

# NATIONAL CONFERENCE ON AUTOMATION, ROBOTICS AND MECHATRONIC SYSTEMS (NCARMS - 2016)

25<sup>TH</sup> & 26<sup>TH</sup> MARCH 2016



## MADRAS INSTITUTE OF TECHNOLOGY, ANNA UNIVERSITY CHENNAI -44 DEPARTMENT OF PRODUCTION TECHNOLOGY



*Trends in Automation for Humanitarian and Industrial Needs*

### TRACK 1- MECHATRONICS

- System design
- Mechatronic systems modeling & simulation
- Man machine interface
- Micro and nano systems
- Marine vehicle (AUV & ROV)
- Automotive system
- Special purpose mechatronics systems
- Control systems
- Linear and nonlinear controlling techniques.
- Artificial intelligence in control
- Embedded system and onboard controllers.
- Sensors and signal processing technique
- Image processing, computer vision and machine vision
- Feature extraction and object recognition
- Multi sensor fusion
- Machine learning and artificial intelligence.
- Optimization techniques
- Autonomous transportation
- Magnetic levitation

### TRACK 2- ROBOTICS

- Serial and parallel manipulator
- Mobile robots
- Tele robotics
- Multi terrain vehicles
- SWARM robotics
- SLAM robotics
- Humanoid modeling
- Special Purpose robots
- Haptics and virtual reality
- Bio mechatronics, artificial intelligence and organs
- Brain signal processing & instrumentation
- Hospital automation and tools
- Tele surgery.
- Animatronics models
- Self-reconfiguring modular robot.
- Powered exoskeleton
- Micro and Nano robots
- Agricultural robots

### TRACK 3- AUTOMATION

- Production line automation
- Virtual factory modelling
- Building automation
- Digital manufacturing
- Smart assisted living
- Process automation
- PLC & SCADA based system
- Municipal waste collection and handling system
- Solid waste processing model and system
- E- waste processing model and system
- Drainage cleaning system
- Pipe line inspection system
- Models and systems for clean nations
- Product design and development
- Mechatronics in material characterization
- Material and composites
- Finite element modeling and simulation of systems under static and dynamic conditions
- Non- conduct measurement technique
- Mechatronics in manufacturing process

• All the accepted papers will be published in the conference proceeding • Selected papers will be published in the International Journals

Conference website [www.ncarms.in](http://www.ncarms.in)

Contact us: [ncarms2016@gmail.com](mailto:ncarms2016@gmail.com) / 9943419270

**NATIONAL CONFERENCE ON  
AUTOMATION, ROBOTICS  
AND MECHATRONICS SYSTEMS  
( NCARMS - 2016 )**

**Registration Form**

Name (Mr./Ms./Dr./Prof.) :  
Age & Date of Birth :  
Sex : Male/Female  
Designation :  
Institution/ Organization :  
Address for Communication:  
E-mail address :  
Phone no. (with STD code):  
Mobile :  
Educational Qualifications :  
Area of expertise/ working:  
Experience (in years)  
Teaching :  
Industrial :  
Registration Details :  
Presenter : Y/N  
Paper ID :  
Title of the paper :  
Participant : Y/N  
Payment details :  
Date: Bank:  
Mode:  
No:

**DECLARATION**

The information provided by me is true to the best of my knowledge. I agree to abide by the rules and regulations governing the conference. If selected, I shall present the paper on the particular session with out absent.

Date:  
Place:

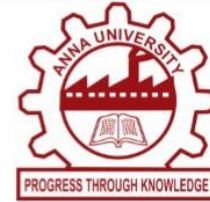
**Signature of the Applicant**

**CERTIFICATE**

Certified that Mr./Ms./Dr..... is an Employee/ Student/ researcher of our Institute/ Organization and is hereby permitted to attend the **National Conference on Automation, Robotics and Mechatronics Systems** to be held at Madras Institute of Technology Campus, Anna University during March 25 – 26, 2016.

Date:  
Place:

**Signature & Seal of the Authority**



**NATIONAL CONFERENCE ON  
AUTOMATION, ROBOTICS  
AND MECHATRONICS SYSTEMS  
March 25-26, 2016**

**( NCARMS - 2016 )**

**Organized by  
DEPARTMENT OF PRODUCTION TECHNOLOGY  
ANNA UNIVERSITY, MIT CAMPUS, CHROMEPET,  
CHENNAI – 600 044.**

**Convener  
Dr. R. SIVARAMAKRISHNAN**

**Co-Convener  
Prof. G. MURALIDHARAN**

**Organizing Secretary  
Dr. P. KARTHIKEYAN**

## ORGANIZING COMMITTEE

PATRON	: Prof. Dr. M. RAJARAM, Vice-Chancellor, Anna University, Chennai.
CO-PATRON	: Prof. Dr. S. GANESAN, Registrar, Anna University, Chennai.
ADVISER	: Prof. Dr. RAJADURAI Dean, MIT Campus, Anna University, Chennai.
CHAIR	: Prof. A. JOTHILINGAM Head, Production Technology.
CONVENER	: Prof. Dr. R. SIVARAMAKRISHNAN Associate Professor, Department of Production Tech.
CO-CONVENER	: Prof. G. MURALIDHARAN, Visiting faculty, Department of Production Tech.
ORGANIZING SECRETARY	: Dr. P. KARTHIKEYAN, Assistant Professor, Department of Production Tech.

## STEERING COMMITTEE

Dr. R. Kesavan	Professor
Dr. J. Jancirani	Professor
Dr. S. Gajendran	Associate Professor
Dr. A. Siddharthan	Associate Professor
Dr. G. B. Bhaskar	Associate Professor
Dr. M. Thirumal Azhagan	Assistant Professor
Mr. C. NandaKumar	Assistant Professor
Dr. P. Ganesh	Assistant Professor
Mr. V. Mugendiran	Assistant Professor
Dr. G. Kumaresan	Teaching Fellow
Mr. J. Suresh kumar	Teaching Fellow
Mr. R. Mathiyazhagan	Teaching Fellow
Mr. M. Manoj	Teaching Fellow

## ABOUT THE DEPARTMENT

The Department of Production Technology was started in the year 1977 with B.Tech Production Technology and M.E Production Engineering (part time) in the year 1981. The Department is a pioneer to start M.E Programme in Mechatronics in the year 1999 & also Manufacturing (Specialization in Green Manufacturing) in part time mode from 2013 and also offers M.S and Ph.D programmes. Currently offers 4 Full Time programmes (1 UG & 2 PG) and 3 Part Time programmes (2 UG & 2 PG). Around 50 scholars have been awarded PhD (till Aug 2015) and 53 scholars are pursuing their research.

## ABOUT THE CONFERENCE

The objective of the National Conference on Automation, Robotics and Mechatronic Systems (NCARMS-2016) is to invite the researchers, academician, students, consultant and practitioners into a single platform to interact each other. The multidisciplinary system development for humanitarian and industrial needs is current trend of integration in this century. This conference aims to integrate these contributors' thoughts, innovation, issues, trends, needs, and solutions in the field of automation, robotics and mechatronics systems. The conference proposed to handle the simultaneous tracks covering of mechatronics, robotics, automation, sensors, systems modelling and control biomechatronics, signal processing, and digital manufacturing, and factory and automation. Any discrete part of research including algorithms, software, models are welcome that may be a direct or indirect contribution to this field. Conference welcomes research and reviews article to this venue. This conference is organized by The Department of Production Technology, Madras Institute of Technology Campus, Anna University, Chennai -600044.

## TRACK DETAILS

- Track 1 — Mechatronics System
- Track 2 — Robotics
- Track 3 — Automation

## REGISTRATION

The Conference will be highly beneficial for the Student community, Faculty and Industrialist. The organizing secretary may be contacted for more details regarding the conference. The confirmation of registration is only through e-mail.

## PARTICIPANTS CATEGORY

Student presenters	- 750
Faculty/ Industrial presenters	- 1000
Participants	- 600

The DD should be drawn in favor of "The Dean, MIT, payable at Chennai (Preferred bank Indian bank). Accommodation, TA and DA will not be given to the presenters and participants.

## PUBLICATION

- All the accepted papers will be published in Conference Proceedings.
- Selected papers will be published in International Journals

## DATES TO REMEMBER

Last date for paper submission :	<b>31.1.2016</b>
Last date for receiving the CRP, Payment and registration form :	<b>25.02.2016</b>
Confirmation of registration & schedule :	<b>01.03.2016</b>

## MAILING AND CONTACT ADDRESS

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