



Agnel Charities'

FR. C. RODRIGUES INSTITUTE OF TECHNOLOGY, VASHI

(AICTE Approved, NBA & NAAC Accredited, Ranked by NIRF in 2021)

5th Biennial International Conference on Nascent Technologies in Engineering 2023



ICNTE - 2023

January 20-21, 2023

IEEE and IAS Technically Co-Sponsored Conference
and Sponsored by AICTE



IEEE BOMBAY
SECTION

CONFERENCE OBJECTIVE

It is proposed to organize the 5th Biennial International Conference on Nascent Technologies in Engineering (ICNTE 2023) at Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai (INDIA). This conference offers an occasion to bring together practitioners in the forefront of technologies from different parts of the world to share their research findings. In addition to paper and poster presentations, the conference will also comprise of keynote addresses by experts from leading Institutions, Research Organizations, and Industries. The information disseminated through this technical interaction will introduce the researchers to advancements in the latest technologies in various engineering fields.

Institute Profile

Fr. C. Rodrigues Institute of Technology was established in 1994 in the heart of Navi Mumbai, Vashi, as a part of Agnel Technical Education Complex. The objective of the Institute is to provide quality technical education in addition to inculcating moral values in its students. Apart from academic excellence, the institute is also reputed for its extensive facilities that have led to it being awarded an "A" grade by the Directorate of Technical Education, Maharashtra (INDIA) right from its inception. The institute is affiliated to the University of Mumbai and it has been accorded accreditation for all the programs by the National Board of Accreditation (NBA) Delhi (INDIA). Institute is accredited by NAAC and ranked by NIRF. The College has been granted religious minority status.

The Institute has the following five programs at Bachelor's level:

- Computer Engineering
- Electrical Engineering
- Electronics and Telecommunication Engineering
- Information Technology
- Mechanical Engineering

It has the following two programs at Master's level:

- Power Electronics & Drives (Electrical Engineering)
- Machine Design (Mechanical Engineering)

It is also a Mumbai University recognized Research Centre which offers:

- PhD in Electrical Engineering
- PhD in Electronics and Telecommunication Engineering
- PhD in Mechanical Engineering

Publication

All the papers orally presented in the Conference will be submitted to IEEE for possible inclusion into.

IEEE Xplore®
(scopus indexed)

CONFERENCE ATTRACTIONS

- ◆ Best Paper Awards in each track
- ◆ Best poster Awards in each track
- ◆ Pre-Conference Tutorials

Patrons

| | |
|-----------------------------------|--|
| Rev. Fr. Saturnino Almeida | Regional Superior and Managing Director, ATEC, Vashi |
| Rev. Fr. Seby Rodrigues | Assistant Director, ATEC, Vashi |
| Dr. S. M. Khot | Principal, Fr.C.R.I.T., Vashi |

Conference Chair

Dr. Mini Rajeev
Associate Professor (Electrical)

Conference Co-Chair

Dr. Pranali Choudhari
Associate Professor (Extc)

Track Chairs

| | |
|---------------------------|--------------------------|
| Dr. Lata Ragha | Head, Comp. Engg. Dept. |
| Dr. Bindu S. | Head, Elect. Engg. Dept. |
| Dr. Milind Shah | Head, Extc. Engg. Dept. |
| Dr. Nilaj Deshmukh | Head, Mech. Engg. Dept. |
| Dr. Christu David | Head, Humanities Dept |
| Dr. Vaishali B | Head, Info. Tech. Dept. |

Conference Venue

Agnel Charities'

Fr. C. Rodrigues Institute of Technology

Agnel Technical Education Complex, Sector-9A, Vashi, Navi Mumbai, Maharashtra, Pin- 400 703

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Visit <https://www.fcrit.ac.in>

Distance from Vashi railway station: 1.8 km

Distance from Vashi bus depot: 500 m



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CONFERENCE TRACKS AND SESSIONS

Structural Design and Dynamics

- Smart Materials, Structures, and Systems.
- Linear and Nonlinear Dynamics of Nano, Micro, and Macro Systems.
- Vehicle Dynamics and Control.
- Structural Design, Optimization and Experimental Techniques.

Thermal Engineering and Fluid Dynamics

- Combustion, Thermo-acoustics and Fuels.
- Refrigeration, Cryogenics, and Air Conditioning.
- Renewable and Non-Renewable Energy.
- Computational and Experimental Techniques in Thermal/ Fluids Systems.

* Acceptance of paper submitted in Thermal Engineering and Fluid control track does not guarantee the publication of manuscript in IEEE Xplore. Paper under the scope of IEEE only will be sent for inclusion in IEEE Xplore.

Manufacturing and Automation

- Smart Manufacturing Technologies.
- Industrial Robotics and Automation.
- Control of Machine Tools.

Electrical Machines and Drives

- Electrical Machine Design and Modelling, Special Machines.
- Advanced Control of Electric Drives, Fault Detection.

Power Systems

- HVAC, HVDC, FACTS, IOT Enabled Energy System.
- Power System Protection, Reliability and Resiliency.
- Big data applications in Power and Energy systems.
- Micro Grids, Smart Grids and Active Distribution Networks.
- Renewable Energy Systems.
- Control System Design and Automation.
- Electricity Markets, System Economics, Cyber Security in Power and Energy systems.

Power Electronics and Energy Conversion

- Power Electronic Devices.
- Power Electronic Converters.
- Electric and Hybrid Electric Vehicles.
- Lighting Systems.
- EMI and EMC.

Signal Processing

- Speech Processing.
- Image Processing.
- Bio-medical Signal Processing.

Communication Engineering

- Wireless Communication.
- Telecommunication Network.
- 4G Technology.

Embedded System

- VLSI Technology.
- RTOS.
- Embedded System Hardware

Networking

- Network Management, Measurement and Monitoring.
- Wireless, Sensor and ADHOC networks.
- Network Resilience, Security and Robust -ness.
- Routing, Multipath, Routing, Distributed System and Data Dissemination.

Security

- Cryptographic Algorithms, Program Security, Secure Coding, and Secure Protocols.
- Network, System, OS, Database, Information, and Cloud Security.
- Biometrics, Forensics, Disaster Recovery and Management, Survivable System, Risk Analysis and Management.
- Secure Communication Channel, Secure Transaction, and Secure Payment Mechanism.

Information and Computer Technologies

- Software Engineering, Software Testing, Project Management, and Object-Oriented Analysis and Design.
- Data Warehousing and Data Mining, Distributed Databases, Parallel and Distributed Computing, Auto-Parallelization, Cloud Computing, and Big Data Analytics.
- Artificial Intelligence, Expert System, Machine learning, Support Vector Machines, Information Extraction and Intelligent Agents, Natural Language Processing, Machine Translation, Cross Lingual IR, and Web Knowledge Processing.
- Computer Graphics, Visualization, Medical Imaging, Animation, Virtual and Augmented Reality, and Geometric Computer Vision.
- Deep Learning

Analysis and Design of Algorithms

- Parallel and Distributed Algorithms and Applications, Multithreaded algorithms.
- Programming languages, Complexity, Data Structures, Mathematical Programming, and Linear programming.
- Cryptographic Algorithms, Bioinformatics and Systems Biology, Scientific Computing, Combinatorial Optimization, and Applied Algorithms.
- Greedy Methods, Amortized Analysis, Dynamic Programming, Graph and Tree Algorithms, Number Theoretic Algorithms, and Computational Geometry.

Advanced Materials and Physics of Devices

- Photovoltaic Materials, Processing Techniques of Solar Cells, Cell Level Modelling.
- Superconductors, Super capacitors, Multi Ferroics
- Physics of Devices and Sensors

IMPORTANT DATES

- Online paper submission begins : June 1, 2022
- Last date of paper submission : September 30, 2022
- Notification of acceptance : November 15, 2022
- Registration begins : November 15, 2022
- Last date of registration : December 15, 2022
- Submission of camera-ready paper : December 15, 2022
- Dates of conference : January 20-21, 2023



REGISTRATION DETAILS

| Type of Registration | Fee (Excluding GST*) |
|---|----------------------|
| Delegates from Industry/Utility/R&D Organization/Govt. Organization | ₹ 8000/- |
| Delegates from Academic Organization | ₹ 7000/- |
| Student Delegates | ₹ 5000/- |
| Delegates of Poster Presentation | ₹ 1600/- |
| Listeners (only attending) | ₹ 1600/- |
| Delegates from Abroad (Online) | \$ 150 |
| Delegates from Abroad(Offline) | \$ 200 |

- * Goods and Service Tax (GST) will be applied as per Government directives.
- Registration of at least one author is mandatory for each paper. For subsequent registration, authors of the same paper can avail a discount of 20% in the corresponding registration amount.
- IEEE members can avail a discount of 20% in the corresponding registration amount for the paper.
- Only registered authors will be allowed to present the paper.
- For more details of registration visit the ICNTE 2023 conference website
- Accommodation can be arranged for few participants on first come first serve basis at a nominal cost in the campus.
- Students and IEEE members need to produce proof for claiming discount in the registration amount.
- Registration of at least one author is mandatory for each poster. Amount is inclusive of soft copy of the souvenir, lunch and refreshments on the day of presentation.
- **50% Discount on registration fee for participants belonging to SC/ST category will be given on First - come - first - serve basis.**

INSTRUCTION TO THE PARTICIPANTS

- For paper submission authors are required to visit the ICNTE 2023 website <https://icnte.fcrit.ac.in> (**CMT is used for the conference**)
- The number of pages in the paper should not exceed six. Paper format is available on the conference website in **Downloads** menu.
- The authors of the accepted papers will be invited for oral presentation in the conference. All the oral papers presented in the conference will be submitted to IEEE for possible inclusion into IEEE Xplore if it falls in the scope of IEEE.
- Registration of at least one author is compulsory for each paper or poster.
- The authors whose paper has been accepted for poster presentation should adhere to the template which will be made available on the conference website in **Downloads** menu.
- The registration fee for paper presentation covers conference kit, soft copy of the conference proceedings, refreshments, and lunch on both the days of the conference .
- Contact Details : For any queries, email to - icnte@fcrit.ac.in
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