

4th Biennial International Conference on Nascent Technologies in Engineering 2021

ICNTE - 2021

JANUARY 15 -16, 2021

Technically Co-Sponsored by
IEEE and Industry Applications Society (IAS)



CONFERENCE OBJECTIVE

The 4th Biennial International Conference on Nascent Technologies in Engineering (ICNTE 2021) is being organised 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. This year, Pre-Conference Tutorials are also scheduled to provide participants with an opportunity to expand their insight and fortify their abilities in the area addressed in the tutorials.

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 courses by the National Board of Accreditation, Delhi (India). The College has been granted Religious Minority Status.

The Institute has the following five branches at Bachelor’s level:

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

It has the following three branches at Master’s level:

- Electrical Engineering
- Electronics and Telecommunication Engineering
- Mechanical Engineering

It is also a Mumbai University approved Research Centre which offers PhD in Electrical Engineering, Electronics and Telecommunication Engineering, and Mechanical Engineering.

Publication

- All the papers orally presented in the Conference will be submitted to IEEE for inclusion into (Scopus indexed



- Few selected papers will be sent to IEEE Transactions on Industrial Applications for probable publication

Patrons

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

Conference Chair

Dr. Mini Rajeev

Conference Co-Chair

Dr. Savitha S Upadhy

Track Chairs

Dr. Lata Ragha	Head, Comp.Engg. Dept.
Dr. Bindu S.	Head, Elect. Engg. Dept.
Dr. Milind Shah	Head, EXTC Engg. Dept.
Ms. Dhanashree H	l/c Head, Info. Tech. Dept.
Dr. Nilaj Deshmukh	Head, Mech. Engg. Dept.
Dr. Christu David	Head, Humanities Dept

Conference Venue

Agnel Charities’

Fr. C. Rodrigues Institute of Technology

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

Phone: +91-22-27771000,

Fax: +91-22-27660619

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

ICNTE 2021 will be a “Virtual” conference using web-based online presentation

CONFERENCE AWARDS

- **Best Paper Award in each track**
- **Best Poster Award in each track**
- **“Young Researcher” Award for student authors below the age of 35 years**



ICNTE 2021

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CONFERENCE TRACKS AND SESSIONS

□ Track M1 - 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.

□ Track M2 - Thermal Engineering and Fluid Dynamics

- Computational and Experimental Techniques in Thermal / Fluids Systems.
- Virtual Instrumentation-based Thermal Systems.
- Smart Thermal Management.
- Electric Vehicle Systems.

□ Track M3 - Manufacturing and Management Strategies

- Industrial Robotics and Automation.
- Computer-Aided-Manufacturing.
- Smart Manufacturing Using AI and IoT.
- Development of Systems for Rapid Manufacturing/3D-Printing.

□ Track E1 - Electrical Machines and Drives

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

□ Track E2 - 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.

□ Track E3 - Power Electronics and Energy Conversion

- Power electronic devices.
- Power electronic Converters.
- Electric and Hybrid Electric Vehicles.
- Lighting Systems.
- EMI and EMC.

□ Track EC1 - Signal Processing

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

□ Track EC2 - Communication Engineering

- Wireless Communication.
- Telecommunication Network.

□ Track EC3 - Embedded System

- VLSI Technology.
- RTOS.
- Embedded System Hardware

□ Track CI1 - Networking

- Network Management, Measurement, and Monitoring.
- Wireless, Sensor, and ADHOC networks.
- Network Resilience, Security, and Robustness.
- Routing, Multipath Routing, Distributed Systems, and Data Dissemination.

□ Track CI2 - 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.

□ Track CI3 - 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.

□ Track CI4 - 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.

□ Track H1 - 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 : July 15, 2020
- Last date of paper submission : ~~September 30, 2020~~
October 15, 2020
- Notification of acceptance : November 15, 2020
- Registration begins : November 15, 2020
- Last date of registration : November 30, 2020
- Submission of camera-ready paper : December 15, 2020
- Pre- conference tutorials : January 14, 2021
- Dates of conference : January 15 - 16, 2021



REGISTRATION DETAILS

Type of Registration	Fee (Excluding GST *)
Delegates from Industry/Utility/ R&D Organization/Govt. Organization	Rs. 6000/-
Delegates from Academic Organization	Rs. 4500/-
Delegates of Poster Presentation	Rs. 2000/-
Student Delegates	Rs. 3000/-
Delegates from Abroad	USD 150

- * Goods and Service Tax (GST) will be applied as per Government directives
- IEEE members can avail a discount of 10% in the corresponding registration amount
- For more details of Registration visit the ICNTE 2021 conference website
- Co-authors can avail a discount of 40% in the corresponding registration amount

INSTRUCTION TO THE PARTICIPANTS

- For paper submission authors are required to visit the ICNTE 2021 website <https://icnte.fcrit.ac.in>
- The sample paper template is made available on the conference website in **Downloads** menu.
- The number of pages in the paper should not exceed six. Papers submitted in the format other than IEEE will not be considered for the conference.
- The authors of the accepted papers will be invited for an **online** poster or oral presentation in the conference. All the oral papers presented in the Conference will be submitted to IEEE for inclusion into IEEE Xplore which is Scopus indexed. Registration of at least one author is compulsory for each paper or poster.
- Exemplary papers presented in the conference may be recommended for consideration **for publication in IEEE Transactions on Industrial Applications**
- Details of the **Online mode of presentation** will be made available in the ICNTE 2021 conference website as and when applicable.
- The authors whose paper has been accepted for poster presentation should adhere to the template which will be made available in the conference website in **Downloads** menu.
- For details regarding the Pre-conference tutorials, visit the ICNTE 2021 conference website.
- Contact Details
 - Dr Mini Rajeev (Conference Chair) 9820893225 (mini.rajeev@fcrit.ac.in)
 - Dr Savitha S Upadhya (Conference Co- Chair) 9004908875 (savitha.upadhya@fcrit.ac.in)
 - Visit the **Contact tab** provided in the ICNTE 2021 conference website

SPONSORSHIP

For sponsorship details visit the ICNTE 2021 conference website

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