Preface

The International Conference on Future Technologies in Manufacturing, Automation, Design & Energy 2022 (ICOFT MADE 2022) was the third in a series of conferences organized by the Department of Mechanical Engineering, National Institute of Technology Puducherry, India. The conference aimed to disseminate knowledge on the latest technological developments and cuttingedge research in manufacturing, automation, design, and energy (MADE) among academicians, researchers, scientists, industry personnel, and entrepreneurs across the globe. This conference provided a premier interdisciplinary forum relevant to mechanical engineering to discuss the recent technologies, innovations, recent research findings, challenges, solutions, and perspectives of the future directions of mechanical engineering in the field of manufacturing, automation, design, and energy through keynote lectures and paper presentations. Eminent professors from India, the USA, and the United Kingdom delivered invited talks and shared their research, knowledge, and experience with the conference participants. Young researchers of foreign universities, CFTIs, state universities and renowned private universities of India as well as scientists, industry personnel, and entrepreneurs from all over the world were active and utilized the opportunity to network with others who sleeked to develop their research abilities and experience. Also, ICOFT MADE 2022 has been recognized by the Science and Engineering Research Board (SERB) for partial funding and attracted other prominent industry players such as Kan-Tht, Anton Paar, Ducom, and Edutech as sponsors.

Committees

Patron:

Prof. K. Sankaranarayanasamy, National Institute of Technology Puducherry, India

International and National Advisory Board:

- Prof. Prabhakaran Ramamurthy, Old Dominino University, USA
- Prof. Surendra M. Gupta, Northeastern University, USA
- Prof. Tapas Jumar Mallick, University of Exeter, UK
- Prof. Duc Truong Pham, University of Birmingham, UK
- Prof. Vijay Kumar Thakur, Schotland's Rural College, United Kingdom
- Prof. J. Paulo Davim, University of Aveiro, Portugal
- Prof. T.S.N. Sankara Narayanan, Chonbuk National University, South Korea
- Prof. Wei Gao, Tohoku University, Japan
- Prof. Gnanamoorthy, Indian Institute of Technology Madras, India
- Prof. K. Srinivas Reddy, Indian Institute of Technology Madras, India
- Prof. R. Velmurugan, Indian Institute of Technology Madras, India
- Prof. Jayashree Bijwe, Indian Institute of Technology Delhi, India
- Prof. D.K. Pratihar, Indian Institute of Technology Kharagpur, India
- Prof. Gautam Biswas, Indian Institute of Technology Kanpur, India
- Prof. S. Senthilvelan, Indian Institute of Technology Guwahati, India
- Prof. S. Kanagaraj, Indian Institute of Technology Guwahati, India
- Prof. R. Ganesh Narayanan, Indian Institute of Technology Guwahati, India
- Prof. M. Ravi Sankar, Indian Institute of Technology Tirupati, India
- Prof. T. Ramesh, National Institute of Technology Tiruchirappalli, India
- Prof. Om Prakash, National Institute of Technology Patna, India
- Prof. Tushar N. Desai, SVNIT Surat, India
- Prof. P. Senthil Velmurugan, Kongu Engineering College Erode, India
- Prof. N. Alagumurthi, Puducherry Technological University, Puducherry, India
- Prof. Ravi Kumar K, Indian Institute of Technology Delhi, India
- Prof. Dinesh Kumar Kotnees, Indian Institute of Technology Patna, India
- Prof. S. Shankar, Kongu Engineering College Erode, India
- Prof. Rajasekar R, Kongu Engineering College Erode, India
- Prof. A. Sreekumar, Pondicherry University, Pondicherry, India
- Prof. Shanmugadas K.P, Indian Institute of Technology Jammu, India
- Prof. Leon Raj, CSIR North East Institute of Science and Technology, India
- Prof. Ashok Kumar Nallathambi, National Institute of Technology Tiruchirappalli, India
- Prof. Satheeshkumar V, National Institute of Technology Tiruchirappalli, India
- Prof. Saurabh Chandraker, National Institute of Technology Karanataka, Surathkal, India
- Prof. Dinesh Kumar Rajendran, National Institute of Technology Srinagar, India
- Prof. Ponappa K, Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, India
- Prof. Vikas Kukshal, National Institute of Technology Uttarakhand, India
- Prof. Narendra Gajbhiye, Maulana Azad National Institute of Technology Bhopal, India
- Prof. K. Karthik Selva Kumar, Pondicherry University, Pondicherry, India

Conference Chairman:

Dr. A. Johnney Mertens, National Institute of Technology Puducherry, India

Organizing Committee:

- Dr. S. Sundaravarathan, National Institute of Technology Puducherry, India
- Dr. N.M. Sivaram, National Institute of Technology Puducherry, India

Organizing Secretaries:

Dr. N. Sendhil kumar, National Institute of Technology Puducherry, India

Dr. M.V.A. Raju Bahubalendruni, National Institute of Technology Puducherry, India

Dr. M. Vadivukkarasan, National Institute of Technology Puducherry, India

Dr. Jack J. Kenned, National Institute of Technology Puducherry, India

Dr. J. Ronald Aseer, National Institute of Technology Puducherry, India

Dr. S. Somasundaram, National Institute of Technology Puducherry, India

Dr. P. SathishKumar, National Institute of Technology Puducherry, India

Dr. A. Karpagaraj, National Institute of Technology Puducherry, India

Dr. R. Naveen Raj, National Institute of Technology Puducherry, India

Sponsors

Government Sponsors:

1. Science and Engineering Research Board (SERB) – Partial Funding.

Industry Sponsors:

- 1. Kan-Tht India Pvt. Ltd., Delhi, India
- 2. Anton Paar India Pvt. Ltd., Gurgaon, India
- 3. Ducom Instruments, Bangalore, India
- 4. Edutech, Chennai, India