

## Conveners

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**Dr.S.Ganesan**,  
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**Mr.Nivin Joy Thykattuserry**,  
Assistant Professor, School of Mechanical Engineering

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**Dr.M.Anish**, Asst Professor, School of Mechanical Engg  
**Mrs.K.R.Kavitha**, Asst Professor, School of Mechanical Engg

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## Contact Us

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## Advisory Committee

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# 3<sup>RD</sup> INTERNATIONAL CONFERENCE ON FRONTIERS IN AUTOMOBILE AND MECHANICAL ENGINEERING (FAME 2020)

**April 2<sup>nd</sup>-4<sup>th</sup> 2020**



Organized by  
School of Mechanical Engineering

In association with



**SATHYABAMA**  
INSTITUTE OF SCIENCE AND TECHNOLOGY  
(DEEMED TO BE UNIVERSITY)

(Estd. U/S(3) of UGC Act, 1956) Accredited with Grade 'A' by NAAC  
Declared as Category 'A' University by Ministry of HRD, Govt. of India



Universiti Putra Malaysia  
Serdang, Selangor  
Darul Ehsan, Malaysia



Universiti Malaysia Pahang  
Pekan, Pahang,  
Malaysia

About Sathyabama Institute of Science & Technology

Sathyabama Institute of Science and Technology (Deemed to be University) was established under section (3) of the UGC Act, 1956 (A Christian Minority Institution) which was formerly known as Sathyabama Engineering College established by JEPPIAAR EDUCATIONAL TRUST in 1987. It is a pioneer institute imparting knowledge in the areas of engineering, science, technology and education. The institution's progress and contribution in the field of technical education for over two decades made the Ministry of Human Resources Development, Govt. of India to grant Deemed University status on 16<sup>th</sup> July , 2001 and University status on 13<sup>th</sup> September, 2006 under section(3) of the UGC Act, 1956. The institute has excellent infrastructure facilities including modern laboratories, library with video, Internet and other general amenities. To its credit it has been awarded as Category " A " University by Ministry of Human Resource Developemnt ( MHRD ) , Government of India . Sathyabama has undertaken various sponsored and collaborative Research and Development projects funded by national organizations such as Indian Space Research Organisation (ISRO), Department of Science and Technology (DST), Indira Gandhi Centre for Atomic Research (IGCAR), Defence Research and Development Organisation (DRDO), National Institute of Ocean Technology (NIOT), Ministry of Environment and Forests (MoEF) etc,. Additional information about Sathyabama Institute of Science and Technology can be found at the institute's official website : [www.sathyabama.ac.in](http://www.sathyabama.ac.in)

About School of Mechanical Engineering

The School of Mechanical Engineering consists of four core departments which includes, Department of Mechanical Engineering, Department of Mechatronics Engineering, Department of Automobile Engineering and Department of Aeronautical Engineering. The departments have state of the art laboratory and research facilities which enable students and faculty members to carry out outstanding research activities. The vision of the school is to provide high quality education in the field of Mechanical Engineering, thereby enabling the students to meet the requirements of the industry and also to create research centres to help industry and society. The school has introduced innovative courses based on industrial and societal demands. School of Mechanical Engineering always strives to collaborate with national and international institutions to excel in its academic pursuit.

About FAME 2020

Mechanical engineers use the core principles of engineering along with tools like computer-aided design, and product life cycle management to design and analyze manufacturing plants, industrial equipment and machinery, automobiles, aircraft, robotics and others. The development and manufacturing of modern Machine Tools, Automobiles and Aircraft is an extremely complex process and demands careful balance and compromise between abilities, design, available technology and costs. Sathyabama University has come forward to confront with the recent discoveries and findings in the field of Aeronautical, Automobile and Mechanical Engineering and advancements in an international forum. The 3<sup>rd</sup> International Conference on Frontiers in Automobile and Mechanical engineering (FAME 2020) is aimed at providing a common platform to researchers, industry personnel, academicians, students and participating professionals to interact and discuss about the advances made in the various areas of Aeronautical, Automobile and Mechanical Engineering. This conference is a perfect platform to share experience, foster collaborations across industry and academia and evaluate emerging technologies to global challenges across the globe.

Conference Themes

Papers are invited but not restricted to the following themes:

- Aeronautical**
- Acoustics And Noise Control
  - Advances In Aerospace Systems And Technology
  - Advances In Space Propulsion
  - Aero- Engine Combustors
  - Aero-Acoustics
  - Aerodynamics
  - Aero-Elastic Modelling
  - Aero-Space Robotics And Challenges
  - Cryogenics
  - Numerical Investigations In Aerodynamics
  - Satellite Technology
  - Space Science And Technology
  - Technologies For Lunar Surface Science
  - Green Fuel Technologies
  - Internal Combustion Engines
  - Innovation On Green Vehicles
  - Intelligent Systems In Vehicles

- Intelligent Transport Systems
- Mechanics In Automobiles
- Multi Body Dynamics
- Safety On Roads
- Vehicle Design And Development
- Vehicle Dynamics
- Vehicle Standards, Regulations, Legislation

Design

- Applications Of AI Techniques In Design And Manufacturing
- Applied Mechanics
- Biomechanics
- CAD/CAE
- Computational Mechanics
- Computational Techniques
- Design And Manufacturing
- Design And Modelling Of Solar-Powered Vehicles
- Design For Assembly
- Dynamics And Vibration
- Fatigue And Fracture
- Fracture Mechanics
- Machine Dynamics
- Machinery And Machine Design
- Modelling And Simulation
- Optimization Applications In Mechanical Engineering
- Precision Mechanics, Mechatronics
- Product Development & Strategies
- Tribology
- Vibration & Control

Thermal

- Alternative Fuels
- Bio-Energy Production
- Biomedical Engineering In Fluid Mechanics
- Computational Fluid Dynamics
- Energy Engineering And Management
- Environmental Fluid Dynamics
- Fluid Dynamics
- Fluid Engineering Systems & Technologies
- Fuels And Combustion
- Heat And Mass Transfer
- Heat Transfer In Electronic Equipment
- New And Renewable Energy
- Nuclear Energy
- Pollution And Environmental Engineering
- Renewable And Non-Renewable Energies
- Sustainable Energy
- Thermal Engineering
- Thermo Fluid Mechanics
- New And Renewable Energy
- Nuclear Energy
- Pollution And Environmental Engineering
- Renewable And Non-Renewable Energies
- Sustainable Energy
- Thermal Engineering
- Thermo Fluid Mechanics

Manufacturing

- Advanced Manufacturing Technology
- Advanced Material Processing And Properties
- Automation, Mechatronics And Robotics
- Biomaterial And Nano Technology
- CAM / CIM
- Composite And Smart Materials
- Corrosion Studies
- Green Manufacturing
- Industrial Engineering
- Industrial, Mechanical, Systems Science And Engineering
- Logistics And Scheduling
- Manufacturing And Production Processes
- Mechatronics & Mems
- Micro Engineering
- Modern Production Processes
- Modern Management Engineering

- Nano Material Engineering
- Plasticity Mechanics
- Rapid Prototyping
- Reverse Engineering
- Robotics
- Safety Reliability & Risk Management
- Smart Materials
- Surface Engineering

Call for Papers

Technologists, Scientists, Professionals, Academicians and Research scholars are invited to present their original work and experience as technical papers in the conference. The paper should not have been presented before in any other National or International Conference/ Journal.

Depending on the Originality, quality, relevance and other editorial considerations, Peer-reviewed research papers of the conference will be published in any of the following **Scopus Indexed** journals:

**Materials Today: Proceedings (Elsevier)**  
**AIP Proceedings (American Institute of Physics)**  
**International Journal of Vehicle Structures & Systems (IJVSS)**  
**International Journal of Mechanical & Production Engineering Research & Development (IJMPERD)**  
**International Journal of Advanced Science & Technology (IJAST)**

Important Dates

|                                   |                                              |
|-----------------------------------|----------------------------------------------|
| Last date for Abstract Submission | 29 <sup>th</sup> February, 2020              |
| Submission of Full Length Paper   | 7 <sup>th</sup> March, 2020                  |
| Early bird Registration           | 10 <sup>th</sup> March, 2020                 |
| Last Date For Registration        | 28 <sup>th</sup> March, 2020                 |
| Conference Dates                  | 2 <sup>nd</sup> - 4 <sup>th</sup> April 2020 |

Registration + Publication Fee

It is essential that at least one of the authors of the accepted papers must register to participate in the conference for including the papers in journal. Registration can be done by mailing scanned copy of duly filled registration form along with fees paid details to the conference email ID : [fame2020@sathyabama.ac.in](mailto:fame2020@sathyabama.ac.in)

| Delegates Category             | Before 10 <sup>th</sup> March, 2020 | After 10 <sup>th</sup> March, 2020 |
|--------------------------------|-------------------------------------|------------------------------------|
| Students/Scholars/Academicians | INR 6,500                           | INR 7,000                          |
| From Industry                  | INR 7,000                           | INR 7,500                          |
| Foreign Delegate               | USD 100                             | USD 110                            |

For details about Journal Publication in Scopus Indexed journals contact [fame2020@sathyabama.ac.in](mailto:fame2020@sathyabama.ac.in) or +91 95669 17500

Mode of Payment

Registration fee is accepted through:

- 1.Demand Draft in favor of "Dean (Publications & Conferences), Sathyabama University", payable at Chennai, INDIA
- 2.Online mode, the account details for online fee transfer is,

**Account Name** : "Dean (Publications & Conferences), Sathyabama University"

**Account Number** : 891734627  
**IFSC Code** : IDIB000T020  
**SWIFT Code** : IDIBINBBTLT  
**Branch Code** : 098

**Bank, Branch & Address** : Indian Bank, Thousand Lights Branch, Chennai - 600 006, India.

Accommodation

Accommodation for research scholars and participants can be arranged in University Hostels. External Accommodation can be arranged on payment basis for interested participants in nearby hotels ranging from Rs. 2000 - Rs. 4000 per day. For more details about nearby hotels please visit the conference website at [www.fame2020.in](http://www.fame2020.in)

Venue & Transport

Sathyabama Institute is located on the IT highway of Chennai City, which is 20 km from the International Airport , 15 km from Adyar, 30 km from Central Railway Station and 20 km from Tambaram Railway Station. For more transport details please visit the conference website at [www.fame2020.in](http://www.fame2020.in)

About Chennai

Chennai formerly known as Madras is the capital city of the Indian state of Tamil Nadu. It is famous for its culture and tradition. Chennai is the fourth most populous metropolitan city and the fifth most populous city in India. Its has the 2<sup>nd</sup> longest seashore in the world, located on the Coromandel Coast of the Bay of Bengal. The Chennai urban agglomeration of metropolitan Chennai has an estimated population of over 8 million people.The city was established in the 17<sup>th</sup> century by the British, who developed it into a major urban centre and naval base. By the 20<sup>th</sup> century, it had become an important administrative centre, as the capital of the Madras Presidency.

Chennai's economy has a broad industrial base in the automobile, technology, hardware manufacturing, and healthcare industries. The city is India's second largest exporter of software, Information Technology (IT) and Information-Technology-Enabled Services (ITES). A major chunk of India's automobile manufacturing industry is based in and around the city. Chennai accounts for 60 per cent of the country's automotive exports and is referred to as the Detroit of South Asia. Chennai hosts a large cultural event, the annual Madras Music Season, which includes performances by hundreds of artists. The city has a vibrant theatre scene and is an important centre for Bharatanatyam, a classical dance form. The Tamil film industry, known as Kollywood, the second largest movie industry in India, is based in the city; the soundtracks of the movies dominate its music scene.

Chief Patrons

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