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# 4th National Conference on Recent Innovations and Advanced Trends in Mechanical Engineering

# NCRIATME 2022

30th JUNE, 2022



Organized by

**Department of Mechanical Engineering** 

## **ABOUT AVIT**

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AVIT-Aarupadai Veedu Institute of Technology (A Constituent college of Vinayaka Mission's Research Foundation –Deemed to be University, Salem) is one of the premier engineering colleges located in Rajiv Gandhi Salai (Old Mahabalipuram Road), Paiyanoor. The University is accredited by NAAC and the Institution courses are approved by AICTE. The institution is committed to impart quality education to the students from different socio-economic backgrounds. The institute is implementing innovative teaching and learning process (TLP) with a student centric approach through classroom teaching and virtual mode as well.

The Institution has collaborations with leading organizations across globe viz. Industries, R&D Centres for experiential learning and for Faculty /Student Exchange programmes. Apart from the professional society memberships, the Institution's Innovation Council is vibrant and has an MSME approved Incubation Centre. The Institution has a well-stocked RFID Automated Library with adequate textbooks, reference books, National and International journals and e-learning facilities in the digital library. Also the library is facilitated with ILMS, a One-Stop Solution for e-Resources Access. AVIT is a registered member of National Digital Library of India (NDLI). Swayam Prabha DTH Channel facility for Swayam / NPTEL and other MOOC online courses are available at AVIT. The Faculty members and students brought many laurels and awards viz., DSIR Certification, ARIIA Ranking, Chhatra Vishwakarma Awards, ISTE Chapter Awards, Achiever in MHRD's SAMADHAN contest and so on. The Faculty Members are motivated for upgrading and enhancing the skills in the emerging domains through AVIT Centre for Continuing Education (ACCE). AVIT always believes "Building individual is Building the World".

### **ABOUT DEPARTMENT OF MECHANICAL ENGINEERING**

The Department offers undergraduate course in the Mechanical Engineering in full-time and part time mode as well. Also Post Graduate Course in Manufacturing Engineering in full-time and part time mode and B.VOC. course in Automotive Manufacturing Technology are being offered. The Department has well-equipped laboratories with state of the art facilities. The department has been organizing a cascade of seminars, guest lectures, workshops, Faculty Development Programs, symposia, conferences, industrial visits, in-plant training and inter collegiate

programmes from time to time for the benefit of the faculty members and students through its Technical Association – "Association of Mechanical Engineers of AVIT", Engineering Design Collegiate Club (EDCC) and professional bodies like Indian Institute of Metals (IIM), ENFUSE, SAE Collegiate club, NIQR and IIPrE. The department is entrusted with research Centres in Alternative Fuels Testing and Bosch Automotive Research. The department has established TARG- Thrust Area Research Group in three major fields of Mechanical Engineering, viz. Materials and Manufacturing Technologies, CAD/CAM, Automotive Research. The Faculty members and students being members of these groups continuously engaged in the research of the recent developments in Mechanical Engineering domain.

### **OBJECTIVE OF THE CONFERENCE**

The objective of this conference is to bring together experts from academic institutions, industries and research organizations and professional engineers for sharing of knowledge, expertise and experience in the emerging trends related to Mechanical engineering education and research. Mechanical Engineering is a traditional field constantly evolving towards new concepts and optimized solutions to existing problems.

The Mechanical Engineering research has become very sophisticated with the introduction of computers and electronics and paved the way for the emergence of new technologies. Globalized competitiveness and increased awareness of the environment have made the Mechanical Engineering research significantly different with more emphasis on competitive technologies and management approaches.

### PAPER FORMAT & PLAGIARISM

Submissions must include title, abstract, author affiliation with the email address and keywords. Submitted papers should be maximum of 6 pages in length in standard IEEE conference format. The proceedings of the conference will be published with ISBN number. All submitted papers will be checked for plagiarism software and those achieving a minimal similarity index of 10% will be published in the Conference proceedings. The selected articles, on requests of the author(s) and on additional payment will be published in the Scopus indexed journal. Author(s) is/are sole responsible for the contents and originality of their work.

# TOPICS OF INTEREST FOR SUBMISSION INCLUDE, BUTARE NOT LIMITED TO

- Advanced Energy Sources
- Automation, Mechatronics, and Robotics
- Automobiles & Alternate Fuel Systems
- Biomedical Engineering CAD/CAM/CIM/CFD
- Advanced Engineering Materials / Metallurgy
- Mechanical Design
- Fluid Flow, Heat and Mass Transfer
- Industrial & Mechanical Systems
- Manufacturing and Production Processes
- Supply Chain Management
- Tribology and Wear Technologies
- Surface Engineering Bio Mechanics
- Ergonomics and Human Factors
- Renewable Energy Technologies
- Artificial Intelligence in Manufacturing Systems
- IoT in Mechanical Systems
- TPM / TQM
   Sensors Technology

### **IMPORTANT DATES**

Deadline for paper submission : 18.06.2022 Acceptance Notification : 20.06.2022 Final Manuscript submission : 22.06.2022

### **REGISTRATION FEES**

Rs.500/- per paper

Journal Publication fee is additional (optional) for publication in Scopus indexed journal(s).

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