

## Registration form

1. Name (Block Letters) : .....
2. Qualification : .....
3. Department : .....
4. Address : .....
5. Faculty/  
Research Scholar/  
Others (Pl. Specify) : .....
6. E-mail-ID : .....
7. Mobile Number : .....
8. Registration Fee Details:  
DD Amount: Rs.2000/- (Rupees Two Thousand only).  
DD Number : .....
- Name of the Bank : .....
- Date of DD drawn : .....
9. Accommodation : Required/Not required

Signature of the Applicant with date:

The DD should be drawn in favour of 'The Director, NIT, Tiruchirappalli, payable at Tiruchirappalli. Please write your Name, Address and Mobile Number on the reverse of the DD. The DD should be enclosed along with this registration form and sent to the following address:

Dr. K. Dhanalaksmi  
Coordinator  
FDP on Smart Materials and Systems  
Department of Instrumentation and Control Engineering  
National Institute of Technology  
Tiruchirappalli – 620 015. Tamilnadu, India.  
Tel: 0431- 2503360, 0431- 2503365  
E-mail: dhanlak@nitt.edu, ezhil@nitt.edu  
Mobile: 9443858456, 9444878908

Faculty Development Program

on

**Smart Materials and Systems**

**JUNE 11-15, 2012**

Organized by

**Department of**

**Instrumentation and Control Engineering**  
**NATIONAL INSTITUTE OF TECHNOLOGY**

**TIRUCHIRAPPALLI - 620015**

Venue: Seminar Hall, Dept. of ICE, NITT



Course Coordinators

**Dr. K. Dhanalakshmi**

**Dr. D. Ezhilarasi**

## ABOUT THE DEPARTMENT

National Institute of Technology, Tiruchirappalli is a deemed university under the control of Ministry of Human Resource Development, Government of India. The Instrumentation and Control Engineering department was established in the year 1993. This is a DST-FIST sponsored department and is accredited by NBA. The faculty members are involved in the execution of sponsored research projects from major funding agencies such as DST, MHRD, British Council (UKIERI), ISRO, ARDB, etc. The MEMS design centre of the department is supported by two national programs viz, National Program on Smart Material (NPSM) and National Program on Micro and Smart Systems (NPMAS). The quality of the department is seen from the fully equipped laboratories and other facilities which cater to the academic and co-curricular interests of undergraduate, postgraduate and doctoral programme in various specializations of the instrumentation and control engineering field. State of the art facilities promote research in the areas of Smart Materials and Systems, MEMS, Instrumentation, Process Control, Mathematical Control Theory, Embedded Systems, etc.

## THE COURSE AND ITS OBJECTIVES

Smart materials and systems is an interdisciplinary domain under science and engineering streams. Smart materials and systems sense and respond to their environment in a predictable manner and have applications in areas as diverse as automotive, defense, aerospace, civil, medical, etc. The field of smart materials and systems has made tremendous progress in recent years. It has created waves across the globe and will play a major role in the future evolution of micro and nano system technologies.

This FDP aims to provide a forum to create awareness about the latest technologies in smart materials and systems as well as to motivate the faculty members to opt this area for their research. This course is dedicated to technical advances in smart materials, systems and structures, including materials, sensing and actuation, control and information processing.

## Objectives of the course

Overview to smart materials and its characteristics  
Smart structures and modeling  
Design of sensors and actuators using smart materials  
Energy harvesting using piezoelectric materials  
Vibration control using smart materials  
Electro rheological fluid and its applications  
Magneto rheological fluid and its applications

## PEDAGOGY

The programme consists of lectures, laboratory visit, laboratory demonstrations and includes discussion of case studies.

## RESOURCE PERSONS

Experts from premier engineering colleges like IISc, IITM, IIITD&M, NITT and, R&D sectors like NPOL and General Motors will be conducting the sessions.

## WHO CAN ATTEND?

Faculty members and research scholars of engineering colleges  
Practicing engineers from industry  
[Instrumentation, Mechanical, Civil, Aerospace, Electrical]

The seats are limited to 30

## FEE

The fee for the programme is **Rs.2000/-** per participant. The programme fee is payable at NIT Tiruchirappalli by cheque/draft favouring **The Director, NIT Tiruchirappalli**. The fee covers study material, hand-outs, lunch and tea.

Accommodation will be provided under payment basis.

No TA/DA will be provided.

## IMPORTANT DATES

Last date for receipt of application: June 1, 2012

Intimation of selected applicants: June 2, 2012