



International Conference on ROBOTICS and SMART MANUFACTURING (RoSMa2018) 19-21 July 2018

Organized by:

Indian Institute of Information Technology Design and Manufacturing (IIITDM) Kancheepuram
(An Institute of National Importance Established by the Ministry of Human Resource Development, Govt. of India)

About Institute

Indian Institute of Information Technology Design and Manufacturing Kancheepuram (IIITDM Kancheepuram) is an *Institute of National Importance* established in 2007 by the Ministry of Human Resource Development, Government of India, to pursue design and manufacturing oriented engineering education and research and to promote the competitive advantage of Indian products in global markets. The Institute is presently offering B.Tech programmes in Computer Engineering, Electronics and Communication Engineering (Design & Manufacturing), Mechanical Engineering (Design & Manufacturing) and Smart Manufacturing, 5 Dual Degree Programmes leading to B.Tech and M.Tech Degrees, M.Des in Electronic Systems Design, Communication Systems Design, Mechanical Systems Design, M.Tech- Smart Manufacturing and inter-disciplinary Ph.D programmes in core and applied areas of engineering.

About Conference

This International conference is a forum which will discuss about the current issues and trends in the development of robotics, application of smart manufacturing, application of smart materials in robotics and allied areas. Experts from industry and academia will be delivering key-note lectures. An International Student Robot Competition is also part of this conference. This is the first edition in "Robotics" series. Subsequent editions will be once in two years.

Paper Submission

Authors are invited to submit only original research papers of best quality as per the template uploaded. All paper submissions, review management and submission of final version will be through "EasyChair" Conference Management System. It is planned to publish all accepted papers online by the publisher (Elsevier) on conference dates.



Paper Acceptance and Publication

All accepted papers will be published in an international journal, *Procedia Computer Science* of Elsevier (SCOPUS Indexed) and hence strict evaluation procedure would be followed. Therefore, authors are requested to submit only good quality original unpublished papers. All papers submitted will be peer-reviewed by two reviewers in a double blinded manner and based on the recommendations of the reviewers; the reviewer's comments will be intimated to the authors through the online submission system. The camera-ready manuscript, after incorporating the revision/comments, as recommended by the reviewers, need to be submitted before deadline.



Best Paper Award

Authors of best 10 papers accepted and registered for the conference, will be intimated to prepare a poster and present the same in the conference in addition to oral presentation. Finally, from the 10 best papers, the first three papers will be selected and best paper award will be presented during the conference. The criterion for the selection of best papers is based on review reports, evaluation of poster and oral presentations. The best paper awards consist of cash prize and citation. Further details will be updated in the conference website.

Key Note Speakers



Prof. Rezia Molfino
University of Genova, Italy
Mechatronics, Robotics, Parallel Mechanisms, Smart Materials, Automation, Robot control



Prof. Jinwhan Kim
Korea Advanced Institute of Science & Technology (KAIST), Republic of Korea
Mobile and Marine Robotics, Unmanned Surface Ships and Underwater Vehicles, Vehicle Intelligence, Navigation and Control



Prof. Huang Weimin
NTU, Singapore
Shape Memory Materials and Technologies, Smart Actuators and Devices for Robots, Active Assembly and Disassembly, Surface Patterning



Prof. S K Saha
IIT Delhi, India
Multibody Dynamics, Robotics, Design, Mechatronics



Prof. Ashish Dutta
Department of Mechanical Engineering, IIT Kanpur, India
Humanoid Robotics, Intelligent Control Systems, Micro-sensors and Actuators, Bio-robotics

International Advisory Committee

Prof. Ananthasuresh G K, IISc, India
Prof. Ashish Dutta, IIT Kanpur, India
Prof. Asokan T, IIT Madras, India
Prof. Fouad Bennis, Ecole Centrale de Nantes, France
Prof. Fulvio Mastrogiorganni, University of Genova, Italy
Dr. Gerald Seet, NTU, Singapore
Prof. Jinwhan Kim, KAIST, Republic of Korea
Dr. Keng Huat Hoh, City University of Hong Kong
Prof. Manfred Kohl, Karlsruhe Institute of Technology (KIT), Germany
Prof. Matteo Zoppi, University of Genova, Italy
Dr. Mohan Rajesh Elara, SUTD Singapore
Prof. Nilesh J. Vasa, IIT Madras, India
Dr. Palani I.A., IIT Indore, India
Dr. Pandiyan SR, IIITDM Kancheepuram, India
Prof. Ponnambalam S G, Monash University, Malaysia
Prof. Renato Zaccaria, University of Genova, Italy
Prof. Rezia Molfino, University of Genova, Italy
Prof. Saha S K, IIT Delhi, India
Dr. Satya Prasad M, Ashok Leyland, India
Prof. Teresa Zielinska, WUT, Poland
Prof. Wojciech Szykiewicz, WUT, Poland

International Student Robot Competition (ISRC-RoSMa2018)

Please visit Conference website for details regarding ISRC and for all other updates.

Conference Venue

The conference will be held at IIITDM Kancheepuram Campus, Vandalur-Kelambakkam Road, Chennai-600 127, India.

Sponsors



The Robotics Society



UNIVERSITÀ DEGLI STUDI DI GENOVA

Industrial Exhibition

Yes

Conference Tour

Mahabalipuram
(a UNESCO World Heritage site)

Scope and Topics

1. Mobile and Autonomous Robots
2. Milli, Micro and Nano Robots
3. Serial, Parallel and Compliant Mechanisms
4. Robots in Manufacturing Automation
5. Robot Design, Modeling, and Simulation
6. Robot Control and AI
7. Haptics and Medical Robotics
8. Collaborative and Swarm Robotics
9. Underwater and Marine Robotics
10. Space Robotics
11. Wearable Robotic Devices
12. Image Processing for Robotic Applications
13. Smart Materials in Robotic Applications
14. Sensors and Actuators for Robotic Applications
15. Robotics and IoT
16. Robots in Heritage Protection
17. Humanoid and Bio-Inspired Robots
18. Social, Rescue, and Demining Robots
19. Robot Performance Evaluation and Benchmarking
20. Robots in Extreme Environments
21. Robots in Smart/Digital Manufacturing
22. Automation and Robotics in Agriculture
23. Robots in Home Automation
24. Robot Assisted Additive Manufacturing
25. Optimization Techniques in Digital Manufacturing
26. Aerial Robots in Surveillance
27. Robots in Sports and Entertainment
28. Advanced Manufacturing Technologies
29. Multi Robotic Systems in Manufacturing
30. Industry Automation and IIoT

Papers from other allied areas in the domain of Robotics, Automation, Smart/Digital/Advanced Manufacturing, and Smart Materials are also welcome.

Important Dates

Submission of Full Paper	31 March 2018
Intimation of Review Results	15 March 2018
Submission of Final Manuscript / Registration	15 April 2018
Conference	30 April 2018
	19-21 July 2018

Registration Fee*

Delegates	National**	International
Student Authors & Research Scholars	₹ 6000	USD 300
Delegates from Academics/Research	₹ 8000	USD 350
Delegates from Industries	₹ 10000	USD 400
Extra Page Charges	₹1000/Page	25USD/Page

* Includes: Journal publication charges, conf. kit, refreshments and lunch on conf days, tour(transport) and banquet dinner. Accommodation charges not included.

** GST@18% extra

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