



## **International Conference on Optimization Techniques and Recent Innovations in Mechanical Engineering (ICOTRIME 2020)**

**Krishna Engineering College, Ghaziabad**

**29 – 30 May 2020**

### **Organized by Krishna Engineering College, Ghaziabad**

International Conference on Optimization Techniques and Recent Innovations in Mechanical Engineering (ICOTRIME 2020) is an inventive event organized with motive to make available an open international forum for the researchers, academicians, technocrats, scientist, engineers, industrialist and students around the globe to exchange their innovations, interact and share the research outcomes which may lead the young researchers, academicians and industrialist to contribute to the global society. ICOTRIME 2020 is being organized on 29th–30th May 2019 at Krishna Engineering College, Mohan Nagar, Ghaziabad, Uttar Pradesh, India.

Optimization techniques incorporate both the recent inventions, innovations and exceptional outcome of research findings in various fields of Mechanical Engineering as well as software fields. Optimization technique is very fast emerging multidisciplinary research fields which recognize and provide optimum solutions by using advanced computing proficiencies. It is a recent area research which includes many disciplines of technological science, but mainly it bridges the gap between industry and academia to reduce the wastage of material and time to design a new product. This conference will provide an excellent platform for the young researchers, scientists, academicians, engineers, mathematicians around the globe to showcase their innovations; peer reviewed their work and collaborates with international community to achieve multidisciplinary research outcomes. ICOTRIME 2020 will spotlight the renowned world-class keynote speakers, special sessions, along with the regular research presentations.

The conference invites research paper submissions all around the world and will include myriad tracks in the area of Optimization techniques and recent Technologies in Mechanical Engi

## TOPICS OF INTEREST

Papers are invited on all aspects of Computer Science, Communication and Automation or research areas aligned to it that include (but are not limited to) the following:

### Optimization Tools and Techniques

- Response Surface Methodology (RSM)
- Search Tool
- Neural Network
- Genetic Algorithm
- Grey Relational Analysis
- Taguchi's Method
- Unconstrained Optimization
- Discrete Optimization
- Genetic Algorithms
- Constrained Optimization
- Robust Optimization
- Dynamic Optimization
- Artificial Intelligence
- Learning Algorithms
- Combinatorial Optimization and Mathematical Programming
- Numerical Methods
- Linear and Non-linear Programming
- Multi-objective Programming
- Parallel and Distributed Computation
- Bio-inspired Computations and Neural Networks
- Fuzzy systems
- Evolutionary Computing
- Meta-heuristic Optimization Algorithms
- Hybrid Algorithms
- Dynamic Optimization
- Continuous Optimization

### Production and Industrial Engineering

- Applications FEA
- Composite and Polymer Manufacturing
- Composites, Inter-metallic
- Functionally Graded Materials
- Future generation materials
- Green Manufacturing
- Material Testing
- MEMS Integration
- Meta materials
- Metallography
- Metrology and Surface Engineering
- Non-destructive Examination
- SMART materials
- Super Alloys

- Ultra-Precision Machining
- Virtual Manufacturing and Concurrent Engineering
- Web-based Manufacturing
- Additive manufacturing
- Agile Manufacturing
- Casting and Forming
- Human factor Engineering
- Industrial Automation, CAD/CAM and Robotics
- Joining Processes (Welding)
- Logistics and Supply Chain Management
- Machining
- Materials and Processing
- Micro/ Nano /Non-Conventional Machining
- Modeling and Simulation
- Stochastic Modeling
- Non-Conventional Energy
- Operations Management
- Product Design and Development
- Reliability and Maintenance Engineering
- Sustainability in Manufacturing
- Surface Engineering and Coatings
- Technology Management
- Environment Management
- Vibrations and Acoustics (Condition Monitoring)
- Computers in Industry
- Mechatronics
- Design for Manufacturing and Assembly
- TQM and Six Sigma
- Theory of Constraints
- Waste Management
- Productivity Enhancement
- Materials Management
- Facilities Design
- Business Analytics
- Machine Learning

### **Thermal Engineering**

- Multi-Phase Flow and Heat Transfer
- Heat and Mass transfer in the ecosystem
- Heat and Mass transfer in Biomedical devices
- Bio-fuels and Internal Combustion Engines
- Micro/nano Heat Transfer
- Biological Heat Transfer
- Double Diffusive Convection
- Melting and Solidification
- Numerical Methods in Fluid Flow and Heat Transfer
- Internal Flow and Heat Transfer
- Transport Phenomena in Porous Media
- Environmental Engineering

- Enhanced Oil Recovery
- Polymer Processing Science and Technology
- Waste Management and Waste Disposal
- Heat Transfer with Non-Newtonian Fluid Flow
- Energy Management and Energy systems
- Air Conditioning and Refrigeration
- Renewable Energy
- Micro/nano-fluid and life science application
- Novel Materials: Thermal Vias, Heat Spreaders and Thermal Interface Materials
- Thermal Management in Wireless, Networking, Computing, Lighting, Harsh Environments
- Sub-Ambient Cooling: Solid State, Vapor Compression, Absorption, Adsorption
- Micro-fabricated Thermal Management Devices and Systems
- Advances in Experimental Characterization
- Advances in Computational Characterization: Multi-Scale Modeling, Multi-Physics Modeling
- Single Phase Liquid Cooling
- Novel Phase Change Cooling Techniques
- Hybrid Energy Storage Systems
- Ionic Liquids, Surfactant and Interface Science

### **Design Engineering**

- Theory and research methods
- Design Methods
- Design Processes
- Organization and management
- Information and knowledge
- Design support tools
- Design innovation
- Human Behavior
- System Engineering
- Engineering Design practice
- Industrial Design
- Computer aided design and simulation

### **IMPORTANT DATES**

Electronic submission of full papers:	21 <sup>th</sup> March, 2020
Notification of paper acceptance:	10 <sup>th</sup> April, 2020
Registration	15 <sup>th</sup> April, 2020
Camera-ready of accepted papers:	23 <sup>th</sup> April, 2020
Conference date:	<b>29-30 May 2020</b>