

SUBMISSION OF ABSTRACT

The abstract should be 200 to 300 words and it should be sent to icrabs.2023@srmist.edu.in on or before 30.06.2023.

PUBLICATION

Selected articles will be considered for publications in SCOPUS-indexed journals. (Additional cost may apply based on the publication policy)

REGISTRATION FEES:

Students and Research Scholars: INR 750

Faculty: INR 1500

International Participants: INR 5000

Atleast one author registration per paper is mandatory for presentation. Only registered authors will receive conference kits and certificates.

ONLINE TRANSFER

Account Name: Association of Mechatronics Engineers(AME)

Account No: 984705705

IFSC Code : IDIB000S181

MICR Code: 600019171

Bank Name: Indian Bank

IMPORTANT DATES

Last date for full paper submission : 02.09.2023

Intimation of Acceptance : 05.09.2023

Last date for final copy submission : 08.09.2023

Last date for registration : 12.09.2023

Conference Dates : September 14 - 15,2023

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(Mechatronics Engineering department, SRMIST, Kattankulathur)

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Dr. V. Sujatha, Assistant Professor.

Dr. B. Priya Esther, Assistant Professor.

Mrs. T. Praveena, Teaching Assistant.

KEYNOTE SPEAKERS

International and National Key note speakers from Academics and Industry have given consent to deliver speech.



DBT sponsored 1st International Conference on “Robotics in Agriculture, Bio- Waste Management and Surgery”

14.09.2023 & 15.09.2023

Convener
Dr. G. MURALI

Co-Convener
Dr. A. VIMALA STARBINO

Co-ordinators
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JEY SUBBAROYAN

Vice-President, Medical Affairs &
Clinical Research (US), Nyxoah, Inc.



ARUN GANAPATHY CHOKKALINKAM

Managing Director I-KNOT Pvt Ltd,
Singapore.



DURGAPRASAD BHANDARI

Department of ECE & EEE, Nepal
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THE PANEL



ALI SOPHIAN

Associate Professor, Kulliyah of
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Islamic University, Malaysia.



L. MAYAKRISHNAN

Deputy Director of Agriculture,
Commissionerate of Agriculture,
Chepauk, Chennai.

ABOUT SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

SRM Institute of Science and Technology (formerly known as SRM University) is one of the top-ranking Universities and most premier engineering destinations in India, which was established in 1985 by the Founder Chancellor, Dr. T.R. Paarivendhar. Now it is functioning in four campuses located at Kattankulathur, Vadapalani, Ramapuram and Tiruchirappalli in Tamilnadu and Modi Nagar in Ghaziabad with over 52,000 students and 3200 faculty members. It offers a wide range of programs to students applying for undergraduate, post-graduate and doctoral programs in Engineering, Management, Medicine &Health Sciences, Law, Science & Humanities and Agricultural Sciences. SRMIST has been engaged in nurturing minds through a rich heritage of academic excellence. Essentially a hub of bustling student activities, the green and beautiful campus has been a second home to thousands of students in their journey to pursue higher education. The Institution has moved up through international alliances and collaborative initiatives to achieve global excellence. SRMIST International Advisory Board (IAB) is actively involved in building a stronger international dimension in research and teaching methodology, which creates avenues for research and successful careers. The SRMIST also collaborates with foreign Universities like MIT, Carnegie Mellon University (CMU), Pittsburg University, etc. offering a postgraduate academic program MSIT-ESE. Over 200 students sponsored to 35 foreign Universities like MIT, Carnegie Mellon, UC Davis, Warwick, and Western Australia. Now the Institute enjoys an unsurpassed reputation in academia and corporate circles being the preferred workforce source for vision to be recognized as a world-class learning institution. SRMIST has been categorized as Category I University by the Ministry of Human Resources Development (MHRD), Government of India. It enjoys 12 B status too. SRMIST is accredited by NAAC with A++ Grade and placed in fourth position in ARIIA (2022). SRMIST has been ranked 19 under University category, 24 under Engineering category and 36 under Research category in National Institutional Ranking Framework (NIRF) 2022.



ABOUT THE DEPARTMENT

The department of Mechatronics Engineering occupies a prominent place in the annals of its academic history. The department has excellent laboratory facilities which include Sensors and signal processing lab, Mechatronics lab, Signal Processing and Embedded Control (SPEC) lab, Electronic Devices and Circuits (EDC) lab and Mechatronics softwares. The faculty in the department is a rich blend of personnel with industrial and professional experience. The dedicated staff members have sound knowledge in emerging areas like Automation systems, Robotics, Expert systems and Embedded system.

ABOUT ICRABS

This Conference provides an opportunity to use more Robotic manipulators in the advancement of Agriculture, bio waste management and surgery. In the recent years, Robotics has emerged into medical field but in Farming and Bio Waste disposal it is at its infant's stage. Autonomous robots are expected to increase productivity, quality and effective time management in Agriculture .These Robots will benefit the bio-waste disposal management which is inhuman to be handled by humans but until now humans are not fully replaced by Robots as it involves more Research and Development to be undertaken in this field. In Medical Field special instruments that are small and delicate could not be performed precisely nor easily maneuverable by the human hand. The robot replicates the surgeon's hand movements thereby minimizing hand tremors. The surgeon thus can operate with enhanced precision, dexterity and control even during the most complex procedures thereby facilitates faster healing and less pain. Hence this conference intends to achieve the above objectives including raising awareness to prevent pollution, degradation of natural resource, to provide scope for engineers in this field. This would also give rise to Research and Development and hence connect engineering with the environment. This conference also provides a scope for more IoT and Artificial intelligence in farming, aqua culture and medical, rehabilitation robotics.



TOPICS

Researchers are invited to present their research work relevant but not limited to the following topics,

- Bio-medical Robotics
- Rehabilitation Robotics
- Assisting technologies for elderly/ disabled/ injured using sensor technologies.
- Drones in agriculture
- Robotics for green house and vertical farming
- Image processing and machine learning in agriculture.
- Obstacle avoidance
- Vertical farming with mobile robots
- Serial/Parallel Manipulators in Bio-waste disposal
- Mobile Robotics in Bio waste management
- Trajectory/Path planning in Medical Robotics
- Machine learning models
- Medical imaging systems
- Applications of expert systems and AI to clinical decision making
- Advanced control strategies

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