



CTFC-2021

# Conference on Technologies for Future Cities

2<sup>nd</sup> in the Series  
8<sup>th</sup> - 9<sup>th</sup> October, 2021

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**Pillai College of Engineering (PCE)**

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Dr. K. M. Vasudevan Pillai Campus

Sector 16, New Panvel, Navi Mumbai – 410206, Maharashtra, India.

Website : <https://www.futurecities.mes.ac.in>, Email: [ctfc@mes.ac.in](mailto:ctfc@mes.ac.in)

Find the conference on IEEE Website (Record No. #53146):

[https://conferences.ieee.org/conferences\\_events/conferences/conferencedetails/53146](https://conferences.ieee.org/conferences_events/conferences/conferencedetails/53146)



## About Pillai College of Engineering

Pillai College of Engineering (Erstwhile Pillai Institute of Information Technology until April 2016), established in 1999 under the patronage of Dr K M Vasudevan Pillai, is a reputed engineering college in Navi Mumbai. It is affiliated to the University of Mumbai, approved by All India Council for Technical Education (AICTE), New Delhi and is recognized by Government of Maharashtra. PCE is approved Research Centre of Mumbai University, which offers PhD degrees in Mechanical Engineering, Computer Engineering and Information Technology. The institute is NAAC accredited with A+ grade by NAAC and three of its departments have been accredited by NBA. The institute strives to provide state of the art facilities conducive to effective teaching-learning, research and consultancy. It further takes every effort in inculcating in the minds of students the respect for the environment. Faculty of PCE is very active in R & D and have completed projects for government agencies such as DST, BRNS, ICSSR and UGC. PCE has also has undertaken and completed urbanization studies for UN office project on 'Urban Expansion' in collaboration with New York University and continues to provide consultancy in similar fields to Tata Consultancy Engineering (TCE) and CIDCO.

## About Conference

Cities in developing countries are rapidly expanding, and it is expected that about 65% of the world population would be living in cities by 2050. Unfortunately, the expansion is unplanned and disorganized which leads to inequitable distribution of public services, unaffordable housing, lack of sufficient streets and roads and insufficient open spaces. Scientists and engineers, world over, are looking for technological solutions to the problems, such as, unorganized traffic, unenforced traffic rules, poor quality public transport and parking facilities, deficiencies in water supply, air and water pollution, etc. Pillai College of Engineering has taken a timely lead and has started a series of conferences on “Technologies for Future Cities”. The first conference in the series was held during Jan.08-09, 2019. The conference was a great success. There were about dozen invited talks followed by a Panel Discussion. About 250 scientists and engineers attended the conference. The present conference is 2nd in the series. The conference would consist of, both, contributory papers and invited talks. The full details of the conference are available on [www.futurecities.mes.ac.in](http://www.futurecities.mes.ac.in).

## About Panvel, Navi Mumbai

Panvel is an old town in Raigad District of Maharashtra and is famous for its heritage of lakes, temples, nearby sanctuary and forts. Panvel Municipal Corporation is the first Municipal Corporation of Raigad. The authority of City and Industrial Development Corporation (CIDCO) has been the backbone in the development of Panvel. The town is situated on the outskirts of Mumbai and is all set to become the new transportation hub of Maharashtra serving the major trade and passenger routes by road, rail and air. It is reachable from Mumbai railway stations by local train and by taxi from Mumbai airport. Depending on the starting point, the travel time varies but, generally, does not exceed 90 minutes.

# Patrons

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## Tracks

Software Technologies

Hardware Technologies

Systems for Future Cities

Policies and Governance for Future Cities

Materials for Future Cities

Healthcare for Future Cities

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- Dr. Jai Narayan Tripathi, IIT Jodhpur
- Prof. R K Malaviya, Ex-Scientist ISRO

# Tracks and Sessions

## Software Technologies

- Urban Land Management – 3D Modeling
- GIS and Remote Sensing
- Image Processing (digital, video)
- AI, Data Analytics, Machine Learning
- Cyber Security
- Cloud Technology.

## Hardware Technologies

- 3D Printing & Design
- Embedded and Automation Systems
- Augmented Reality/Virtual Reality(AR/VR)
- Internet of Things (IoT)
- VLSI, Sensors and actuators,
- Real time monitoring
- Instrumentation and Robotics
- Nonconventional energy sources
- Electric Vehicles, Self-driving Car
- Molecular Manufacturing
- Carbon capture systems
- Lean Construction Technology
- Low-cost desalination of seawater
- Green Technology & Sustainability Engineering

## Systems for Future Cities

- Power generation and distribution
- Communication Systems
- Transportation Systems
- Disaster Management and Early Warning Systems
- Water Supply and Sanitation
- Pollution Control and Waste Management
- Supply Chain Management
- Smart and sustainable electrification and HVAC&R.

## Policies and Governance for Future Cities

- Use of ICT in urban planning, services and management of utilities
- Infrastructure Management for facilitating good Healthcare, Education and Sports
- Modern educational system
- Integrated Water Management System
- Mass transportation and efficient & environment friendly transport system
- Police & cyber security and Financial inclusion

## Materials for Future Cities

- New Construction Materials
- Recycling and efficient use of materials
- Environment friendly & biocompatible materials
- Nanomaterials, Polymers and Composites
- Alternate Fuels
- Packaging Materials

## Healthcare for Future Cities

- Technologies in medicine
- Use of ICT for keeping medical records or available infra-structure
- Technologies for faceless doctor-patient interaction
- Net-working hospitals and health centers
- Digital healthcare
- Use of robotics in surgery
- Quantitative methods in medical imaging.
- Supply chain for fresh and hygienic food
- Establishing Cold Stores
- Methods to monitor food products quality

# Call for Papers

The manuscript should be submitted latest by 15<sup>th</sup> July 2021. The guidelines for preparing manuscript and template are available on conference website. Authors are requested to adhere to the guidelines for smooth processing of the manuscript. Manuscripts will be checked for plagiarism using turnitin and peer reviewed. The comments of the reviewers will be communicated to the authors by 10th September 2021. Selected manuscripts will be published in IEEE Xplore, a digital library indexed in Scopus, Web of Science, etc and a separate abstract book of all the presented papers (with ISSN Number) will be published. However, it is mandatory that at least one of the authors registers and presents the paper at the conference.

Manuscripts submission will be through Microsoft CMT. Click <https://cmt3.research.microsoft.com/CTFC2021> to submit your manuscript. For further details please visit [www.futurecities.mes.ac.in](http://www.futurecities.mes.ac.in). **Awards will be given to outstanding papers both in Poster and Oral category.**

## Important Dates

Call for Paper submission open	25/04/2021
Last date of submitting Paper	31/07/2021
Communication to authors on acceptance of their Paper	10/09/2021
Last date of submitting full camera ready manuscript	20/09/2021
Registration Opens	20/09/2021
Last date for request for accommodation	30/09/2021
Last date for Registration	01/10/2021

## Accommodation

Accommodation on request basis could be made available to registered participants on individual or sharing basis subject to availability. During registrations, participants are requested to opt for the need well in advance to enable us to make the necessary arrangements. For more details kindly refer the conference website.

## Complementary Workshops

- Antenna Design and Troubleshooting
- Machine Learning

# Registration

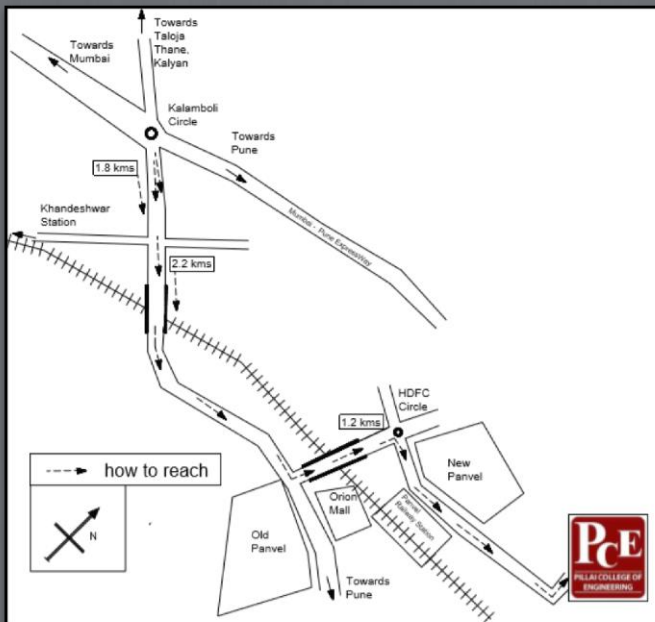
The procedure for registration and payment of fees would be made available on conference website. The applicable fee structure is tabulated below.

Category	Registration fee for authors *		Registration fee for attendance only	
	Non IEEE Members	IEEE Members	Non IEEE Members	IEEE Members
Faculty Members	Rs. 2500/-	Rs. 2000/-	Rs. 1500/-	Rs. 1200/-
Delegates from industry	Rs. 5000/-	Rs. 4000/-	Rs. 3500/-	Rs. 2800/-
Students (UG/PG/PhD)	Rs. 1500/-	Rs. 1200/-	Rs. 1250/-	Rs. 1000/-
Foreign Delegates	USD 150	USD 120	USD 100	USD 80

The registration fees include conference kit, Abstract Book, refreshments and lunch at the conference venue and complementary workshops. (Details of workshops are available on [www.futurecities.mes.ac.in](http://www.futurecities.mes.ac.in) )

\* There will be additional charges of Rs. 1650 /- (USD 22) for uploading the selected paper in IEEE Xplore.

# Travel Map





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& Technology Rasayani

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New Panvel

Mahatma School of Academics and  
Sports, Khanda Colony

HOC International School  
Rasayni

**Conference Venue**

Pillai College of Engineering (PCE)

Dr. K. M. Vasudevan Pillai Campus ,Sector 16,

New Panvel, Navi Mumbai – 410206, Maharashtra, India. Contact: [ctfc@mes.ac.in](mailto:ctfc@mes.ac.in)

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