Faculty Development Webinar on

Nano - Electro - Mechanical System

NEMS Technologies:

Modern interdisciplinary approach in engineering

राष्ट्रीय प्रौद्योगिकी संस्थान, सिलचर
तेजस्विनावधीतमस्तु
NATIONAL INSTITUTE OF TECHNOLOGY, SILCHAR

NEMS TECH 2020

TEQIP - III

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Online Registration Link:
https://forms.gle/dUZAABW5WMhJKgYp9

17th Aug to 21st Aug ,2020

Objective:

- Fundamentals of Nano-Electro-Mechanical (NEMS) Systems and their applications in various areas.
- Multi-disciplinary approach for design and fabrication of NEMS based devices/systems.
- To understand the concept of functional materials for N/MEMS based systems: Simulation, growth and characterization.
- Recent trends and development in Nano/Micro manufacturing process and composite.
- To explore the NEMS applications in the field of high performance computing systems.
- Industry view on the fabrication techniques and system development for the N/MEMS applications.

Speakers:


Prof. J. Ramkumar
IIT Kanpur


Prof. A. Shukla
IIT Bombay


Dr. M. Anbarasu
IIT Madras


Dr. P. Nayak
IIT Madras


Dr. I. A. Palani
IIT Indore


Dr. A. Thakur
IIT Patna


Dr. R. Devan
IIT Indore


Dr. D. Mallick
IIT Delhi


Dr. M. Z. Ansari
IIITDM Jabalpur


Dr. T. Dixit
IIITDM Kancheepuram


Dr. K. Guha
NIT Silchar


Dr. S. Bhowmik
NIT Silchar


Dr. Y. Singh
NIT Silchar


Dr. S. K. Pandey
NIT Silchar

Coordinators

Dr. Sumitra Sharma
Dr. Shivendra Kumar Pandey

Organized by:

Department of Mechanical Engineering And
Department of Electronics & Instrumentation Engineering,
National Institute of Technology Silchar
Silchar-788010, Assam, India **Web: http://www.nits.ac.in**

One Week Webinar

on

Nano-Elecro-Mechanical System

NEMS Technologies: Modern Interdisciplinary Approach in Engineering

NEMSTech 2020

TEQIP

(TEQIP III SPONSORED)

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Department of Mechanical Engineering

&

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INTRODUCTION

The Nano-Electro-Mechanical System (NEMS) market is one of the fastest growing zones of the semiconductor industries for the consumer, medical, defense, space, communication etc. applications. NEMS is one of the increasingly important multi-disciplinary areas which integrates materials, electronics and mechanical engineering to design miniaturized devices/systems. This workshop will provide an insight to understand the current and futuristic trend of NEMS devices in order to meet the needs of relevant industry and research organization.

OBJECTIVES

- Fundamentals of Nano-Electro-Mechanical (NEMS) Systems and their applications in various areas.
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- To understand the concept of functional materials for N/MEMS based systems: Simulation, growth and characterization.
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- To explore the NEMS applications in the field of high performance computing systems.
- Industry view on the fabrication techniques and system development for the M/NEMS applications.

WHO CAN APPLY

Faculties, PhD Scholars, PG/UG Students, Researchers and Working Professionals from various engineering as well as basic science background.

REGISTRATION & CERTIFICATION

- There is no registration fees.
- Number of participants is limited to 200.
- Interested candidates can register by filling the online registration form with the link given below:

https://forms.gle/dUZAABW5WMhJKgYp9

- e-Certificate will be provided to the active participants.

IMPORTANT DATES

- Last date for online registration: **15th Aug 2020**
- Date of confirmation to participants: **16th Aug 2020**
- Date of webinar: **17th Aug – 21st Aug, 2020**

CONTACT DETAILS

Dr. Sumitra Sharma,

Assistant Professor, Mechanical Engineering,

NIT Silchar

Email: sumitra@mech.nits.ac.in

Mob: +91-7017419360

Dr. Shivendra Kumar Pandey

Assistant Professor, E&I Engineering

National Institute of Technology Silchar

Email: skpandey@ei.nits.ac.in

Mob.: +91-9425472154

ABOUT NIT SILCHAR

National Institute of Technology (NIT) Silchar, an Institute of National Importance under the NIT Act was established in 1967 as Regional Engineering College (REC) Silchar in Assam. In year 2002, it was upgraded to the status of an NIT from REC. NIT Silchar is situated on the banks of river Barak and on a sprawling campus spread over 600 acres of land on the outskirts of Silchar. The landscape of NIT Silchar campus is beautiful with natural lakes and hillocks, surrounded by tea gardens. NIT Silchar has achieved 9th position among NITs, 46th in Engineering institutions and 94th in overall category in NIRF 2020 ranking.

ABOUT DEPARTMENTS

The Department of Mechanical Engineering is one of the oldest and finest Departments in the region. The workshops of the Department contain highly sophisticated machines presenting a unique and unparalleled quality. The Departments offers a four year B.Tech. Programme in Mechanical Engineering, and a two year M.Tech. Programme in Thermal engineering, Design and Manufacturing, CAD-CAM and Automation, Materials and Manufacturing Technology, and Ph.D. Programme in the related research topics.

The Department of Electronics & Instrumentation Engineering was established in the year of 2008 and currently offers a four year B.Tech. programme in Electronics & Instrumentation Engineering, M.Tech. in Instrumentation Engineering and Ph.D. in the related areas. Department is having Design and Simulation Lab and Instrumentation Lab, which is useful for the development and characterization of nanoscale devices. In addition to this, the department is developing nanofabrication facility with the funded research grant from SERB-DST.

TENTATIVE RESOURCE PERSONS

Highly qualified and experienced faculties from various reputed institutes (IITs, NITs, IIITs etc.) and industry experts.

- Prof. J. Ramkumar, Professor, IIT Kanpur
- Prof. Alok Shukla, Professor, IIT Bombay
- Dr. M. Anbarasu, Associate Professor, IIT Madras
- Dr. Pramoda Nayak , Adjunct Professor, IIT Madras (DST Ramanujan Fellow)
- Dr. I. A. Palani, Associate Professor, IIT Indore
- Dr. Rupesh Devan, Associate Professor, IIT Indore
- Dr. Atul Thakur, Associate Professor, IIT Patna
- Dr. Dhiman Mallick, Assistant Professor, IIT Delhi
- Dr. Mohd. Zahid Ansari, Assistant Professor, IIITDM Jabalpur
- Dr. Tejendra Dixit, Assistant Professor, IIITDM Kancheepuram
- Mr. Subhas Pai, Chief Technical Officer, Excel Instruments Mumbai
- Dr. Koushik Guha, Assistant Professor, NIT Silchar
- Dr. Sumit Bhaumik, Assistant Professor, NIT Silchar
- Dr. Yogesh Singh, Assistant Professor, NIT Silchar
- Dr. S. K. Pandey, Assistant Professor, NIT Silchar

CHIEF PATRON
Prof. Sivaji Bandyopadhyay,
Director, NIT Silchar

Patrons
Prof. P. K. Patowari, Dean (Faculty Welfare)
Prof. R. D. Mishra, Dean (Student Welfare)

Advisory Members
Dr. S. H. Laskar, HoD, E&I Engineering
Dr. A. Biswas, HoD, Mechanical Engineering
Dr. Sukumar Pati, Coordinator, TEQIP-III

Organizing Committee Members
All the faculty members of Mechanical Engineering and Electronics & Instrumentation Engineering Department

Coordinators
Dr. Sumitra Sharma
Assistant Professor, Mechanical Engineering
Dr. Shivendra Kumar Pandey
Assistant Professor, E&I Engineering

Department of Mechanical Engineering
&
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