

10th ISSS National Conference on

MICRO AND SMART SYSTEMS

21 – 23 October 2019 NMAM Institute of Technology, Nitte

Call for Participation

Organized by



NMAM INSTITUTE OF TECHNOLOGY

(An Autonomous Institution affiliated to VTU, Belagavi) Nitte - 574110, Karnataka, India



In association with

INSTITUTE OF SMART STRUCTURES AND SYSTEMS

Indian Institute of Science, Bengaluru, 560012

About the Organizers

The Institute of Smart Structures and Systems (ISSS) plans to organize its annual conference in a new format in 2019. The conference on micro and smart systems aims to bring together distinguished speakers who will present state-of-the-art research in their respective domains. There will be eight talks each of which will be of one hour duration with ample time for discussion and interaction. The first day will have four distinguished talks and will be open to college students of the institutions in the vicinity. The students can interact with the speakers. Second and third days are for those who register for the conference; of course, all registrants should attend the first day's talks too. Second day will have four more distinguished talks and a session on power presentations by contributing authors in a plenary session.

The 10th edition of ISSS National Conference on **Micro and Smart Systems** is being organized by Nitte Mahalinga Adyanthaya Memorial Institute of Technology (N.M.A.M.I.T.), Nitte under the aegis of the Institute of Smart Structures & Systems, ISSS, India. NMAMIT is Affiliated to VTU, Belagavi, is an Autonomous Institution offering UG, PG and Doctoral Programmes. The institute is a unit of Nitte Education Trust, Mangalore. The institute currently offers 7 UG programmes, 11 M.Tech programmes in Engineering, MBA and MCA programmes. All UG Programmes are accredited by National Board of Accreditation (NBA), New Delhi and is a ISO 9001:2015 certified Institution. Institute is accredited with National Assessment and Accreditation Council (NAAC), New Delhi with 'A' Grade. The institute has been placed at 128th position in NIRF ranking -2019.

Scope of the Conference

The ISSS conference will attract researchers, industries and other professionals in the field of MEMS, Smart Materials, Structures & Systems, across the country with special emphasis on Piezoelectric and Shape Memory materials, Actuators, Sensors and Intelligent System Design.

The focus is on the following topics:-

- Modelling and Analysis of Micro and Nano Structures
- Smart Multi Functional Materials
- Sensors and Actuators
- Image Processing Techniques in Micro & Smart Systems
- Applications of Machine Learning, Artificial Intelligence and Neural Networks in Smart Systems
- Micro/ Nano Devices: Design, Fabrication, Packaging and Characterization
- Smart materials and Structures for Health Care, Energy, Environment, Structural
 Health Monitoring, Wireless, Thermal Management, DNA Computing, Automotives.

Special Workshops on related topics will be scheduled on 21 Oct 2019 (FN and AN).

Plenary Speakers:

This year's ISSS conference on Micro and Smart Systems will feature a set of eight indepth talks by eminent researchers. Each talk will have a discussion leader to enable substantive discussion and interaction with the speaker. Therefore, unlike the usual format of a long presentation followed by just a few questions, the new discussion format will facilitate active engagement of the audience throughout the talk. Here is the line-up of the speakers:

- **Prof. Amit Agrawal**, IIT-Bombay, Mumbai: *Development of Innovative Point-of- Care Microdevices*
- **Prof. Enakshi Bhattacharya**, IIT-Madras, Chennai: *Silicon-based Biosensors and BioMEMS*
- **Prof. Saurabh Chandorkar**, IISc, Bengaluru: *Energy Loss Mechanisms in Micromechanical Resonators*
- Prof. S. Gopalakrishnan, IISc, Bengaluru: Active Structure borne Noise and
 Vibration Control of Marine platform using Novel
 Piezoelectric Stack Actuators
- **Prof. Dipti Gupta**, IIT-Bombay, Mumbai: *Development of flexible electronic*devices and sensors for biomedical and industrial applications
- Dr. V.R. Lalithambika, ISRO, Bengaluru: Space exploration
- Prof. G.M. Kamath, IIT Kanpur: Corrosion Monitoring in Aircraft Structures
- **Prof. Rahul Roy**, IISc, Bengaluru: *Droplet microfluidics for single molecule analysis*

A Special Session One-on-one Mentoring of Student Participants

Another highlight of this year's conference is special session allocated for student mentoring by experience researchers. Specific time will be allotted for each student to spend with a mentor to discuss her/his research and career aspirations to seek guidance in person. Those student participants who want to avail this opportunity may please see details and fill their details using the online form by Oct. 1st, 2019. The organizers will choose a mentor and connect the student and the mentor by an introductory email, prior to the conference. It is hoped that substantive interaction during the special session will be continued later as the mentor would have understood the student's background and aspirations. Only 20 students will be given this special opportunity and will be selected based on their CVs. Those students who register for the conference early and send their CVs will be given preference.

[Details] [Request]

Paper Submission

Authors are requested to submit their research findings in about four pages with an abstract highlighting the technical contributions and key results which will enable to finalize the acceptance of the paper.

The full-length conference paper manuscript in pdf format after embedding all figures, graphics etc. should be sent by email to: ncmss2019@nitte.edu.in

A few of the contributed papers presented during the conference will be shortlisted for publication in the ISSS Journal of Micro and Smart Systems after further review.ISSS Special Session

A special session is earmarked for ISSS Annual Awards presentation during the conference.

Venue

Sambhram Auditorium, NMAM Institute of Technology, Nitte, Udupi District, Karnataka.

Important Dates

Submission of Full Paper : 15th Sep. 2019
Acceptance of Paper : 20th Sep. 2019
Submission of revised Paper : 30th Sep. 2019
Last date for Conference Registration : 10th Oct. 2019

Registration Fee

ISSS member

(Student/Research Scholar/Faculty*) : Rs. 1,000/-Other ISSS Member: : Rs. 2,000/-

Non Members

(Student/Research Scholar/Faculty*): : Rs. 2,500/-Others# : Rs. 3,500/-

Please note that it would be possible become Annual Member of ISSS by paying Rs 1000 towards the membership fee and avail discounted registration fee for members. Registration fee includes conference kit, refreshments during the conference period. Accommodation will be provided on first come first serve basis and nominal charges apply.

The registration fee has to be paid through DD/NEFT. DD has to be drawn in favor of "Principal, N.M.A.M.I.T., Nitte", payable at Syndicate Bank Nitte / SBI, Karkala, to be sent to the Conference Secretary before the due date.

^{*} Students / Research Scholars should enclose a recommendation letter from the Supervisor / HOD along with the Registration form.

NEFT/RTGS

A/c Holder name : Principal, NMAMIT, Nitte Syndicate Bank, Nitte-574110

Account Type : S/B

Account No. : 01152200033493 IFS/RTGS code : SYNB0000115 SWIFT code : SYNBINBB014 MICR Code : 576025533.

The proof of NEFT payment (with UTR No, date & time, Paper Id) needs to be communicated through email to ncmss2019@nitte.edu.inContact Details

Organizing Secretary:

Mr. Raghavendra Bairy (Ph.D),

10th ISSS National Conference, NMAM Institute of Technology, Nitte – 574110, Karnataka.

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Email: ncmss2019@nitte.edu.in

For paper submission registration and other details please visit: ncmss2019.in

Sponsorship:

Government/ Private Institutions/ Industries/ Equipment Manufactures & Suppliers are requested to avail the benefits as sponsor by contributing Rs. 50,000/-, Rs. 25,000/- Rs. 10,000/, as Platinum/ Gold/ Silver sponsor respectively.

For more details: https://ncmss2019.in/sponsorship/.



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Registration Form

Name	:	
Gender	:	
Designation	:	
Address	:	
Pin code	:	
Mobile No.	:	
Email	:	
DD/NEFT Details	:	
Accommodation	on Required : Yes / No	
Place Date		Signature