AMITY UNIVERSITY

UTTAR PRADESH

2nd International Conference
on
"Future Learning Aspects of Mechanical Engineering"
(FLAME 2020)

FLAME 2020

Organised By
Department of Mechanical Engineering
Amity School of Engineering and Technology
Amity University Uttar Pradesh, Noida

August 5th-7th 2020

Venue
Amity University, Sector-125, Noida, Uttar Pradesh

In Association With

Springer · IBME · ELSEVIER · INDERSCIENCE PUBLISHERS Linking academia, business and industry through research · SIEMENS Ingenuity for life · Tamkang University, Taiwan · Department of Sciences & Technology Government of India · UNIVERSITY OF LEICESTER

- *Lecture Notes in Mechanical Engineering – Springer*
- *Materials Today: Proceedings – Elsevier*
- *Procedia Manufacturing – Elsevier*

Special Issue Publication

- ★ *International Journal of Six Sigma and Competitive Advantage*
- ★ *Journal of Advanced Research in Dynamical and Control Systems*
- ★ *Facta Universitatis, Series: Mechanical Engineering*
- ★ *International Journal of Vehicle Structures and Systems*

WELCOME IN FLAME 2020

The Department of Mechanical Engineering, Amity School of Engineering and Technology, Amity University, Noida has the great pleasure to welcome scientists, students, engineers, professors, industry professionals and entrepreneurs from all over the world to attend the 2nd international conference on "*Future Learning Aspects of Mechanical Engineering*" (FLAME) to be held from 5th to 7th August 2020. FLAME is a leading event of mechanical engineering and has an objective to provide a platform to share the research results, exchange ideas on theories, technologies and applications. Distinguished plenary lectures will present recent developments on important topics which includes discussion about future learning aspects of mechanical engineering.

- **All the accepted and presented papers will be published in SCOPUS indexed proceedings and journals.**
- **Selected papers will be published as Special Issues in various SCOPUS / ESCI / SCI indexed International Journals of Repute.**

TOPICS COVERED

Fluid and Thermal Engineering

- Biomimetic/Bioinspired Engineering
- Boiler Design
- Case Studies in Thermal Engineering
- Combustion Engines
- Computational Fluid Dynamics (CFD)
- Cooling of computer chips
- Cooling Systems
- Energy Conservation
- Energy Conversion
- Flow Analysis and Instability
- Fluid Structure Interaction
- Gas Turbines
- Heat Exchangers
- Heat Pipes and Pumps
- Heat Transfer Augmentation
- Hydel and Wind Power Systems
- Multiphase Flow/Heat Transfer
- Nano Fluids
- Nontraditional Energy Sources
- Nuclear Power Stations
- Petrochemical Processing
- Pollution Control
- Porous Media
- Refrigeration and HVAC Systems
- Renewable Energy
- Rheology of Complex Fluids
- Satellite Meteorology
- Solar Heating
- Solar Systems and Combustion Systems
- Thermal Hydraulics of Nuclear Systems
- Thermal Power Plants
- Thermodynamics
- Transition to Turbulence

Engineering Design

- Behavior of Solids and Structures
- Biomechanics
- Contact Mechanics
- Failure Analysis
- Fracture Mechanics
- Micro and Nano-mechanics
- Multi-body Dynamics
- Non-linear Dynamic/Chaos
- Solid and Structural Mechanics
- Stability of Solids
- Synthesis of Mechanism
- Vibration and Acoustics

Engineering Materials

- Advanced 2D and 3D materials
- Advanced Materials Processing
- Bio-ceramics and medical applications
- Biomaterial designing
- Biomedical devices
- Biopolymers and bioplastics packaging
- Ceramics Coating
- Composite Materials
- Computational Materials
- Condensed Matter
- Corrosion
- Electronic materials
- Functionally graded composites
- Glass Technology
- Magnetic materials
- Material for Semiconductor devices
- Material properties and applications
- Materials Synthesis and Processing
- Mechanical Characterization
- Metals and Composites
- Novel synthesis and processing of ceramics
- Materials Organs and Tissues
- Photovoltaic, Fuel cells and Solar Cells
- Piezoelectric Materials
- Polymers and Ceramics
- Self-Healing Materials
- Semiconductors
- Smart Materials and Biomaterials
- Super-alloys
- Superconductors
- Surface Engineering

Robotics and Automation

- Actuation
- Automated Mining
- Autonomy Levels
- Dynamics and Kinematics
- Environmental Interaction and Navigation
- Humanoid Robots
- Industrial Applications of Robotics
- Locomotion
- Manipulation
- Marine Robotics
- Medical Robotics
- Micro Robot
- Multi Robot System
- Nanorobotics
- Robotic Outsourcing
- Robots & Society
- Robots in Defense
- Sensors
- Service Robot Applications

Production Engineering and Technology

- 3D/4D/5D Printing
- Artificial Intelligence in Production
- Automation in Production
- Casting Process
- CAD/CAM/CAPP/CIM
- Computer Numerical Control (CNC)
- Cyber Physical Production Systems
- Cyber Security in Manufacturing
- Digital manufacturing
- Digital Twins and Threads
- Environmental Aspects in Production
- Green Manufacturing
- Industrial Application of Cleaner Production
- Industry 4.0 and 5.0 in Production
- Infrared Thermography in Production
- Intelligent Manufacturing
- Jigs and Fixtures
- Laser based Manufacturing
- Machine Tools
- Material Forming and Joining Processes
- MEMS
- Metrology and Measurement
- Micro/Nano Processing / Fabrication and Tribology
- Nano-metrology, Nanomaterials and nano-manufacturing
- Nature Inspired Algorithms in Production Processes
- Non-conventional machining processes
- Non-Destructive Testing Techniques
- Optimizations, Modelling, Analysis and Simulation of Manufacturing Processes
- Powder Metallurgy
- Precision Molding Processes
- Process Planning and Scheduling
- Rapid Prototyping
- Semiconductor Materials Manufacturing
- Soft Computing in Production
- Surface Engineering and Coatings
- Surface, Subsurface, and interface phenomena
- Sustainable Tribology
- Theoretical Fundamentals of Cleaner Production
- Thin & Thick Coatings
- Tool Engineering
- Tribology in Manufacturing
- Ultra-precision Machining
- VR in Production
- Wear, Tear and Lubrications
- Welding Techniques

Industrial Engineering and Management

- Big Data and Analytics
- Blockchain
- Decision Support Systems
- Economy and Cost Analysis
- Facilities planning and management
- Green technology and productivity
- Healthcare Operations Management
- Industrial automation and control
- Industry 4.0 / 5.0
- Information Management Systems
- Intelligent logistics and transportation
- Intelligent Systems and IoT
- Inventory & Logistics management
- Manufacturing Systems
- Multi Objective Optimization
- Operations Research
- PLM and PPC
- Project Management
- Quality Control and Management
- Reliability & Maintenance Engineering
- Safety, Security and Risk Management
- Sales & Operation Planning
- Smart Cities and Factories
- Supply Chain Management
- Sustainable Manufacturing

Computational Engineering

- Artificial Intelligence
- Artificial Neural Networks & Deep learning
- Augmented reality and virtual reality
- Big Data analytics
- Cloud computing
- Cognitive computing
- Computational learning theory
- Computer graphics
- Condition monitoring
- Cyber-physical systems
- Digital Thread and Twins
- Evolutionary Computing
- Fuzzy stochastic/time series modeling
- Hybrid machine intelligence techniques
- Hybrid systems modeling and simulation
- Image processing
- Intelligent Decision Support Systems
- Intelligent Robotics
- Machine learning
- Machine Vision and Industry 4.0 & 5.0
- Multi Agent Systems (MAS)
- Statistical computation and simulation

Inter-Disciplinary Engineering & Allied topics

- Renewable Energies Technology
- Acoustics
- Work Design and Ergonomics
- Alternative Fuels
- Nano and Micro Electromechanical Systems
- Nuclear Engineering
- Agriculture Engineering
- Automobile Engineering
- Chemical Engineering
- Electronics and Communication Engineering
- Biomedical Engineering
- Navigation and Sensor Network for Under Water Vehicles
- Medical Devices
- Combustion and Pollution
- Night Vision Technology in Automobile
- Green Energy

CALL FOR PAPERS

Authors are requested to submit the paper related to topics covered in FLAME 2020 through Easychair.

https://easychair.org/conferences/?conf=flame2020

For further details, please visit: *https://www.amity.edu/flame2020/submission_guidlines.asp*

CALL FOR POSTERS

Students and research scholars may present their research work as a poster presentation during the conference, highlighting their innovation in the field of mechanical engineering.

REGISTRATION FEE

	Early Bird Registration		Registration After: 20th April 2020	
	INDIAN	**FOREIGNERS**	**INDIAN**	**FOREIGNERS**
❖ Students (B.Tech/M.Tech/M.S)	4000 INR	250 USD	5000 INR	300 USD
❖ Research Scholars (Ph.D/JRF etc.)	5000 INR	300 USD	6000 INR	350 USD
❖ Faculty from academic institutions	6000 INR	350 USD	7000 INR	400 USD
❖ Researchers from Industries	7000 INR	400 USD	8000 INR	450 USD
❖ Listener (without paper presentation)	1500 INR	100 USD	2000 INR	150 USD

Note

- **Students must produce a valid id card issued by concerned institute to register in student's category.**
- **25% discount in registration fee is applicable for selected members of ISME.**
- **Registration fees include conference kit, tea/coffee, lunch, proceedings and CD.**
- **Minimum one registration is mandatory for a paper to be the part of proceedings.**
- **Registration fees does not include accommodation and transportation expenses.**
- **Accommodation could be arranged in guest house of Amity University or nearby hotels as per the availability, on the payment basis for which the organizers will provide necessary assistance if informed well in advance.**

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Ms. Sheelam Misra

IMPORTANT DATES

- **Deadline for Paper Submission** — *10 January 2020*
- **Notification of Paper Acceptance** — *28 March 2020*
- **Submission of Camera-Ready Paper** — *10 April 2020*

Note: **Please refer conference website for updates (if any)**

SPEAKERS

Prof. K. Muralidhar

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Uttar Pradesh, India

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Computer Science,Data Science
Ensemble, University of South Alabama
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Prof. Zhixiong (James) Guo

Mechanical and Aerospace Engineering,
Rutgers University, New Brunswick, USA

and many more...

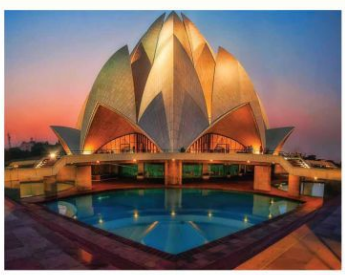
Nearby Places to visit

TAJ MAHAL, AGRA

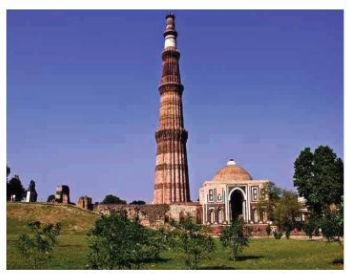
INDIA GATE, DELHI

AKSHARDHAM TEMPLE, DELHI

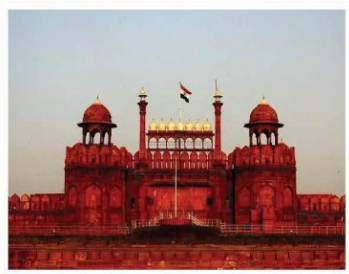
LOTUS TEMPLE, DELHI



QUTUB MINAR, DELHI



RED FORT, DELHI



GLIMPSE OF FLAME –2018

- 321 articles published in LNME Springer (Scopus Indexed).
- 4 proceedings were published on Design, Thermal, Production & Inter-disciplinary Engg.
- More than 20 Keynote speakers and 500 participants have joined across the world.
- Round table discussion on emerging mechanical engineering topics
- 15 technical sessions conducted and 15 best paper presentation awarded.

CONTACT DETAILS:

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