

Faculty Development programme (FDP)

on

MEMS Design- Challenges Made Easy

(02nd Sep-03rd Sep, 2017)

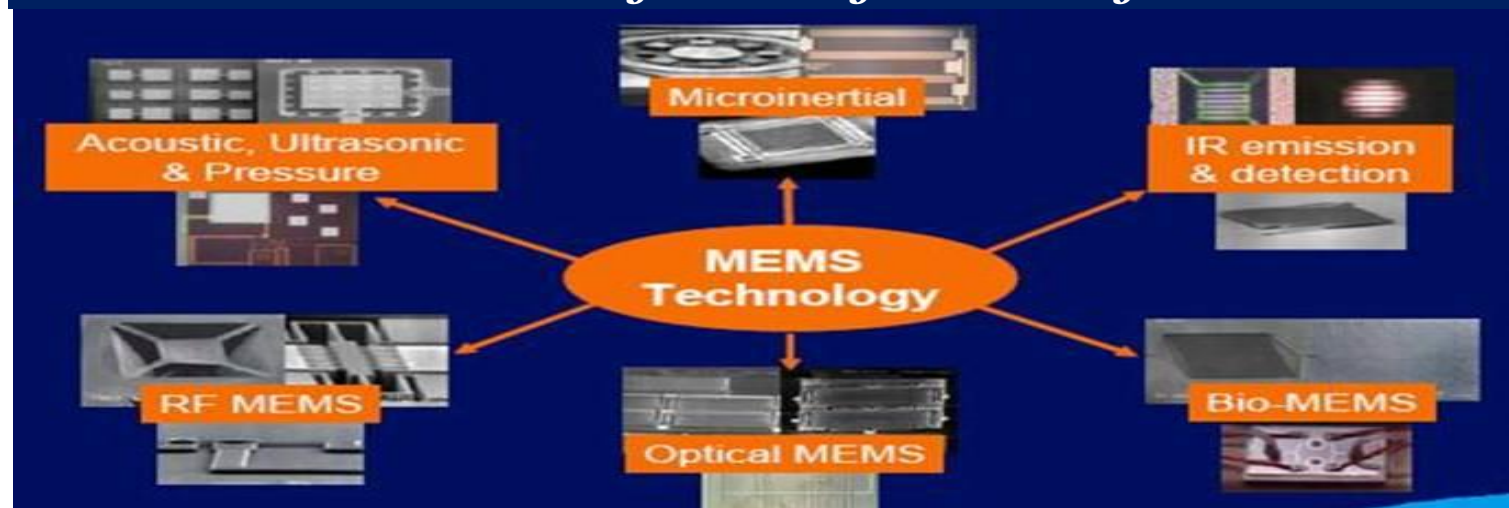
Organised by

Electronics & ICT Academy, IIT Roorkee

Government of India Initiative for Faculty of Institutes/Colleges in areas of Electronics and Information & Communication Technolo

Supported by Ministry of Electronics and Information Technology (MeitY), Govt. of India

MEMS Design- Challenges Made Easy



Venue: Indian Institute of Technology Roorkee

Experts from Academia/Industry

❖ **Sripadaraja.K, (IntelliSuite) Industry Expert**

Dr. Sanjeev Manhas (IITR)

Eligibility: Faculty/Phd/Research Scholars of engineering/technical institutions and Persons from Govt. departments/labs and industry

Course Date: 02nd Sep-03rd Sep, 2017 **Last Date for Registration:** 28th Aug. 2017

Course Contents

The course is designed wherein the participants will be given a thorough understanding of the following topics:

- ✚ Introduction to MEMS
- ✚ Device Simulation – using FEM tools
- ✚ Reduced Ordered Modeling
- ✚ Introduction to IntelliSuite Software
- ✚ System Level Design – NO Fabrication process required
- ✚ System Level Device Analysis
- ✚ Parametric Simulation & Effect of Ambient Conditions.
- ✚ Comparison FEM & System Level Design & Simulation
- ✚ Summary
- MEMS Process Design and Simulation
- Optimisation techniques
- Macromodel Simulation & System Integration

Objective of the Courses

- ✓ Understand MEMS design & simulation challenges.
- ✓ The objective of the course is to provide knowledge on MEMS device and introduce about the use of simulation tools such as IntelliSuite.
- ✓ The focus of the program would be Hands-on through interactive lab sessions on IntelliSuite Software focusing on MEMS Design using Fabrication, FEM Simulation and system Integration with case studies would be shared.

Benefits and Outcomes of the Course

- ❖ The program would help the participants in acquiring knowledge on design thinking on MEMS Sensors and Actuator.
- ❖ Participants would also acquire the skills needed to efficiently utilize IntelliSuite Software through MEMS process development, Design Rule Checks, FEM Simulations, benchmarking and knowledge on various design parameters. This would enable them on being updated with the current state of the art, industry insight and connects.

Course Program

- ✓ The program is split into lectures and labs/hands-on sessions (60:40).
- ✓ Quiz and project work for enhanced learning.
- ✓ Hands-on experience on basic & advanced-level topics.
- ✓ Interaction & learning with experts from academia & industry
- ✓ Certificates to the participants by E&ICT Academy IITR.

Contact Hours: Two days (Theory, Hands-on, Guest Lectures)





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About E&ICT Academy

As a part of "Financial Assistance for setting up Electronics and ICT Academies" of MeitY. E&ICT academy, IIT Roorkee is mandated to provide specialized training with emphasis on hands-on learning, on basic/advanced level topics and emerging technologies in the electronics and ICT domain. We conduct training programs at IIT Roorkee, as well as at other institutes/colleges through activity center.

Activities of the Academy

- Faculty development programmes on
 - Specialized training with hands-on on basic and advanced level topics for engineering streams
 - Domain based training on use of ICT tools and techniques
- Training and consultancy services for industry
- Curriculum development for industry
- Continuing education programme for students / working professionals
- Design, develop and deliver specialized modules for specific research areas
- Provide advice and support for technical incubation and entrepreneurial activities

Seats	40 seats on first-cum-first-serve basis
Duration	2 days, 15 hours
Accommodation	Available if required in the institute's hostels
Registration Fee	Faculty Members: Rs. 1,000/- Research scholars: Rs. 600/- Persons from Industry: Rs. 3,000/-
Payment Details	Demand draft in favor of "Dean SRIC IIT Roorkee" payable at Roorkee
How to Apply	Online: The participant may log on to the E&ICT academy IITR (website: http://eict.iitr.ac.in) and fill-up the application form. Offline: Email scanned copy of the filled-in Registration form to E&ICT Academy IITR (Email: eict@iitr.ac.in , eictiitr@gmail.com).
Contact Details	Dr. Sanjeev Manhas (P.I., E&ICT Academy, ECE Dept, IITR) eict@iitr.ac.in Tel: +91-1332-28 6457, Mob. 7078627392

Registration Form

Name of the Applicant :.....

Gender:.....

Category (Please tick): GEN/OBC/SC/ST

Designation:

Name and Address of the Organization/Institute:
.....

Employ ID:

City/Town:.....

Email:.....

Phone Number:.....

Mobile Number:.....

Do you need Accommodation? (Yes/No):

DD Number:.....

Date:.....

Issuing Bank:.....

Payable at:.....

Signature of the Applicant:.....

Affix stamp size
photograph

A hard copy of the application form along with Demand Draft must reach to the following address:
Dr. Sanjeev Manhas, EICT Academy, ECE Department, IIT Roorkee, Uttarakhand 247667

For More Information



- : <http://eict.iitr.ac.in>
- : eict@iitr.ac.in
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