

REGISTRATION FORM

**A Short Term course on Mechatronics,
MEMS and Micro-fabrication
7th to 11th July 2014**

NAME :

DESIGNATION:

INSTITUTION/ORGANIZATION:

ADDRESS:
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E-MAIL:

PHONE/MOBILE:

FAX NO:
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DATE: SIGNATURE:

PAYMENT DETAILS

D.D No. :

DATE:

AMOUNT IN Rs.:

DRAWN AT:

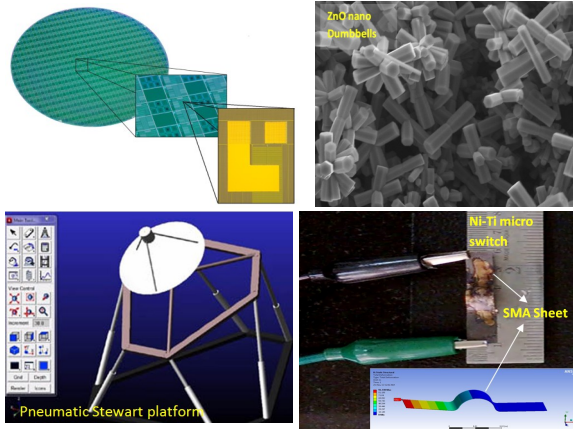
**NAME AND ADDRESS OF THE
SPONSORING ORGANISATION**
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SIGNATURE OF APPLICANT WITH DATE

Course content :

Lectures on

- Sensors and Actuators
- Pneumatic system design
- Micro-robotics
- Mechanical system modelling
- Micro fluidic-system Design
- Bio-MEMS & Lab on chips
- Signal processing and analysis of MEMS device
- Opto Mechatronics
- Nanoscale Memory devices
- Micro/Nano fabrication
- Bio/Chemical Sensors
- Soft material based opto-electronic sensors
- Device characterization techniques



Hands On experience

- PLC based pneumatic system design
- Opto- Mechatronics system design
- Control of Mechanical elements
- Laser based micro Fabrication
- Smart material based device development
- Thin film deposition techniques
- Four probe conductivity
- System automation in LabVIEW platform
- Data acquisition and processing
- Nanoscale Memory devices
- Optical characterization technique

A SHORT TERM COURSE ON

MECHATRONICS, MEMS & MICRO-FABRICATION

**FOR PRACTICING ENGINEERS,
RESEARCHERS, FACULTY MEMBERS**

7th to 11th July 2014

Dr. I. A. Palani

Assistant Professor, Mechanical Engineering, IIT Indore

Dr. Vipul Singh

Assistant Professor, Electrical Engineering, IIT Indore

Dr. M. Anbarasu

Assistant Professor, Electrical Engineering, IIT Indore

Organized by

**Indian Institute of
Technology
Indore
(IIT Indore),
Madhya Pradesh**



Objective of this course

Micro electromechanical systems (MEMS) present a unique platform where both electrical and mechanical components are fabricated on a single wafer. There have been many developments in the last few decades towards the design, fabrication and commercialization of MEMS and NEMS based sensors. Some of the fastest growing areas which utilize different MEMS sensors and actuators are entertainment industries, consumer electronics, medical, defense, space industries, etc. The electro mechanical device basically includes micro actuators, micro sensors, micro transducers, micro-switches etc, these micro device have occupied their own positions for different applications ranging from bio medical, aero space, defense, energy and day to day life. Mechatronics MEMS and micro fabrication are interlinked areas, focusing towards the development of micro devices for the benefit of mankind.

Mechatronics is a multi disciplinary field of engineering. Mechatronics and Micro-fabrication are basic foundation for the development One of the important outcomes of the field is that it is catching up the attention of various scientists either working in the MEMS related area or not. Keeping the interest of serious researchers, faculties, and employees of different institutions, R&D labs and companies across the country, we have designed a unique program on Mechatronics, MEMS and which cover fundamentals of design, fabrication, and packaging of a complete MEMS device.

Accommodation and course details

The accommodation will be provide in the hostel and guest house on Payment basis. Working lunch, tea & snacks will be provided during the training

Teaching Experts: The faculties form the different discipline of IIT Indore will be delivering the lectures,

Laboratory facilities IIT Indore, School of Engineering has a state of art facilities in micro-fabrication and Mechatronics, a laboratory session will be held in the different laboratories In discipline of mechanical engineering and electrical engineering, IIT Indore. Kindly check the updates in the following website

<https://mechatronicsiiti.webs.com/>

Course Fee & details

Students/Research scholars: Rs 3500 per participant

Academic and Govt Research organization:
Rs 7000 per participant

For Industry Rs 12,000 per participant

Course fee includes course material, laboratory work book, lunch and tea during the course

Applications in the prescribed format along with fees (in case of online payment please enclose the online transfer receipt) and sponsorship certificate should reach the coordinator by 31st May 2014.

The selected participants will be informed through email by 15 th May 2014

The fees should be paid by a crossed demand draft drawn in favor of “ The Registrar, IIT Indore”, payable at Indore on or before 5th May 2014.

For Online payment/ Bank Transfer

Bank Name : State Bank of India

Branch : Khandwa Road, Indore

Account number: 31702151577

IFS Code : SBIN0011779

Send the duly filled registration form to

Dr. I.A. Palani,

**Discipline of Mechanical Engg,
IIT Indore,**

**PACL campus, survey no-113/2-B,
opposite to veterinary college,
Indore-MHOW Road. Indore,
Madhya Pradesh, INDIA-453446.**

E-mail: palaniia@iiti.ac.in

Off No-07314240740

Mobile: 09009356097

