About the Institute

Established in 2004 by The Nagpur Pallottine Society, St. Vincent Pallotti College of Engineering & Technology is one of the premier technical institutions in the region and is recognized for its culture of discipline and academic excellence. The society founded by our founder St. Vincent Pallotti has numerous institutions spread across 46 countries and 5 continents. The Institute is granted Autonomy by University Grants Commission & is accredited with grade "A" by NAAC & is approved by AICTE, New Delhi & DTE, Government of Maharashtra and is affiliated to RTM Nagpur University, Nagpur. The institute is reputed for excellent education in Engineering and Technology at Under Graduate, Post Graduate and Research levels. Presently SVPCET offers B. Tech programmes in eleven disciplines of engineering, two M. Tech. programmes and one PhD programme in Mechanical Engineering discipline.

About Dept. of Mechanical Engineering:

The evergreen branch, from the day the Stone Age man chiselled his first tool; the fold of mechanical engineering has come a long way. Mechanical Engineering department at SVPCET was established from inception of the institute. It is accredited by NBA, New Delhi. It offers the under graduate course in Mechanical Engineering and post graduate course in CAD/CAM along with Doctoral Program in Mechanical Engineering. The department has highly qualified and dedicated faculty and is known for its high academic standard, well-maintained discipline and complete infrastructure facilities. The Department has student's chapters of SAE INDIA which won the National championship of SAEINDIA BAJA 2023. The department has also ISTE and ISHRAE student's chapters.

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About the Conference

"Technological Innovations & Applications in Industry 4.0: Challenges and way ahead" (ICTIA-2024) is a conference to offer an International forum for discussion and exchange of knowledge on opportunities and challenges related with all facets and aspects of technological innovations & aapplications in Industry 4.0,its Challenges and way ahead. The objective of this international conference is to provide platform for policy makers, academicians and researchers to share their experiences and knowledge by presentation of scientific advances made in the field of Industry 4.0. Industry 4.0, also known as the Fourth Industrial Revolution, is characterized by the integration of advanced technologies into industrial processes, leading to increased automation, connectivity, and data exchange. This transformation is driven by several technological innovations and applications that have the potential to revolutionize various industries. However, along with the opportunities, Industry 4.0 also presents significant challenges for sustainable development. The conference theme is in line with the initiatives of Government of India like "Make in India" & "Samarth 4.0" which refers to the rapidly expanding technology in numerous domains that aims to increase system performance across all sectors of the economy, gives researchers thorough awareness of the world around them and improves the critical thinking ability.

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EUPHORIC 20 YEARS

ST. VINCENT PALLOTTI
COLLEGE OF ENGINEERING & TECHNOLOGY, NAGPUR
(AN AUTONOMOUS INSTITUTION)

INTERNATIONAL CONFERENCE ON TECHNOLOGICAL INNOVATIONS & APPLICATIONS IN INDUSTRY 4.0: CHALLENGES AND WAY AHEAD (ICTIA-2024) (HYBRID MODE CONFERENCE)

24th-25th April, 2024

Organized by
Department of Mechanical Engineering
St. Vincent Pallotti College of Engineering & Technology, Gavsi Manapur, Wardha Road, Nagpur, Maharashtra, India

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International Conference on "Technological Innovations & Applications in Industry 4.0: Challenges and way ahead" (ICTIA-2024)

Papers on the following Themes / Sub-themes are invited from Academicians, Scientists, Practicing Engineers, Researchers, Consultants and others associated with this domain:

Paper Submission Guidelines and Link

1. Papers should be in English. Previously published work should not be submitted, nor may the work be concurrently submitted to any other conference or journal. Such papers will be rejected without review.
2. The paper is to be done at two links. Authors have to register in Microsoft CMT before submission. After that submit the paper in Microsoft CMT: https://cmt3.research.microsoft.com/ICTIA2024
3. All the articles will be checked for plagiarism by Turnitin. Plagiarism should be less than 13%.
4. A double-blind peer review will be carried out for review of every article
5. The conference registration is mandatory for at least one of the authors and should be done before the deadline.
6. All accepted high-quality papers will be will be published in a Taylor & Francis conference proceedings as book volume and further submitted to Scopus for indexing.
7. Publisher will conduct quality checks on the accepted papers and only papers that pass these checks will be published. Check conference website for more details.
8. Short papers (Work-in-Progress) are an opportunity to present preliminary or interim results. The paper length should be up to 5 pages.
9. Literature reviews/survey papers will only be considered if they present a new perspective or benefit the field.

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3. Papers should be camera-ready in MS-Word format (as per template), not exceeding 5 pages in length including figures, tables, and appendices.
4. The language of the Publication is English. The mode of presentation should be in third person.
5. The Template for preparation of article and the Declaration Form, (to be submitted by the authors duly filled in and signed for copyright purpose) is available with the link
6. SI units should be used wherever possible. Other units, if used, should be given only in parentheses preceded by SI units.
7. Mathematical symbols should be typed and care should be taken to differentiate between similar characters (e.g. 1 and I), upper and lower case letters and superscripts and subscripts.
8. Lengthy mathematical proofs and derivations and extensive test data are discouraged. If absolutely essential, they should be given as appendices.

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The papers are considered for possible publication on the understanding that these have not been submitted to any other publisher.

Address for Communication

Dr. V. C. Sontake
Assistant Professor, Dept. of Mechanical Engineering
Mobile no- 9637582119

Dr. A. R. Bhende
Assistant Professor, Dept. of Mechanical Engineering
Mobile no- 9326276073

CONFERENCE TRACKS

TRACK-1: Technological Innovation

Wireless Sensor Network and Security
Big Data and Information Integrity
Cloud Computing and Devices with Platforms
Ultra-low power Technologies and
Embedded Systems Architectures
Digital Transformation and Industry 4.0
Augmented Reality and IoT
Blockchain
Cognitive Computing
Intelligent Data Communication Technologies
Internet of Robotic Things
Additive Manufacturing
Cyber-Physical Production Systems
Digital Twin-Driven Smart Manufacturing
Flexible and Agile Manufacturing Systems
Smart Manufacturing Systems, Smart Factories
Virtual Reality
Artificial Intelligence and Machine Learning

TRACK-2: Application in Industry 4.0

Industrial Manufacturing Design
Process Engineering
Quality Assurance and Processes
Intelligent Logistics
Network Integration and Management
Industrial Simulation Techniques and Tools
Analytics and Data Mining
Decision Support Systems
Optimization Models and Applications
Sustainability
Carbon Neutrality
Circular Economy
Green, Sustainable and Lean Manufacturing
Condition based Monitoring
Machine fault diagnosis
Challenges in design of Agriculture related product
Autonomous Transport as a Public Service
Energy Management
Consumer market, military applications
Human-machine interaction
Education 4.0
Application of basic sciences in Industry 4.0

TRACK-3: Challenges in Industry 4.0

Systems Interoperability and Integration
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Edge Computing & 4/5G Systems
Multimedia, Computer Vision, and Image Processing
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Condition based Monitoring
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Systems and Software Security
Intelligent Supply Chain Management
Health standards -Internet of things for E-health applications

TRACK-4: Future of industrial revolution

From Industry 4.0 to Industry 5.0
The Convergence of Construction & Manufacturing
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IMPORTANT DATE

25th Feb, 2024 — Paper submission deadline

10th March, 2024 — Acceptance notification

20th to 30th March, 2024 — Early bird registration and paper submission

20th March, 2024 — Camera Ready Paper Submission

10th April, 2024 — Last date of Registration

24th - 25th April, 2024 — Conference Date

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