



INSTITUTE OF SMART STRUCTURES AND SYSTEMS (ISSS)

A Society Registered under Govt. of Karnataka
Dept of Aerospace Engineering, Indian Institute of Science, Bangalore

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INFORMATION BROCHURE

ISSS is a Professional Society that helps to keep pace with the advances being made in Micro and Smart Systems Technologies in India. It organizes a series of international conferences every three years on Smart Materials, Structures and MEMS to bridge the gap between the advanced level of technology abroad and the R&D efforts in India. In addition, it organizes and supports various national conferences and awareness workshops in this area. It also provides a common forum for the scientist and researchers working in various related fields. Basic aim of this Society is to foster dedicated research among Indian scientists in this vital, state-of-the-art / cutting edge technology.

ISSS has made significant societal contributions in emerging areas of science and technology such as micro electromechanical systems (MEMS) and Smart materials, to increase the awareness and interest among the public, students in general, and researchers from allied fields. Having come into prominence in the last two decades, these areas make use of developments in semiconductor and other materials technologies. It is felt that the country can reap significant potential if these technologies are disseminated and nurtured at an urgent pace. Hence the following activities are taken up by the Society over the past several years.

The hub of activities of this Professional Society is located in IISc, in Bangalore – the Silicon Valley of India. The city has various Aerospace, Electronics, Information Technology and other hi-tech establishments. This Society formed by a core group of scientists and experts has access to infrastructure and scientific support of all DRDO, CSIR, DAE, DOS Laboratories and Academic Institutions in various cities of the country. In order facilitate local activities Chapters are formed at Coimbatore and Vishakhapatnam.

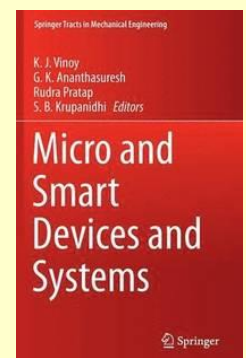
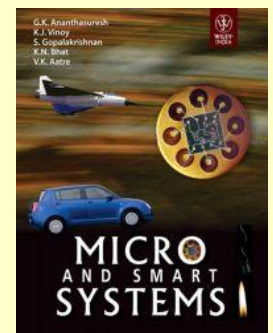
The Institute has been exempt from paying taxes under Section 12/A.

RECENT /PROPOSED ACTIVITES OF ISSS

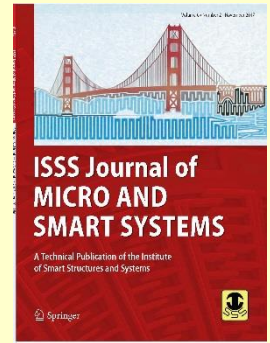
- Organized international Symposia in Bangalore for the benefit of researchers in the country. One characteristic outcome/feature of this conference series is that the participation from Indian scientists have increased manifold during the last 18 years. All these were held at JN Tata Auditorium, IISc, Bangalore. These were attended by a large number of researchers from across the country, many of whom were not members of the society. Some foreign experts were invited by ISSS to give special talks during these events.
- Annual National Symposia on MEMS are held at various locations to distribute benefits to the society at large. Past events were held at Hyderabad (Dec 1-2 2006) Pilani (Nov 16-17 2008) Kolkatta (Oct 14-16 2009) Nagpur (Sept 30-Oct 01 2010), Coimbatore (Sept 21-22, 2012), Pune (Sept 6-7, 2013), Kochi (Sept 22-25, 2015) and Kanpur (Sept 28-30, 2016).
- Collaborated with Visvesvaraya Technological University (VTU-Belgaum) for curriculum development in the area of MEMS, by proposing a new syllabus, arranging experts to write a new text book, and organizing workshops for students and faculty members.
- A book is written in the area of Micro & Smart Systems by an expert team constituted by ISSS and published by John Wiley, India. This book is dedicated to ISSS. An extended version of this book is published for international readers by John Wiley USA with the title Micro & Smart Systems Technologies.
- Recently, the society has collaborated with the National Program on Micro and Smart Systems to organize various workshops at Coimbatore (Nov 26-28, 2008) Pune (January 22-24, 2009) Kanpur (September 10-12, 2009) Shillong (March 25-27, 2010) and Kurukshetra (November 13-14, 2010)
- Organized technical talks by experts from within and outside the country, on cutting edge technologies during National and International Conferences organized by the Society, and also at various engineering colleges to guide students and scientists to initiate research activities in MEMS

OFFICE BEARERS

| | |
|----------------|---|
| President | Prof. KJ Vinoy IISc, Bangalore |
| Vice-President | Dr. K Vijayaraju ADA, Bangalore |
| Secretary: | Dr. B. Vidyashankar General Electric, Bangalore |
| Treasurer | Mr. J. Guru Dutt SriDutt Tech., Bangalore |



- The society has constituted an **ISSS Annual Awards** from 2012, to recognise Young Scientists below the age of 40 by conferring on them a Young Scientist Award comprising of a cash prize and a citation. A new **Technology Award** is instituted in 2015.
- Many **Student Awards** at different levels have been instituted by the Society.
- Provided financial support of students travelling for attending national/ international conferences.
- Provided technical and financial assistance for Institutions/Organizations such as Engineering colleges for holding National /International Conferences.
- Honoured accomplished scientific and technical experts in the areas of Smart and Micro systems, from across the country. The objective was to encourage people to take up research in areas of interest to this Institute.
- Provide common forum for the Scientists working in this field by publishing a quarterly newsletter **Sukshma**
- A Scientific **Journal** has been started by the Society in 2012. Early issues of the journal is freely available online. Since 2017 this is co-published with Springer.
- Publish research work through Monographs. A monograph Structural Health Monitoring was published in 2002. An edited monograph on Micro and Smart Devices and Systems is published with an arrangement with Springer in 2014.
- ISSS plans to assist industries in the area of Micro and Smart Technologies and has formed a subcommittee.
- Other special sub-committees have been formed for addressing the needs for **International Relations**, and for furthering our activities towards **Education sector**.



We hope that the above activities of ISSS have been helpful to the society at large as these have facilitated researchers in emerging areas of science and technology such as microelectromechanical systems (MEMS) and Smart materials, and to increase the awareness and interest among the public, students in general, and researchers from allied fields. We seek volunteers to help us reach out to larger numbers of professionals across the country.

TYPES OF MEMBERSHIPS & BENEFITS (Membership Forms [available online](#))

Student Member: Undergraduate and postgraduate students studying in recognized institutions can become members of the Institute. Student membership is only for the duration of the study, to be renewed annually. First time members are required to pay Rs 750, and subsequent renewals are at Rs 250. Student members have all rights of regular members of the society, except voting rights. They do not get copies of the Journal of ISSS.

Life Member: Working professionals engaged in the area of micro and smart materials, devices, systems and modelling can become life members of the Institute. All life members get the ISSS quarterly Newsletter Sukshma. They also get special discounts on conferences organized by ISSS. First time members are required to pay Rs 5500 for the life membership.

Existing life members get copies of the Journal of ISSS till end of 2015 after which the Journal will have to be subscribed. New life members will get copies of the current volume of the Journal of ISSS.

Annual Member: Eligibility of annual membership is the same as that of Life Members. New annual memberships are at Rs 1000, and subsequent renewals at Rs 500. Annual members get subsidised rates for the Journal of ISSS.

Corporate/Institutional Member: Academic and Industrial Research Organizations engaged in the area of micro and smart materials, devices, systems and modelling can become members of the Institute. Regular staff members of these Member Organizations can avail special discounts on conferences organized by ISSS. Life time Institutional membership fee is Rs 100 000 for Industries and Rs 50 000 for Academic Institutions. These organizations can subscribe copies of the Journal of ISSS at subsidised rates. Technical support may be provided by ISSS to organize workshops/seminars at these organizations.

Registered Office

Institute of Smart Structures & Systems,
Department of Aerospace Engineering
Indian Institute of Science
Bangalore 560 012, India

| NEW MEMBERSHIP SUBSCRIPTION | | |
|---|------------|---------------|
| Category | Annual* | Life* |
| Member | Rs. 1000/- | Rs.5500/- |
| Student member | Rs. 750/- | N.A |
| Corporate member – (Industry) | | Rs. 100,000/- |
| Corporate member (Academic Institution) | | Rs 50,000 |

(*Includes Admission fee: Rs.500/-)
Cheque/DD should be drawn in favour of **ISSS**, payable at Bangalore

Address for Correspondence

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