Main theme of Scientific activity

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

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 11th – 12th Dec 2020 at Krishna Engineering College, Ghaziabad, UP, 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 Engineering.

About US

Krishna Engineering College

Krishna Engineering College (KEC), Ghaziabad was established in 2004 by Friends Charitable Society (FCS) Ghaziabad. FCS has eminent Businessmen, Industrialists and Professionals as its members. FCS members are also associated with other leading Educational Institutions.

KEC has been established as an institution for the millennium with a vision to turn out scholars who will be Global Players when they leave the portals of KEC. With this vision in the background, the college endeavors to impart core technical knowledge, help students to develop requisite soft skills, instill adaptability for change and builds cross cultural compatibility to its students. The college is approved by AICTE, Delhi and is affiliated to AKTU, Lucknow. Currently, the college offers five programs in B.Tech. (Computer Science & Engineering,
Information Technology, Electronics & Communication Engineering, Mechanical Engineering and Civil Engineering) with an approved intake of 600 students/year.

Within a span of 16 years, the college has established its credentials as an institution of repute by figuring among top 20 colleges of over 400 Engineering & Technology Institutions of AKTU in session 2016-17. The college infrastructure is a planned endeavor built over a period with care and concern keeping all the needs of a premier Engineering Institution. The campus is located in Mohan Nagar, Ghaziabad, next to IAF Station Hindon and is strategically located vis-a-vis Delhi (5 Km from border), Ghaziabad (6 Km), 12 km from Noida. The campus is spread over an area of 11 acres with plans for 3 academic blocks covering over 25000 Sq. meter of built up area, 3 Hostels (2 for boys and 1 for Girls), an Auditorium, workshops, play grounds.

The Department of Mechanical Engineering

The Department of Mechanical Engineering is devoted to advance the knowledge and educate students in the area of Mechanical Engineering that will meet the needs of Industry and academics in the ever changing business dynamics and technological challenges associated with the modern world. Department strives for excellence in Teaching and Learning, Innovative Research and Community Service. The Department works with an aim to develop specialized knowledge in Mechanical Engineering, laying much emphasis on developing the students’ practical skills in thermal, design, production, industrial etc. As we take note of our learners’ professional needs ardently, so various In-house events such as Technical events, Seminars, Personality Development classes, Workshops, Conferences, Guest lectures are being arranged at regular intervals.

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The conference ICOTRIME 2020 is being organized at Krishna Engineering College, Ghaziabad, Uttar Pradesh, during 11th – 12th Dec 2020. It will feature world-class keynote speakers, special sessions, workshops, along with the regular/oral paper presentations. The conference welcomes paper submissions from researchers, practitioners, academicians and students, and will cover myriad tracks in the field of Mechanical Engineering and associated research areas. Original unpublished manuscripts, and not currently under review in any other journal or conference, are solicited in relevant areas including, but 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 & Constrained Optimization
- Learning Algorithms
- Combinatorial Optimization and Mathematical Programming
- Numerical Methods
- Multi-objective Programming
- Meta-heuristic Optimization Algorithms
- Hybrid Algorithms
- Optimization techniques

**Production and Industrial Engineering**

- Applications FEA
- Manufacturing
- Material Science
- Metrology and Surface Engineering
- Non-destructive Examination
- Machining
- Virtual Manufacturing and Concurrent Engineering
- Manufacturing
- Industrial Automation, CAD/CAM and Robotics
- Joining Processes (Welding)
- Logistics and Supply Chain Management
- Modeling and Simulation
- Stochastic Modeling
- Non-Conventional Energy
- Product Design and Development
- Reliability and Maintenance Engineering
- Surface Engineering and Coatings
- Mechatronics
- Design for Manufacturing and Assembly
- TQM and Six Sigma
- Theory of Constraints

**Thermal Engineering**

- Multi-Phase Flow
- Heat Transfer
- Bio-fuels and Internal Combustion Engines
- Transport Phenomena in Porous Media
- Environmental Engineering
- Enhanced Oil Recovery
- Polymer Processing Science and Technology
- Waste Management and Waste Disposal
- Energy Management and Energy systems
- Air Conditioning and Refrigeration
- Renewable Energy
- Micro/nano-fluid and life science application
- Novel Materials
- Thermal Management
- Micro-fabricated Thermal Management Devices and Systems
- Hybrid Energy Storage Systems
- Ionic Liquids, Surfactant and Interface Science
Design Engineering

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

Important Dates

Electronic submission of full papers: 1st Oct, 2020

Notification of paper acceptance: 20th Oct, 2020

Early bird Registration and submission of camera-ready papers: 15th Oct, 2020

Late Registration and submission of camera-ready papers: 25th Oct, 2020

Conference date: 11th – 12th Dec 2020

Registration

- Indian Delegates (INR)

| Category                        | Early registration | Late registration |
|---------------------------------|--------------------|-------------------|
| UG & PG students/ Research scholar | 6500               | 7000              |
| Faculty/ Academicians           | 7500               | 8000              |
| Industry Delegates              | 8500               | 9000              |
| Attendees                       | 2000               | 3000              |

- International Delegates (US $)

| Category                        | Early registration | Late registration |
|---------------------------------|--------------------|-------------------|
| UG & PG students/ Research scholar | 200                | 250               |
| Faculty/ Academicians           | 250                | 300               |
Industry Delegates | 300 | 350

**Registration Fee includes**

- Registration Kit
- High Tea
- Lunch/Refreshment

**Registration Detail of ICOTRIME -2020**

- Candidate are advised to visit our website www.krishnacollege.ac.in/icotrime regularly for updates.
- All Paper presenter & conference attendees require pre-registration.
- Only registered participants are allowed to attend the conference.
- Fill up separate registration form for each participant.
- For online registration delegate has to do NEFT first and update the transaction ID on online gateway or send Scanned copy of payment DD or Bank transaction receipt along with signed copyright form must send to the Organizing chair by email on icotrime@krishnacollege.ac.in.
- Students must attach the copy of identification card of their institute with the registration form.
- At least one author of each accepted paper must register by Oct 15, 2020 and present the paper at the conference in order to include the paper in the ICOTRIME -2020 Conference Proceedings.
- Bring the physical copies of the registration form, payment DD or Bank transaction receipt along with signed copyright form at the time of conference.

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**Author Instruction**

**Paper Submission Guidelines:**

Researchers are welcomed to submit original high quality manuscript which has not been submitted anywhere for publication, it should not be under consideration and not be copyright protected.

Manuscripts will be checked for plagiarism using software.

Easy-Chair Submission: will be updated soon
Publication

ICOTRIME 2020 proceedings will be published in scopus indexed.

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