



**PSG COLLEGE OF TECHNOLOGY, COIMBATORE – 641004**  
**Department of Robotics and Automation Engineering**  
**Third International Conference on**  
**Advancements in Automation, Robotics and Sensing**  
**ICAARS 2022**



**9 – 10 December 2022**

**9 December 2022 (Friday)**

9 December 2022 (Friday)			
08.30 – 09.00	Registration		
09.00 – 10.00	Inaugural Session	Mr. Gary Bateman, Managing Director of Lapp India Pvt. Ltd Mr. B N Nandakumar, Executive Vice President, Fanuc India Dr. M Ramalingam, Renowned Robotic Surgeon Dr. K Prakasan, Principal, PSG Tech	
10.00 – 10.30	Exhibition Inauguration	Shri. L. Gopalakrishnan, Managing Trustee, PSG & Sons' Charities	
10.30 – 10.45	Refreshments		
10.45 – 11.15	Plenary Talk – 1 & 2	Advancements in Manufacturing Automation Mr. Mahendra Patil, Fanuc India	Robotic Surgery Dr. M Ramalingam, Robotic Surgeon
11.15 – 12.00	Plenary Talk – 3	Collaborative Robotics Dr. Richard Voyles, Purdue University, USA	
12.00 – 12.45	Plenary Talk – 4	Future Robots Driven by Artificial Muscles Dr. Robert Katzschmann, ETH, Zurich	
12.45 - 13.00	Plenary Talk – 5	Trends in Pneumatic Automation Mr. Harish Nachnani, Festo India	
13.00 – 13.45	Lunch		
13.45 – 14.45	Paper Presentation: Session 1A	Session 1B	Session 1C
14.45 – 15.00	Tea Break		
15.00 –15.30	Plenary Talk – 6	Development of Robotics for Remote Inspections Mr. S Joseph Winston, IGCAR, Kalpakkam	
15.30 – 16.15	Plenary Talk – 7	Proposal for Process Chain Improvement in Topology Optimization Considering Manufacturing Constraints Dr. Klaus Mecking, University of Westfälische, Germany	
16.30 – 17.30	Paper Presentation: Session 2A	Session 2B	Session 2C
18.00 – 19.00	Gala Event		
19.00 – 20.30	Dinner		

**10 December 2022 (Saturday)**

08.30 – 09.15	Plenary Talk – 8	Connecting the Unconnected through UAV's Dr. Mahasweta Sarkar, San Diego State University		
09.15 – 10.00	Plenary Talk – 9	Future of Medical Robotics: Challenges and Opportunities Dr. T Kesavadas, SUNY, Albany		
10.00 – 10.15	Plenary Talk – 10	Latest Trends in Automation Mr. D Balakumar, Lapp India Pvt. Ltd		
10.15– 10.30	Refreshments			
10.30– 10.45	Plenary Talk – 11	Advancements in Automation: Influence of 5G in Automation – A Perspective Mr. R Krishnamoorthy, NavTat Solutions		
10.45– 11.15	Plenary Talk – 12	Latest Trends and Development in Marine Robotics for Low Carbon Solutions Mr. Satish Ramachandran, AROBOTNX, Chennai		
11.15 – 11.30	Plenary Talk – 13	Advanced Robotics Platforms for Education, Research and Application Development Mr. Adithya Marathe, Nugenix Robotics		
11.30 – 12.30	Paper Presentation: Session 3A		Session 3B	Session 3C
12.30 – 13.30	Lunch			
13.30 -14.00	Plenary Talk – 14	Industry 4.0 and Future of Jobs Dr. Prahlad Vadakkepat, NUS, Singapore		
14.00 -14.30	Plenary Talk – 15	High-Fidelity Haptic Feedback for Tele-robotic Surgery Dr. Asokan Thondiyath, IIT Madras		
14.30 -15.30	Paper Presentation: Session 4A		Session 4B	Session 4C
15.30 – 15.45	Refreshments			
15.45 – 16.15	Plenary Talk – 16	Surgical Applications of Flexible Endoscopic Robots Dr. Dong-Soo Kwon, KAIST, Korea		
16.15 -16.45	Plenary Talk – 17	Robotic Surgery Dr. P R Murugesan, PSG IMSR		
16.45 – 17.00	Closing Remarks			