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NATIONAL CONFERENCE

RECENT TRENDS IN MACHINE, MANUFACTURING, MODELING AND TECHNOLOGY

Date: 28th - 29th June, 2024

ABOUT JGI

The JAIN Group, Bengaluru is an education provider and an entrepreneurship incubator in India. The Group successfully operates 77+ educational institutions with 75,000 students and 10,000 employees engaged at the K-12, undergraduate, postgraduate, doctoral levels spread across 64 campuses pan India. More than 100 entrepreneurs and 50 ventures from various domains like IT, Financial Services, Home Decor, Hospitality, Music, Education, and Engineering have been incubated by JAIN Group's entrepreneurial wings so far.

ABOUT ARKA JAIN UNIVERSITY

ARKA JAIN University is one of the leading Universities in the East India Region and the first private University in the entire Kolhan Region (3 districts of East Singhbhum, West Singhbhum and Saraikela-Kharsawan). The University was established by the JHARKHAND State Legislature under "The ARKA JAIN University Act" in the year 2017. AJU is recognized by UGC. Accredited with 'A' Grade by NAAC in the First Cycle, AJU is the first and only State Private University in Bihar, Jharkhand and West Bengal to achieve this feat. An illustrious 13year legacy characterizes the success of the University (before becoming a private university, JAIN College provided quality higher education since 2011) in terms of carving a niche for itself through a gamut of diploma, undergraduate, postgraduate and doctoral programs. The university has affiliations, recognitions and memberships from such statutory and affiliating bodies as AICTE, BCI, PCI, OCI, INC, JNRC, AIU, ASCO India. AJU has been ranked 3rd in the "Top-15 Emerging Private Universities in India" category in the prestigious Outlook iCare University Ranking 2023. 5000-plus students, 30-plus programs (at diploma, undergraduate, postgraduate, and doctoral levels), 7 schools, Research & Development Cell, and 175-plus faculty members are the hallmarks of the University. Programs are offered in the domains of engineering, technology, management, commerce, biotechnology, pharmacy, optometry, English, mass communication, fashion design, law, and nursing.

VISION

To Develop Human Capital by creating spirited learning environment by empowering the students with knowledge, skills and instil social responsibility towards holistic development.

MISSION

To impart multidisciplinary and a holistic education in order to ensure the unity and integrity of all knowledge

To create academic impact through a combination of age-old tradition with modern scientific knowledge

To create a lifelong learning environment that nurtures intellectual inquisitiveness, holistic & critical thinking, ethics and human values, equity and inclusion, and life skills, and thus making students responsible citizens and nation builder.

To augment the employability aspect of students as per global requirements

To provide ideal environment for research, innovation, consultancy and entrepreneurship for larger and wider socio-economic and humanistic progress

To endow the faculty and staff members with necessary means so that they can deliver on the stated lines

To create a global tribe of technocrats, managers, entrepreneurs, scientists, biologists, pharmacists, artists and other professionals

To engage with industry, and society at large, in productive manner

To promote respect for diversity and respect for the local context in all curriculum, pedagogy, and policy

ABOUT ENGINEERING & IT

AJU School of Engineering & Information Technology is established with an aim to provide quality education and entrepreneurship development. ARKA JAIN University is an intellectual destination that draws inspired students from diverse backgrounds. AJU Bachelor of Technology (B.Tech) is an AICTE approved professional Engineering undergraduate degree of 4 Years duration program offered in 5 different disciplines. Our B.Tech program offers a variety of programs that involve theoretical and practical learning in equal measure.

ABOUT THE DEPARTMENT

The Graduate degree programs are designed to deliver technical skills and knowledge as well as develop the academic and professional abilities. It also aims to develop analytical and management skills of the students.

ABOUT THE CONFERENCE

The National Conference on "Recent Trends in Machine, Manufacturing, Modelling and Technology" is going to be organized by the Department of Mechanical Engineering, School of Engineering & IT of ARKA JAIN University. The conference topic is multifaceted which covers the recent advancement in many applications.

OBJECTIVE OF THE CONFERENCE

The aim of RTMMMT' 2024 is to bring together specialists and practitioners from industry, R&D institutes and academicians and to provide the forum for exchange of ideas. It also provides a premier interdisciplinary platform for researchers, practitioners, and educators to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the fields of recent advances in manufacturing engineering research and applications.

CALL FOR PAPERS: TOPICS

The Conference covers a broad range of topics on Research paper and article submissions are invited (but not limited) to the following topics of Interest for submission include (but are not limited to):

- Advance Optimization and characterization techniques,
- Advances in Additive Manufacturing
- Advances in Machine Tool Design
- Advances in Materials Technology
- Advances in Metal Cutting Technology
- Advances in Metal Joining
- Advances in Metal Forming
- Artificial Intelligence and Robotics
- Automation and Smart Systems
- **Bio Materials**
- Cellular manufacturing
- Characterization and Testing
- Coatings and Surface Engineering
- Composite and Polymer Processing, CAD/CAM/CAE/Reverse Engineering
- Composite materials
- Computer aided inspection
- Cryogenic aspects of metal cutting
- **Energy Engineering**
- Turbo machinery
- Green and Sustainable Manufacturing
- Hybrid Manufacturing Processes and Technology
- Industry 4.0

- Laser based manufacturing
- Manufacturing process planning and scheduling
- Materials behaviour
- Mechanical dynamics and vibration
- Mechanical strength
- Micro and Nano Manufacturing
- Modelling, analysis, and simulation of manufacturing processes
- Nano Technology
- Non Destructive Testing
- Non-Conventional Machining Processes
- Plastic processing technology
- Powder metallurgy and ceramic forming
- Precision Engineering
- Thermal aspects of metal cutting
- Tribology

GUIDELINES FOR PAPER SUBMISSION

- Paper should be original, unpublished and should not exceed eight pages.
- Author and Co-Author should register separately.
- All papers are subject to scrutiny.
- At least one of the authors of the selected paper should present the paper in the conference.
- Paper should be in IEEE standard format (Two column)
- All Abstract and Full paper (A4 page) should be submitted by Mail: conference.soe@arkajainuniversity.ac.in / Link: https://forms.gle/gyMdHVwQBtn4v28B6
- The selected papers will be published in National/International/UGC-CARE list journals.
- Outstanding research papers selected by the review committee will be published in the SCOPUS Indexed Journal.

GUIDELINES FOR MANUSCRIPT PREPARATION

Papers must be based on themes and sub-themes of the conference.

- Submission of paper should be in word doc format only.
- Paper Format: Single Column, A4 Size, 1.5 line spacing.
- Font Style: Times New Roman (Size 12).

Word Limit: Total word limit for each paper should be between 3000 - 5000 words

Page Limit: Not to exceed 8 pages including all references (IEEE standard format), tables and figures.

First Page: Title, Author(s), Name(s) and Affiliation(s) with contact number and email id.

Second Page: Title, Abstract (between 150-200 words), Keywords (5) followed by main text.

The papers will be blind reviewed and only those approved by the reviewers will be selected for publication.

Paper must be sent through mail/link.

Please register to participate in the conference by using the link:

https://forms.gle/eFk5DrKchB4cevvC7

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IMPORTANT DATES

Last Date for Submission of Abstract: 22.06.2024

Notification of Acceptance : 24.06.2024

Last Date for Submission of Full Paper: 26.06.2024

Notification of Acceptance of Full Paper: 27.06.2024

Last Date for Registration: 26.06.2024

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