolution
(Factories for Future)

October 10 to 23, 2019

Organized by

Department of Mechanical Engineering

KCG College of Technology

Karapakkam, Chennai-600 097



www.kcgcollege.ac.in

About KCG College of Technology

KCG College of Technology (A Unit of Hindustan Group of Institutions) was established in the year 1998 to fulfil the Founder-Chairman, Dr. KCG Verghese's vision of "To Make Every Man a Success and No Man a Failure". KCG College of Technology is affiliated to Anna University, Chennai and approved by AICTE. KCG College of Technology has been accredited by NAAC with A+ grade and certified as an ISO 9001:2015 Institution. The college is providing excellent infrastructure and progressive outlook in order to achieve high academic standards and performance. The college has established Centre for Excellence in Engineering to actively involve in Research and Development. The campus is beautifully landscaped in a lush green stretch of land spread over 50 acres at Karapakkam, about 10 km from Adyar on the Old Mahabalipuram Road the IT corridor of Chennai.

About The Department

The Department of Mechanical Engineering has been functioning since 1998. The department offers undergraduate programme in Mechanical Engineering and post graduate programme in Manufacturing Engineering covering all areas of Mechanical Engineering such as Machining and Metal Cutting, Composite Materials, Tribology, Alternative fuels, Vibration and CAD/CAM/CAE. The Department is awarded permanent affiliation from Anna University and also accredited by NBA. The department is recognized as a Research Centre by Anna University, Chennai to pursue research under Ph.D. and M.S (By Research) programs. The department is also actively involved in doing funded projects from DST-IEDC, AICTE (RPS), IE (I), TNSCST, IIT PALS and NRDC. The department also maintains an active interaction with the industries and MoU's have been signed with leading industries to make students industry ready.

About The Programme

In India, lot of technical initiatives like digital manufacturing and development of smart cities are taken to find its place in the list of developed nations. This FDP on The Role of Smart Materials in Digital Manufacturing and Fourth Industrial Revolution (Factories for Future) is significant for the faculty to carry out research in the applications of smart materials including digital manufacturing and smart cities. The knowledge on smart materials, its role and advanced applications helps to focus on developing smart structures, actuators and sensors which play a key role in digital manufacturing and "Industry 4.0". This FDP provides a platform for the faculty members to interact with various experts in different fields working on smart materials. New innovations and solutions may be derived to modernize and optimize the current manufacturing systems through interdisciplinary research. Also, this programme will accelerate the digital manufacturing by initiating joint research projects among researchers of various disciplines and enhance industry-institute collaborations.

Programme Objectives

The objectives of the two weeks FDP programme are to:

- ⊗ Accelerate the digital transformation of manufacturing processes.
- ⊗ Nurture knowledge on different smart materials and classifications, their properties and applications.
- ⊗ Deliberate the technical advances in smart materials systems and structure including piezoelectric materials, shape memory alloys, phase changing materials, ceramic materials, MR fluids, ER fluids, self-healing materials and functionally graded materials.
- ⊗ Provide an insight about the recent research works on smart materials in different fields including aerospace automobile, nano technology, defence, biomedical and nuclear industries
- ⊗ Perceive new concepts on different smart materials and their applications which will initiate joint research activities in new direction, which leads to digital transformation and marching towards Industry 4.0, the factories of the future.

ORGANIZING COMMITTEE

CHIEF PATRONS

Dr. Elizabeth Verghese, *Chairperson, HGI*
Dr. Anand Jacob Verghese, *Director & CEO, HGI*
Dr. Annie Jacob, *Director*

PATRON

Dr. G. Prabhakaran, *Principal*

CONVENER

Dr. D. Easu, *Associate Professor, Department of Mechanical Engineering*

CO-CONVENERS

Dr. Z. Edward Kennedy, *Professor, Department of Mechanical Engineering*
Mr. S. Jesudass Thomas, M.E., (Ph.D.,)
Head & Associate Professor, Department of Mechanical Engineering

COURSE COORDINATOR

Mr. L. Prince Jeya Lal, M.E., (Ph.D.,)
Assistant Professor, Department of Mechanical Engineering

RESOURCE PERSONS

Around 25 Eminent Professors from IISc, IIT, NIT, Anna University and Engineers from Industry

Dr. John Philip, *Professor, Homi-Bhabha National Institute (HBNI), IGCAR*
Dr. A. Velayudham, *Scientist F, Project Director, CVRDE*
Dr. B. S. Sundar Daniel, *Professor, Metallurgical and Materials Engineering, IIT Roorkee*
Dr. V. Sampath, *Professor, Metallurgical and Materials Engineering, IIT Madras*
Dr. M. Manivannan, *Professor, Applied Mechanics, IIT Madras*
Dr. A. Arockiarajan, *Professor, Applied Mechanics, IIT Madras*
Dr. S. Kumaran, *Professor, Metallurgical and Materials Engineering, NIT Trichy*
Dr. K. Kalaiichelvan, *Professor, Ceramic Technology, Anna University*
Dr. R. Ramakrishnan, *Professor, Tamil Nadu Physical Education & Sports University*
Dr. I. A. Palani, *Associate Professor, Mechanical Engineering, IIT Indore*
Dr. K. Jayabal, *Associate Professor, Mechanical Engineering, IIITDM, Kanchepuram*
Dr. N. Ramesh Babu, *Associate Professor, Metallurgical & Materials Engineering, NIT Trichy*
Dr. K. Siva Prasad, *Associate Professor, Metallurgical & Materials Engineering, NIT Trichy*
Dr. V. Arumugam, *Associate Professor, Aerospace Eng., MIT, Anna University*
Dr. A. Siddharthan, *Associate Professor, Production Technology, MIT, Anna University*