



# 9<sup>TH</sup> IET SMART CITIES SYMPOSIUM 2025

1-3 DECEMBER 2025

HYBRID EVENT -WITH VIRTUAL ACCESS SYMPOSIUM  
UNIVERSITY OF BAHRAIN

TECHNICAL SUPPORT:

THE INSTITUTION OF ENGINEERING AND TECHNOLOGY

FULL-PAPER REVIEWED MANUSCRIPTS SUBMISSIONS.

Symposium Proceedings will be submitted to the IET Inspec, IEEE Xplore, and Scopus Elsevier's for indexing, once meeting the IET publication standards.

DISTINGUISHED CONTENTS WILL ALSO BE EXAMINED BY IET FOR POSSIBLE SUBMISSION TO IET JOURNALS, AFTER SELECTION AND EXTENSION.



TECHNICAL SPONSOR AND SUPPORT



*Welcome to the IET 9-SCS-25. An annually run IET symposium related to development of smart innovations for smart cities. The symposium objectives are to create awareness through research and publications about the prospects of smart cities. The symposium also serves as a platform to exchange ideas and thoughts in international prospect and stand. In addition, the symposium is emphasizing the role of academia, universities, industries, experts, and innovations for promoting smart cities solutions, projects, smarter ideas, consultancies and continuity in the form of indexed publications. The 9th IET International Smart Cities Symposium (8-scs-2025) will be held at the University of Bahrain, Bahrain, on December 1-3, 2025. The symposium will feature world-class plenary speakers, major technical symposiums, industry and academic panels, and invited tracks. For more information, please visit symposium website: <https://www.iet-smartcities-symposium.com/>. You are cordially invited to submit your latest research work to the symposium. Best paper awards will be selected from accepted papers. The symposium and tracks papers will be published and indexed in IET Inspec - IEEE Xplore and will appear on other indexing databases.*

TECHNICAL PROGRAM:

DETAILS ARE FOUND AT:

<https://www.iet-smartcities-symposium.com/>

SYMPORIUM KEYNOTE, PAPERS, AND PROCEEDING VOLUME SUMMARY

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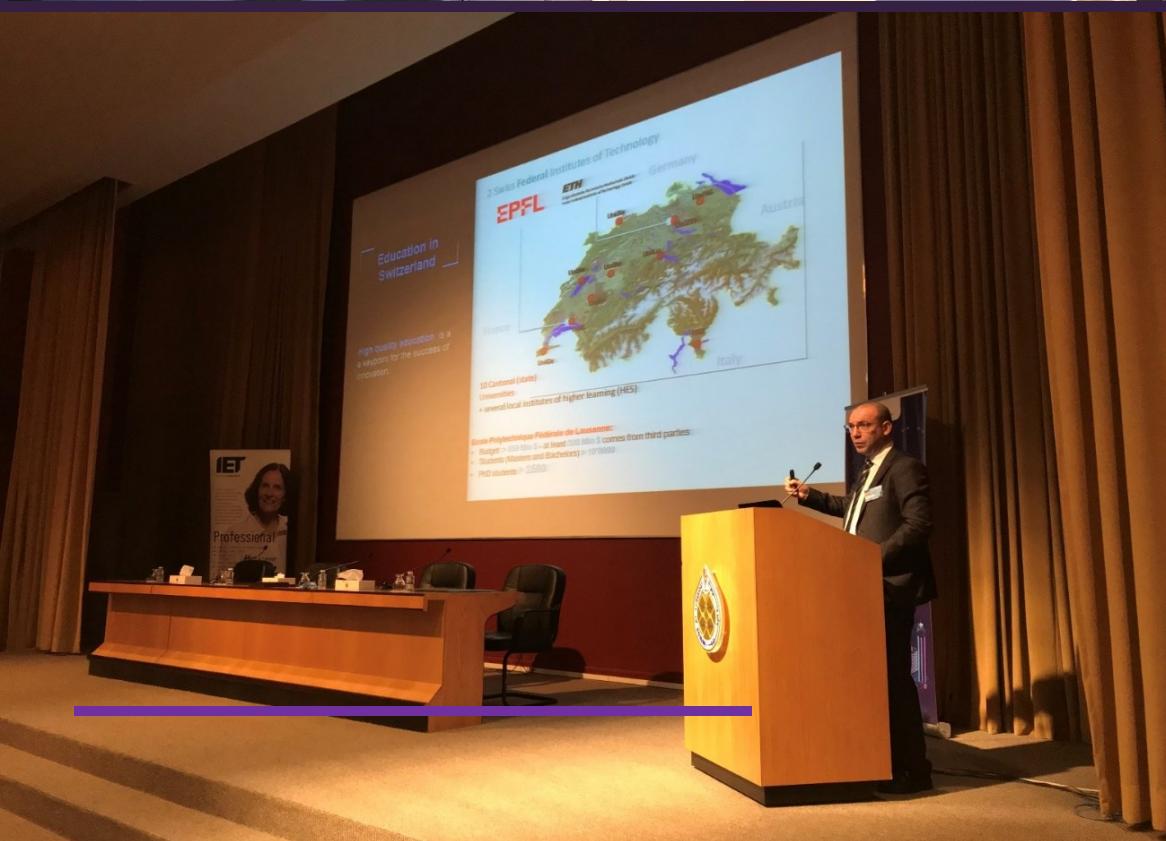
# THE 9<sup>TH</sup> IET SCS-2025 SYMPOSIUM

## SETUP AND PURPOSE

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## IET TECHNICAL SUPPORT: THE INSTITUTION OF ENGINEERING AND TECHNOLOGY





## 18 YEARS ... WAY FORWARD AND A SENSE OF A PURPOSE:

*The first IET forum at the University of Bahrain has started since 2008. The first IET Smart Systems International Conference was also during 2008. Since the year 2008, we have been organizing the local IET forums and then indexed Symposiums in an annual basis at University of Bahrain.*

*As annually planned, also this year of 2025, the University of Bahrain; 9th Smart Cities Symposium (1-3 December 2025) is also organized with collaboration of the IET, (The Institution of Engineering and Technology), UK.*

*Smart Cities is a new and emerging concept that have received a substantial attention for a while. This is because of the fast development of Engineering Concepts, IT and ICT sectors. Smart cities are a used term used to define employment of smart technologies and data as the means to solve cities' sustainability challenges and prosper. In this sense, many cities are in the process of transforming themselves to be smart. This can be achieved while relying on and using data and technology to improve several sectors. Sectors that are applicable for such transformations are:*

*{Transport, Energy use, Health issues, Health care, and Air quality, or to Drive economic growth}. Others are being built to be smart from the start. This is a term that relates to the present and to the future. Nevertheless, in general notion, cities world-wide consume substantial resources and global energy supply, which make them much under demand to be transformed to smart. Reports are also showing that, there are growing numbers of the world's natural resources, global energy supply, healthcare issues, the need of fast and easy transports, and easy health care. In addition, over the coming twenty years, it is expected that cities worldwide will generate not less than 60 per cent of global GDP. In this sense there are potentials that, Engineering and High Technologies will help and participate to resolve several issues and demands of current cities. The regional infrastructure, and the ICT backbone, are developing very fast, that makes the concept of smart cities are very applicable concepts locally. Therefore, the event will be an excellent platform and a site for energetic and dynamic discussions between locally demanding parties, possible international experts, and the community of academics, decision makers, researchers, practitioners, real estate developers in Bahrain, investors, and policy makers from the urban spheres. This is all with the aim to explore such emerging trends and innovative solutions to green and smart cities within the region.*

*The main purpose of the event is to create awareness about the prospects of Smart Cities. The event will serve as a platform to exchange ideas and throughout in an international prospect. The event objectives are also in emphasizing the role of academic institutions in promoting a smarter kingdom via its consultancy, building smarter ideas or continuity in the form of publications, and creating innovative solutions. In addition, such organization of the event, will also focus on networking opportunities, and that the event is a good starting point and could help in making networking opportunities for smart cities. The event venue (the symposium) will be at University of Bahrain, and will run for three days, 1-3 December 2025. The symposium will involve both invited speakers (talking about load needs for smart cities), in addition to academic submitted papers (with review), as they will be published afterward within the IET (once satisfying the needed technical standards of the IET).*

*The event is also to create awareness about the prospects of Smart Cities. The symposium is a platform to exchange ideas and thoughts in international prospects. The symposium is a platform for emphasizing the role of academia in promoting Smart Cities, Digital Twins of Cities, Projects, Smarter Ideas, and Consultancies. The symposium is a platform for research community in forms of publications and creating innovative solutions.*

9<sup>TH</sup> SMART CITIES SYMPOSIUM -2025:  
IET PARTNER AND TECHNICAL SUPPORT

18 YEARS OF CONTINUOUS ANNUAL IET FORUMS AND SYMPOSIUMS AT UOB

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# DETAILED TECHNICAL PROGRAM AND PARALLEL SESSIONS

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DAY -I

MONDAY, DECEMBER 01, 2025



# OPENING SPEECH

## TOWARDS SMART CITIES AND DIGITAL TWIN CITIES: A NOVEL PARADIGM

December 1<sup>st</sup> - 2025, 09:00+03 - 09:10+03

OPENING CEREMONY: WELCOMING TO THE 9TH SMART CITIES SYMPOSIUM BY UNIVERSITY OF BAHRAIN

DAY -I

Monday, 1<sup>st</sup> December 2025 9:10 - 9:15 (Asia/Bahrain)

OC1: OPENING CEREMONY: WELCOMING TO THE 9TH SMART CITIES SYMPOSIUM

UNIVERSITY OF BAHRAIN: OPENING CEREMONY WELCOME SPEECHES: WELCOMING TO THE 9TH IET SMART CITIES SYMPOSIUM

MAIN-THEATRE HALL – FOR VIRTUAL ACCESS

WELCOME SPEECH

# UNIVERSITY OF BAHRAIN SMART CITIES EVENT

WELCOME SPEECH BY  
THE UNIVERSITY OF BAHRAIN

1<sup>st</sup> December 2025, 09:10+03 - 09:15+03

Monday, 1<sup>st</sup> December 2025 9:15 - 9:20 (Asia/Bahrain)

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CP: IET Smart cities Symposiums, Projection from the Past, and the Future: Thanks, and Appreciations.

THANKS, AND APPRECIATION  
MAIN-THEATRE HALL – FOR VIRTUAL ACCESS

DAY -I: MONDAY, 1<sup>ST</sup> DECEMBER 2025

KEYNOTE SPEECH: 01:

Monday, 1<sup>st</sup> December 2025, 09:20+03 - 10:00+03 (Asia/Bahrain)

## SMART MARITIME TRANSPORTATION: ICT SOLUTIONS AND DIGITIZATION FOR EFFICIENT AND SUSTAINABLE PORTS AND SHIPPING



Professor, Dr. Michele Fiorini  
Ing., MBA, PhD, CEng, FIET, Principal Engineer,  
Chartered Engineer at Leonardo SpA, Italy  
Session Chair: Dr. Imran Shafique Ansari, MIET, James Watt School of Engineering, UK

MAIN-THEATRE HALL – FOR VIRTUAL ACCESS

TALK ABSTRACT

This presentation will draw upon insights and concepts from my recent IET Transportation Series books, ICT Solutions and Digitalization in Ports and Shipping (2021) and Clean Mobility and Intelligent Transport Systems (2015). The focus will be on how information and communication technologies can address key maritime transport challenges such as reducing waiting times, energy consumption, and emissions, while also improving trade facilitation and contributing to the sustainability objectives of smart cities.

SPEAKER DETAILS: PROFESSOR, DR. MICHELE FIORINI

Ing. (Mr) Michele Fiorini, MBA, PhD, CEng, FIET is a principal engineer leading large-scale international projects and cross-cultural teams at Leonardo S.p.A. in Rome, Italy, specializing in maritime transport, smart transportation systems, and digital innovation for sustainable infrastructure. His expertise bridges engineering management, research, and innovation to strengthen cooperation between industry and academia in the domains of smart and connected maritime logistics and transport. Michele is co-editor and co-author of two authoritative IET books in the Transportation Series: Clean Mobility and Intelligent Transport Systems (2015) and ICT Solutions and Digitalisation in Ports and Shipping (2021). His work addresses ICT-enabled strategies to optimize port operations, reduce emissions, and advance sustainable maritime transport as a vital element in integrated smart city ecosystems. He is an Industrial Member of the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) in Paris, contributing to maritime technology standards. Michele has held leadership roles including Chair of the Council at the Institution of Engineering and Technology (IET) in London (2017–2018) and currently chairs the judging panel for the IET Excellence and Innovation Awards, International Award. He also serves on the advisory board of the MBA programme at Gdańsk University of Technology, Poland, blending academic insight with practical industry leadership.

DAY -I: MONDAY, 1<sup>ST</sup> DECEMBER 2025

KEYNOTE SPEECH: 02:

Monday, 1<sup>st</sup> December 2025, 10:00+03 - 10:30+03 (Asia/Bahrain)

## DATA MINING AND CYBERSECURITY FOR SMART CITIES



Dr. Roy Hachache,

Ph.D. in Computer Sciences, Data mining, Databases, and Administration

Vice Chair – ASIS British Columbia Chapter | Co-Founder, the Lebanese IT Syndicate, Canada

Session Chair: Dr. Suresh Vishwakarma, P.Eng., CEng, MIET, MBA, PhD, PostDoc, Senior Engineer, Vancouver Canada, and IET - Communities Resources Committee Member

MAIN-THEATRE HALL – FOR VIRTUAL ACCESS

### TALK ABSTRACT

In this keynote address, he will underscore the urgent need to mitigate (Data Mining/Cybersecurity) and in Computer Science & Telecommunication. The speaker has 25+ years of experience in the information technology, security leadership, and services industry. He has a deep understanding of the latest trends and technologies in data mining, databases, and administration.

### SPEAKER DETAILS: DR. ROY HACHACHE

Dr. Roy Hachache is a seasoned global leader with over 25 years of experience in security technologies, smart infrastructure, and digital transformation. Throughout his career, he has managed complex projects and partner ecosystems across 12 countries, delivering strategic growth and innovative solutions across diverse sectors. In his current role as Channel Business Manager at Milestone Systems, Roy leads key initiatives in urban safety and intelligent video technologies, working hand-in-hand with government and enterprise partners to help build safer, smarter cities. His leadership has consistently strengthened partner networks, accelerated regional development, and fostered innovation in city surveillance, mobility, and infrastructure resilience. Roy is also Vice Chair of ASIS International's British Columbia Chapter, ISACA Ambassador, and Co-Founder of The Syndicate—a multidisciplinary forum that unites public and private sector leaders to address critical challenges in cybersecurity, policy, and smart city planning. He holds a Ph.D. in Computer Science, specializing in restructured data mining frameworks and applied cybersecurity, along with a master's in computer science and Telecommunications. Widely recognized for his collaborative and future-focused approach, Roy is a dynamic speaker who bridges technology, governance, and human-centered design to enable sustainable and secure urban innovation.

DAY -I: MONDAY, DECEMBER 1,  
PARALLEL SESSIONS



## DAY -I: Monday, December 1 10:30 - 13:00 (Asia/Bahrain):

### PARALLEL SESSION: SA02: ARTIFICIAL INTELLIGENCE COMPUTATIONAL ALGORITHMS: HEALTHCARE

HALL      HALL- B: SESSION JOINING: HALL-B

SESSION CHAIR: DR. CHINTAREDDY AMULYA, ARCHISHA CHANDA, P ANANDAN AND SRIDEVI S (VELLORE INSTITUTE OF TECHNOLOGY, CHENNAI, INDIA)

10:30 1571192200: End-to-End Liver Cancer Detection Using Deep CNN and Deep Learning-Based Liver Region Segmentation.  
Dipti Dip (India); Merilyn Gomes (Presidency College, Bengaluru, India); S. Pragadeswaran (Karpagam Institute of Technology, Coimbatore, India); Abhishek Singla (Chitkara University, India); Vaibhav Kaushik (Chitkara University Institute of Engineering and Technology, Malaysia); A. Jemshia Miriam (Sathyabama Institute of Science and Technology, India); T. Lalitha (Presidency University, Bengaluru, India).

10:45 1571192976: Anemia Detection using voting classifier.  
Sridhar Chintala (S R University, India); Gadde Aruna (Sumathi Reddy Institute of Technology for Women, India); Srihari Gude (Christ University, India); Thatikonda Radhika (CVR College of Engineering, India).

11:00 1571191402: Advanced Abdominal Aortic Aneurysm Diagnosis using Stage and Size Prediction.  
Rajmohan Rajendran (SRM Institute of Science and Technology, India); T Ananth kumar (IFETCE, India); Ramkumar M o and Jayakumar D (IFET College Engineering, India); Saran Raj S (Vel Tech Rangarajan Dr Sagunthala R&D Institute of Science and Technology, India).

11:20 1571186847: GlaucoNet: A Convolutional Neural Network for Enhancing Glaucoma Disease Classification using Optical Coherence Tomography Images at Early Stage.  
Md. Abu Towsif and Farjana Yesmin Opi (American International University - Bangladesh, Bangladesh); Md Sadi Al Huda (Khwaja Yunus Ali University); Md. Tarequl Islam (Khwaja Yunus Ali University, Bangladesh); Md. Asraf Ali (American International University-Bangladesh, Bangladesh); Syamimi Mardiah Shaharum (Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia).

11:40 1571186779: A Lightweight Multi-Modal CNN-LSTM Based Sleep Apnea Severity Detection Using ECG and Respiratory Effort Signals.  
Chintareddy Amulya, Archisha Chanda, P Anandan and Sridevi S (Vellore Institute of Technology, Chennai, India); Indira B (Vellore Institute of Technology Chennai, India).

12:00 1571185919: Characterization of Valvular Heart Defects through Phonocardiogram signals.  
Kanthini G and Vigneswaran Vijean (Universiti Malaysia Perlis, Malaysia); Rajkumar Palaniappan (University of Technology Bahrain, Bahrain); Sindhu Ravindran (Amrita Viswa Vidhyapeetam, India); Rokiah Abdullah (Universiti Malaysia Perlis, Malaysia); Kantha Rao Narasamuloo (Hospital Sultanah Bahiyah, Malaysia); Khaled Mohamed Helmy Abdelaziz (Asian Institute of Medicine, Science and Technology, Malaysia).

12:20 1571184205: Deep Learning in Scalp Dermatology: Optimal AI Models for Hair and Scalp Condition.  
Mahzabee Noorul Hasan (University of Technology and Applied Sciences, Oman).

12:40 1571174593: Hybrid CNN with Depth wise Separable Convolutions for Lightweight Diabetic Retinopathy Detection.  
Abhishek Kumar (Chandigarh University, India & UIE, India).



Monday, December 1, 13:00 - 13:30 (Asia/Bahrain)

ZB1: Day-1 - Mid-Day Break

DAY -I: Monday, December 1, 13:30 - 15:30 (Asia/Bahrain):

PARALLEL SESSION 01: SB01: SMART ENVIRONMENTS -PART-B:

Hall Hall-A: SESSION JOINING: HALL-A

SESSION CHAIR: DR. RUCHI TYAGI (ADJUNCT ASIAN INSTITUTE OF TECHNOLOGY, EX-SENIOR FACULTY BIRMINGHAM CITY UNIVERSITY, PART TIME FACULTY UNIVERSITY TECHNOLOGY MAURITIUS).

13:30 1571171330: Enhancing Disaster Awareness through Transformer Models: Location and Event Extraction from Social Media.  
Ilhan Aydin (Firat University, Turkey & Firat, Turkey); Zeynep Karaca (Firat University, Turkey).

13:50 1571171577: ICT in Education: Effects of Remote Work on Teachers.  
Manisha Sharma (KIET Group of Institutions Ghaziabad, India); Prerna Srivastava and Hemant K. Upadhyay (Poornima University, India); Udit Mamodiya (Poornima University, Jaipur, India); Tapan Mohanty (National Law Institute University, India).

14:10 1571171884: Behavioural Energy Governance in Smart Cities: Leveraging Digital Nudges for Sustainable Consumption in Small Island Developing States.  
Suresh Vishwakarma (Institution of Engineering and Technology, Canada); Ruchi Tyagi (Adjunct Asian Institute of Technology, Ex-Senior Faculty Birmingham City University, Part Time Faculty University Technology Mauritius).

14:30 1571171505: Sociotechnical Layers in Smart Urban Futures: A Meta-Analysis of Cognitive City Models.  
Prerna Srivastava, Ritu Raj Choudhary and Hemant K. Upadhyay (Poornima University, India); Udit Mamodiya (Poornima Institute of Engineering & Technology, India); De Rosal Ignatius Moses Setiadi (Dian Nuswantoro University, Indonesia).

14:50 1571176975: Frame-Level Human Anomaly Detection in Smart Campus Surveillance via a Motion-Aware Transformer.  
Melisa Gozet (Ankara University, Turkey & Ostim Technical University, Turkey); Mehmet Karakose (Firat University, Turkey); Asim Yilmaz (Ankara University, Turkey).

15:10 1571177160: TransWasteX: Interpretable Multi-Label Learning from Real-World Urban Waste.  
Melisa Gozet (Ankara University, Turkey & Ostim Technical University, Turkey); Hatice Rana Yamac (Ostim Technical University, Turkey).

15:30 1571173146: A Comparative Analysis of Different Conventional Methods for Moving Object Detection.  
Jyoti (Chandigarh University, India); Bobbinpreet Kaur (Chandigarh University, India); Raj Kumar (Chandigarh University, India).

## DAY -I: Monday, December 1 13:30 - 15:30 (Asia/Bahrain):

### PARALLEL SESSION 02: SB02: CYBERSECURITY SOLUTIONS:

HALL      HALL- B: SESSION JOINING: HALL-B

SESSION CHAIR: SESSION CHAIR: DR. VIMMI PANDEY, HEAD COMPUTER SCIENCE AND ENGINEERING, GYAN GANGA COLLEGE OF TECHNOLOGY, JABALPUR, INDIA

13:30 1571159322: Blockchain-Enabled Secure IoT Systems: A Decentralized Approach to Cybersecurity  
Yousif Raja Salem, Abdulla Eyad Mahmood, Abbas Abdulaziz Alaswami, Sr and Wael M El-Medany (University of Bahrain, Bahrain).

13:50 1571167038: A Review and Performance Analysis of MQTT-SN Based Routing Protocols in IoT-Enabled Wireless Sensor Networks.  
Nabeel Alassaf and Selvakumar Manickam (Universiti Sains Malaysia, Malaysia); Ammar Mohammad Jamil Odeh (Princess Sumaya University for Technology, Jordan); Mohammed Anbar (Universiti Sains Malaysia, Malaysia).

14:10 1571167372: Risk-Based Security Assessment of IoT Devices Using Vulnerability Scanning and Simulation.  
Ammar Mohammad Jamil Odeh (Princess Sumaya University for Technology, Jordan); Abobakr Aboshgifa (The Libyan Higher Technical Center for Training and Production, Libya); Mohammad A AbuKarim (Philadelphia University, Jordan); Nabil Belhaj (The Libyan Higher Technical Center for Training and Production, Libya)).

14:30 1571168475: Leveraging CICDDoS2019 and Autoencoder-RNN Models for Enhanced Multi-Class DDoS Detection.  
Tareq Alhajahjeh (De Montfort University, United Kingdom (Great Britain)); Ammar Mohammad Jamil Odeh (Princess Sumaya University for Technology, Jordan); Aladdin Ayesh (University of Aberdeen, United Kingdom (Great Britain)); Francisco Javier Aparicio Navarro (De Montfort University, United Kingdom (Great Britain)).

14:50 1571169842: Secure Metaverse Meeting Platform for Blockchain Enabled Smart Cities.  
Nida Canpolat (Firat University, Turkey); Hasan Yetis and Mehmet Karakose (Firat University, Turkey).

15:00 1571171095: Hybrid machine learning driven cybersecurity system for secure networking in Smart cities.  
P Kalpana (Sri Eshwar College of Engineering, India); Ananth kumar Tamilarasan (IFET College of Engineering, India); S. Saranya (Sri Krishna College of Technology, India); K. Anupriya (Hindusthan College of Engineering and Technology, India); K.M. Madhumitha (Sri Krishna College of Technology, India); Suresh Kumar Krishnadhas (Sri Eshwar College of Engineering, India).

15:20 1571188397: Formulating a Multi-Layered and Scalable Cybersecurity Defense Architecture to Mitigate Coordinated Smart Cyber-Physical Threats Targeting Next-Generation Smart City Infrastructures.  
Aarsh Dip (India); A. Akhila (MLR Institute of Technology, India); Surabhi Shanker (K R Mangalam University, India); Alka Gangrade (IES College of Technology, India).

15:40 1571192181: A Blockchain-Based Decentralized Data Governance Mechanism with Policy Enforcement for Secure Smart City Systems.  
Gaurav Singh (India); T. Manoj Kumar (Karpagam Institute of Technology, Coimbatore, India); Deepak Minhas (Chitkara University, India); Simran Kalra (Chitkara University, India); K Srilatha (Sathyabama Institute of Science and Technology, India); Ashishika Singh (Presidency University, Bengaluru, India); Swetha Appaji Parivara (Presidency College, Bengaluru, India).

## DAY -I: Monday, December 1 13:30 - 16:00 (Asia/Bahrain):

### PARALLEL SESSION 03: SB03: SMART TRANSPORTATION SYSTEM:

HALL      HALL-C: SESSION JOINING: HALL-C

SESSION CHAIR: DR. U GAZDER (UNIVERSITY OF BAHRAIN, BAHRAIN).

13:30 1571163159: A Data-driven Approach to Investigate Road Safety in An Emerging Smart City of Pakistan.  
Muhammad Junaid (Southwest Jiaotong University, Chengdu, China); Chaozhe Jiang (Southwest Jiaotong University, China); U Gazder (UoB, Bahrain).

13:50 1571165506: Traffic Accident Severity Based On Decision Level Fusion Of Machine And Deep Learning Model Using RFCNN.  
Neetha Cholleti (Sreyas Institute, India); K. Neeraja and B.v.s. Likhith (Sreyas Institute of Engineering and Technology, India).

14:10 1571168853: Graph Theory Applications in Smart Cities: Enhancing Traffic, Energy, and Public Infrastructure.  
Soham Nandy and Amishtha Bose (Amity University Kolkata, India); Subrata Paul (Brainware University, India); Tamoghna Mukherjee and Anirban Mitra (Amity University Kolkata, India).

14:30 1571169586: An Ensemble model for Traffic prediction using captured data through Cyber-Physical Networks.  
Bobbinpreet Kaur and Sheenam Middha (Chandigarh University, India); Narinder Kaur (Chandigarh University, Gharuan Mohali, India).

14:50 1571171165: Investigating Traffic Flow Dynamics and Service Levels on an Urban Arterial Roadway: A Data-Driven Approach.  
Md Kamrul Islam, Muath Fahad Abdullah Alsaqer, Abdulaziz Ibrahim Mohammed Almuaybid, Khaled Saleh Abdulaziz Alnewaihel and Mohammed Saleh Rashid Alnagada (King Faisal University, Saudi Arabia); U Gazder (UoB, Bahrain); Md. Shafiqul Alam (King Faisal University, Saudi Arabia).

15:10 1571171185: AI-Driven Autonomous Drones for Intelligent Disaster Response in Smart Cities.  
Bright Keswani (Poornima University, India); Sheng-Lung Peng (National Taipei University of Business, Taiwan); Ambarish Gajendra Mohapatra (Silicon Institute of Technology, India).

15:30 1571171235: Spatiotemporal Traffic Modeling for Smart Cities using ML Algorithms.  
Akanksha Kumari and Anu Kaushik (Chandigarh University, India); Bobbinpreet Kaur (Chandigarh University, India).

15:40 1571192603: Designing Federated Learning-Driven Intrusion Detection and Prevention Systems for Protecting Distributed Smart Transport Networks Against Cyber Threats.  
Muskan Ms (India); V. Dinesh Babu (Karpagam Institute of Technology, Coimbatore, India); Gupta Gupta (Chitkara University, India); Prem Jacob (Sathyabama Institute of Science and Technology, India); R Amuthan (Presidency University, Bengaluru, India); Haseena Shaik Valli, Sr (Christ University, India & Presidency College, India).

16:00 1571185923: SAFESMART: A Federated Edge-AI Architecture for Smart and Secure Urban Transportation Systems.  
G Sekar and Raja J (Adhiparasakthi Engineering College, India).

16:15 1571188444: Architecting AI-Powered Threat Intelligence Systems for Real-Time Identification and Mitigation of Cybersecurity Threats in Smart Transportation Ecosystems.  
Aarsh Dip (India); Ammanni Bidinamcherla (GITAM Deemed to Be University, India); Dilraj preet Kaur (K R Mangalam University, India); Rohit Shrivastava (IES College of Technology, India).



MONDAY, DECEMBER 1 15:25 - 15:30 (ASIA/BAHRAIN)

CD-1: CLOSING OF DAY-1

DAY -II

TUESDAY, DECEMBER 02, 2025

DAY -II: 2<sup>ND</sup> TUESDAY, DECEMBER 2025

KEYNOTE SPEECH: 03:

2<sup>nd</sup> Tuesday, December 2025, 9:00 – 9:30 Asia/Bahrain)

## SMART AND SUSTAINABLE MANUFACTURING: A STRATEGIC NECESSITY FOR CURRENT AND FUTURE SMART CITIES



Dr. Manish Billore, MTech, PhD

Principal, Sagar Institute of Science and Technology, Gandhinagar, Bhopal 462036, INDIA

Session Chair: Dr. Simmi Narula, DNP, PMHNP-BC, Shelton, CT 06484, USA

MAIN-THEATRE HALL – FOR VIRTUAL ACCESS

### TALK ABSTRACT

My talk explores the intersection of smart cities and sustainable manufacturing, emphasizing how technology and environmental awareness are transforming urban industries. Smart cities are defined as digitally integrated environments where ICT, IoT, and intelligent infrastructure enhance urban efficiency. Within these cities, smart manufacturing uses AI, machine learning, and robotics to streamline production and reduce environmental harm. Sustainability is framed through the triple bottom line: people, planet, and profit. I will talk about circular economy models, energy efficiency through renewables and smart grids, and waste minimization strategies like lean production and AI-driven inventory control. I will quote examples of pioneering cities such as Tokyo, Amsterdam, and Singapore, where innovative practices have yielded greener manufacturing landscapes. I will also acknowledge the challenges including high infrastructure costs, skills gaps, and data security concerns. Future-forward ideas like digital twins, programmable materials, and climate-intelligent manufacturing suggest a path toward zero-waste cities. My talk will additionally highlight the collaboration required between academia and industry to cultivate talent and scalable solutions. I will conclude with the message that achieving smart, sustainable cities are not only beneficial but also essential for future resilience.

### SPEAKER DETAILS: DR. MANISH BILLORE

Dr. Manish Billore brings over 29 years of professional experience, including more than 11 years in the manufacturing industry with reputed multinational corporations such as Kinetic Honda, Machine Tools (India), and DMG Mori Seiki. As a practicing engineer, he has received international training in CNC manufacturing and metrology, enhancing his technical proficiency and global perspective. Dr. Billore holds a postgraduate degree and a Ph.D. in Mechanical Engineering from the National Institute of Technology, Bhopal, India. He is a Chartered Engineer, a Fellow of the Institution of Engineers (India), and a lifelong member of several esteemed professional organizations. His academic interests lie in Modern Manufacturing Technology and Industrial Engineering, reflecting a strong and enduring commitment to education and research. His professional engagements have taken him to the USA, UK, Japan, and Germany, where he has participated in advanced training and knowledge exchange programs. In recognition of his contributions to academia, he has been certified as a 'Mentor' by All India Council for Technical Education and honored with distinguished accolades such as the Air India-Hindustan Times BOLT Award. Dr. Billore is deeply invested in technology innovation, entrepreneurship, and startup development. He serves as a government-approved startup mentor for the state of Madhya Pradesh, co-founder of the incubation centre AIC-Aartech in Mandideep (India), and a founding member of B-Nest, the Bhopal-based incubation centre in India. Currently, he serves as a Professor, Principal, and Mentor at a leading group of institution in central India. He is actively engaged in academic quality enhancement, industry-institute collaboration, and startup incubation initiatives. Dr. Billore aspires to bridge the gap between academia and industry, serving as a "Technological Facilitator" for educational institutions and an "Academic Facilitator" for the industrial sector.

DAY -II: 2<sup>ND</sup> TUESDAY, DECEMBER 2025

KEYNOTE SPEECH: 04:

2<sup>nd</sup> Tuesday December 2025, 9:30 – 10:30 (Asia/Bahrain)

## THE ROLE OF HYDROGEN ENERGY IN DEVELOPING SUSTAINABLE SMART CITIES



Dr. Suresh Vishwakarma

P.Eng., CEng, MIET, MBA, PhD, PostDoc, Vancouver, Canada

Session Chair: Dr. Ruchi Tyagi, Adjunct Asian Institute of Technology, Ex-Senior Faculty Birmingham City University, Part Time Faculty University Technology, Mauritius

MAIN-THEATRE HALL – FOR VIRTUAL ACCESS

### TALK ABSTRACT

The concept of sustainable smart cities is no longer just a vision; it is a reality. It has become a necessity now since we stand at the crossroads of rapid urbanization and an urgent climate crisis. At the heart of this transformation, hydrogen energy is a clean, versatile, and forward-looking solution. Green hydrogen especially, when produced from renewable energy, offers a powerful pathway to decarbonize our cities and meet our net-zero targets. It also resonates well with one of the five societal-wide challenges - "Sustainability and Climate Change Helping the planet through sustainable living", the IET is focussing its efforts to have maximum impacts over the coming years. Hydrogen energy has an immediate and visible impact on clean urban transportation. Hydrogen-powered buses, trains, and even taxis are emerging as sustainable alternatives to fossil-fuel-based fleets in the smart cities. Hydrogen offers a longer range and faster refueling for heavy-duty transport and long-range travel, where batteries may fall short, thereby enhancing the efficiency of public and commercial transit. As always, such journeys are not without challenges. High Hydrogen production costs, limited infrastructure, and the need for robust safety regulations need to be carefully addressed. However, these barriers are being rapidly overcome through coordinated policy, investment, and innovation.

### SPEAKER DETAILS: DR. SURESH VISHWAKARMA

Dr. Suresh Vishwakarma is a Professional Engineer in BC Province, Canada, and a Chartered Engineer of the Engineering Council of UK. I am working in the utility industry since 1988 holding engineering and managerial positions. I have MBA and a Ph.D. (power management). I have undertaken postdoctoral research in energy conservation at the University of West Indies. I have extensive experience in the generation, transmission, distribution, asset management, and human resources development in utility companies. My key areas of strength include the capability to take on challenges, exceptional human relations, innovation, responsibility, self-motivation, and flexibility. I am also a very results-oriented team player and team builder. I am an Honorary Professor at Amity International University. I was an Adjunct Professor (Utilities Engineering) at the University of Trinidad and Tobago for one year. I was a part-time faculty at the University of Technology, Mauritius. I am also an External Evaluator at the Accreditation Council of Trinidad and Tobago. I am an active member of Institution of Engineering & Technology, UK and Engineers and Geoscientists of BC, Canada. My areas of expertise include asset management, power distribution, energy access, renewable energy, energy efficiency, energy policy, and energy conservation.

DAY -II: TUESDAY, DECEMBER 2,  
PARALLEL SESSIONS



## DAY -II: Tuesday, December 2 10:30 – 13:00 (Asia/Bahrain)

### PARALLEL SESSION 02: SC03: NEW TECHNOLOGIES FOR SMART CITIES-PART-A: ENERGY FOCUS:

HALL      HALL- B: SESSION JOINING: HALL-B

SESSION CHAIR: DR. QASEM ABU AL-HAIJA (JORDAN UNIVERSITY OF SCIENCE AND TECHNOLOGY, JORDAN);

10:30 1571170316: Study of the Impact of Air Conditioning on the Production and Consumption of Renewable Energy in Bahrain.  
Isa Salman Qamber (Former UoB, Member of BSE, Bahrain).

10:45 1571170377: Edge-Enabled IoT and Renewable Energy Integration for Decentralized Smart Mobility and Grid Optimization.  
Udit Mamodiya and Indra Kishor (Poornima Institute of Engineering & Technology, India); Ramkumar Jaganathan (Sri Krishna Arts and Science College, India).

11:00 1571170431: AI-Orchestrated Smart Grids: A Federated Learning Approach for Renewable Energy Balancing in Urban Networks.  
Udit Mamodiya and Indra Kishor (Poornima Institute of Engineering & Technology, India); Jafar Alzubi (Al-Balqa Applied University, Jordan); Pushan Kumar Dutta (Amity University Kolkata, India & Amity School of Engineering and Technology, India).

11:20 1571171232: An Attention-Augmented BiLSTM and LightGBM Hybrid Ensemble Model for Early Sepsis Prediction in ICU Patients.  
Esra Gundogan and Mehmet Kaya (Firat University, Turkey).

11:36 1571192186: Adaptive Energy Management for Smart Cities Using Cloud-Based Renewable Resource Balancing in Real Time.  
Dipti Dip (India); Pradeep Shinde (Presidency College, Bengaluru, India); T. Manoj Kumar (Karpagam Institute of Technology, Coimbatore, India); Abhinav Mishra and Nipun Setia (Chitkara University, India); Raja Rajalakshmi, Sr. (Satyabama Institute of Science and Technology, India); Sharon M (Presidency University, Bengaluru, India).

11:53 1571174112: Early strength development of limestone calcined clay cement concrete using silica fume, nanoparticles and curing temperature.  
M. Aminul Haque (IRC for Construction and Building Materials, Saudi Arabia); Xiao-Ling Zhao (The Hong Kong Polytechnic University, Hong Kong); Md Arifuzzaman (King Faisal University, Saudi Arabia); U Gazder (UoB, Bahrain).

12:10 1571176644: An AI-Driven Methodology for Analyzing Paged-Out Memory and Reconstructing Executables.  
Morad Rawashdeh (Princess Sumaya University for Technology, Jordan); Qasem Abu Al-Haija (Jordan University of Science and Technology, Jordan); Muawya Al-Dalaien (Princess Sumaya University for Technology, Jordan).

12:26 1571185178: Evaluation of YOLO-Based Object Detection Models for Real-Time Identification of Fowl Pox in Poultry Farming Applications.  
Syamimi Mardiah Shaharum, Muhammad Amir Syazwan Mohd Asri, Wan Syahirah Wan Samsudin and Ahmad Afif Mohd Faudzi (Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia); Md. Asraf Ali (American International University-Bangladesh, Bangladesh); Rajkumar Palaniappan (University of Technology Bahrain, Bahrain).

12:43 1571185320: Redefining Travel Through Technology: The Shift from Smart Cities to Smart Tourism Destinations.  
Avishek Das (Symbiosis International University, India); Sujoy Sen (Symbiosis International (Deemed University) & Symbiosis Institute of Business Management, Pune, India).



## DAY -II: Tuesday, December 2 13:30 – 15:30 (Asia/Bahrain)

### PARALLEL SESSION 02: SD03: SMART ENERGY SYSTEMS – TECHNOLOGY SOLUTIONS:

HALL      HALL- B: SESSION JOINING: HALL-B

SESSION CHAIR: DR. RAJA MOHAMED COLLEGE OF ENGINEERING, UNIVERSITY OF BAHRAIN

13:30 1571163697: Automated Detection of Wind Turbines in Satellite Imagery Using Machine Learning Models.  
Doaa Sami Khafaga and Amel Ali Alhussan (Princess Nourah bint Abdulrahman University, Saudi Arabia); Khaled Sh Gaber (Delta Higher Institute of Engineering and Technology, Egypt); Amal Alharbi (Princess Nourah bint Abdulrahman University, Saudi Arabia); Marwa M Eid (Delta University for Science and Technology, Egypt); El-Sayed M El-kenawy (Delta Higher Institute for Engineering & Technology, Egypt).

13:50 1571163706: Solar Power Prediction Based on Hybrid Deep Learning Neural Network and Ensemble Models Techniques.  
Mona Ahmed Yassen (Mansoura University, Egypt); S K Towfek (Applied Science Research Center, Jordan); Mohamed Gamal and Islam Ismael (Mansoura University, Egypt); Hossam El-Din Salah Moustafa (Mansoura University & Professor of Electronics and Communications Engineering, Founder of Biomedical Engineering Program, Egypt).

14:10 1571164634: Optimal Sizing of Off-Grid Hybrid Renewable Energy Microgrids: A Case Study of Auchi Modern Hospital, Nigeria  
Abdullahi Abubakar Mas'ud (Jubail Industrial City, Saudi Arabia & Jubail Industrial College, Saudi Arabia); Ibrahim Seidu (Nigeria); Umar Musa (Ahmadu Bello University-Zaria, Nigeria); Sani Salisu (Ahmadu Bello University, Nigeria); Najib Yusuf (Centre for Atmospheric Research, National Space Research and Development Agency, Nigeria).

14:30 1571166274: Enhancing YOLOv8 Object Detection with GAN-Based Data Augmentation on the KITTI Dataset.  
Jaswinder Kaur and Navneet Kaur (Chandigarh University, India).

14:50 1571166862: Comparative Analysis of Simulated and Real-Time Performance Data for a 1.25 MW PV Carport System in a Smart Campus Environment.  
Hamda Abdulaziz Al binali, Raja Mohamed M Sumsudeen and Khaled Zehar (University of Bahrain, Bahrain).

15:10 1571167874: Reducing technical and commercial losses in electricity distribution system - a strategic imperative for smart cities.  
Akash Kumar Bansal (Madhya Pradesh Paschim Kshetra Vidhyut Vitran Company Limited Indore, India); R. N. Singh (Devi Ahilyabai Vishva Vidhyalay, India); Anjali Sharma (MP State Electricity Board, India).

15:30 1571167877: Role of local Climate Conditions in shaping the architectural and technological aspect of net-positive energy buildings in Smart Cities.  
Anjali Sharma (MP State Electricity Board, India); Shraddha Sharma (Entergy, USA).

15:45 1571170046: AI-Based Optimization of TCSC Placement for Power Loss Minimization in Smart Grid Transmission Systems Using Dung Beetle Optimization (DBO).  
Nor Rul Hasma Abdullah, Muhammad Alif Najmi Johari, Maheletchumi Maha, Rosdiyana Samad and Mahfuzah Mustafa (Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia).

## DAY -II: Tuesday, December 2 13:30 – 15:30 (Asia/Bahrain)

### PARALLEL SESSION 03: SD04: SMART CITIES AND AI COMPUTATIONAL ALGORITHMS:

HALL      HALL-C: SESSION JOINING: HALL-C

SESSION CHAIR: DR. FAIZAL HAJAMOHIDEEN (UNIVERSITY OF TECHNOLOGY AND APPLIED SCIENCES, OMAN)

13:30 1571163710: Automated Classification of Date Fruit Varieties Using Machine Learning on Morphological Features.  
Amal Alharbi, Doaa Sami Khafaga and Amel Ali Alhussan (Princess Nourah bint Abdulrahman University, Saudi Arabia); Mark Emad Sobhi Abdelmalak (Delta Higher Institute of Engineering and Technology, Egypt); Marwa M Eid (Delta University for Science and Technology, Egypt); S K Towfek (Applied Science Research Center, Jordan).

13:50 1571163840: Assessing Compressive Strength of Sustainable Concrete with Waste Glass Powder via Machine Learning Methods.  
Muhammad Ali Martuza (Qassim University, Saudi Arabia); Md Arifuzzaman (King Faisal University, Saudi Arabia); Md Sarwar M Haque (King Fahd University of Petroleum and Minerals, Saudi Arabia); Mohammad B Hossain (University of Prince Mugrin, Saudi Arabia); Md E Haque (King Faisal University, Saudi Arabia); U Gazder (UoB, Bahrain).

14:10 1571165214: Paving the way: Artificial Intelligence in developing cognitive smart infrastructure.  
Pallavi Vishwakarma (India); Suresh Vishwakarma (Institution of Engineering and Technology, Canada).

14:30 1571165242: Technology-Driven Urban Climate-Responsive Design: Comparative Analysis of Global Best Practices and New Delhi.  
Malika Rahman (National Institute of Technology Patna, India); Shubham Jaiswal (Hiroshima University, Japan); Mazharul Haque (National Institute of Technology Patna, India).

14:50 1571165772: Comparative Study of BERT and Hybrid Model (LSTM+GRU) for Language detection using NLP: A Comparative Study.  
Rupesh Kumar Mishra (SR University, India).

15:10 1571166927: Automated Pricing and Portion Control in Cafeterias using Deep Learning.  
Celal Erkus and Buket Kaya (Firat University, Turkey).

15:25 1571167863: Optimal Overcurrent Relays' Coordination of Standard Inverse Characteristics using Cauchy-Mutation Barnacles Mating Optimizer (CMBMO).  
Noor Zaiyah Jamal and Arif Fahmi Zulaffandi (Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia); Sulastri Abdul Manap (Universiti Malaysia Pahang & Universiti Malaya, Malaysia); Hidayatul Zakaria (Universiti Malaysia Terengganu, Malaysia).

Tuesday, December 2 15:30 – 15:35 (Asia/Bahrain)

CD-2: Closing of Day-2

DAY -III

WEDNESDAY, DECEMBER 03, 2025

## DAY -III: 3<sup>RD</sup> WEDNESDAY, DECEMBER 2025

WEDNESDAY, 3<sup>RD</sup> DECEMBER 2025, 8:30 – 9:00 (ASIA/BAHRAIN) - D3: DAY3 – GETTING READY, AND PLATFORM TECHNICAL HELP

KEYNOTE SPEECH: 5

### INTEGRATING SUSTAINABLE WASTE MANAGEMENT INTO THE DESIGN OF FUTURE SMART CITIES



Ms. Ria Narula, Veterinary Technology  
Connecticut State, USA

Session Chair: Shefali Vishwakarma, MSc, IET - Communities Committee America, Vancouver, Canada

MAIN-THEATRE HALL – FOR VIRTUAL ACCESS

#### TALK ABSTRACT

In this keynote address, I will underscore the urgent need to mitigate pollution risks from both solid and gaseous waste as a critical step toward building healthy, sustainable smart cities. With global waste generation reaching alarming levels, much of it ends up in landfills, oceans, or the atmosphere that poses serious threats to public health and the environment. I will draw attention to how improper solid waste management contaminates essential resources like soil and water, while gaseous emissions exacerbate air pollution and accelerate climate change. I will advocate for a future where smart cities integrate advanced waste management systems that not only reduce pollution but also harness waste as a resource. Technologies such as waste-to-energy conversion, biogas production, and comprehensive recycling of organic and inorganic materials offer powerful tools for creating more sustainable urban environments. By transforming waste into fuel and energy, cities can shrink their environmental footprint, reduce dependence on non-renewable resources, and move toward a circular economy that supports long-term resilience and sustainability.

#### SPEAKER DETAILS: MS. RIA NARULA

Ms. Ria Narula is in veterinary technology at a leading institution in the Connecticut State of USA, with a strong academic background in environmental conservation and sustainability. She began her academic journey focused on environmental stewardship, earning credits in environmental conservation before transitioning to veterinary medicine - a field that allows her to merge her passion for animal welfare with her commitment to ecological responsibility. Ria remains actively engaged in sustainability efforts through local initiatives in her hometown, promoting environmentally conscious living and community resilience. With a multidisciplinary foundation and a deep dedication to both animal care and environmental health, she aspires to drive meaningful change by integrating her skills to support a more sustainable and compassionate world.

## DAY -III: 3<sup>RD</sup> WEDNESDAY, DECEMBER 2025

3<sup>rd</sup> Wednesday, December 2025, 9:45 – 10:45 (Asia/Bahrain)

KN6: KEYNOTE SPEAKER-6

# ADVANCED CRYPTOGRAPHIC TECHNIQUES FOR PROTECTING BIOMETRIC INFORMATION AND ENSURING DATA PRIVACY IN SMART URBAN ENVIRONMENTS

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Professor Dr. Garima Aggarwal,

Department of CSE, Head, International Collaboration for Engineering & Technology, ASET

General Co-Chair, Confluence 2025, Amity School of Engineering & Technology Amity University Uttar Pradesh, Noida-201313, India

Session Chair: Sandeep Kulkarni - Vice President Marketing and Sales Operations at Harbinger Group, India

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MAIN-THEATRE HALL – FOR VIRTUAL ACCESS

TALK ABSTRACT

As smart cities continue to integrate biometric technologies for enhanced security and seamless citizen services, protecting sensitive biometric data becomes paramount. This keynote address explores cutting-edge cryptographic techniques tailored to safeguard biometric information within smart urban environments. We will delve into advanced encryption methods—including selective and blockwise encryption, chaotic map-based cryptography algorithms—that provide robust, real-time protection while maintaining data integrity and accessibility. The talk highlights how these approaches address challenges such as data privacy, unauthorized access, and computational efficiency, ultimately contributing to the development of resilient, trustworthy smart city infrastructures. Attendees will gain insights into the latest trends and practical implementations of biometric data security, essential for driving innovation in smart city ecosystems.

SPEAKER DETAILS: PROFESSOR DR. GARIMA AGGARWAL

Dr. Garima Aggarwal is currently working as a Professor in the Department of Computer Science Engineering and the Head of International Collaboration at the Amity School of Engineering & Technology, Amity University, Noida. She has 16 years of experience in the field of Computer Science and Engineering. Her academic background includes B.Tech degree in Electronics Engineering from Kurukshetra University in 2005, followed by an M.Tech in Computer Science from Ch. Devi Lal University in 2007 and Ph.D. in Computer Science & Engineering from Amity University in 2018. Her research interests span Digital Data Security, Steganography, Cryptography, Artificial Intelligence, Machine Learning, and Image Processing. She has contributed extensively to academia with more than 45 peer-reviewed research papers published in reputed international journals indexed in SCI, Scopus and Web of Science, as well as in IEEE and Springer conferences. She was editor of 15th international conference Confluence' 25. She is also the reviewer of many international journals and conferences.

## DAY -III: 3<sup>RD</sup> WEDNESDAY, DECEMBER 2025

3<sup>rd</sup> Wednesday, December 2025, 9:45 – 10:45 (Asia/Bahrain)

KN7: Keynote Speaker-7

### TRANSFORMATION OF POWER SYSTEMS USING INTELLIGENT GRID TECHNOLOGY: ENABLING RESILIENCE, SUSTAINABILITY, AND INNOVATION IN SIDS

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Dr. Tagore Ramlal,

PhD, REng, CEng, MIET, SMIEEE, F(ASl), Chair IET Trinidad and Tobago, Trinidad and Tobago  
Session Chair: Dr. Abhishek Chaubey, Principal, Sagar Institute of Science and Technology, Bhopal, India

MAIN-THEATRE HALL – FOR VIRTUAL ACCESS

#### TALK ABSTRACT

Transformation of Power Systems Using Intelligent Grid Technology Subtitle: Enabling Resilience, Sustainability, and Innovation in SIDS. With over four decades of experience in energy systems and sustainable engineering, I look forward to contributing to the symposium' s mission of advancing smart city innovation. I am particularly excited to share insights on intelligent grid technologies, hydrogen energy infrastructure, and regional strategies for resilient energy transitions, especially as they pertain to Small Island Developing States (SIDS).

SPEAKER DETAILS: Dr. Tagore Ramlal

Dr. Tagore Ramlal lectures in specialized courses presently at the BSc level and previously at both the Diploma and MEng Levels within the Utilities and Sustainable Engineering Department. He has been involved in the field of training and development in Electrical Engineering with a diversified experience spanning thirty-nine (39) years at the tertiary level. This wealth of experience is compounded with twenty-nine (29) as a professional education consultant performing training needs analysis, developing specialized "competency" based training modules as well as conducting professional seminars/workshops for industry personnel in all major companies in Trinidad and within the Caribbean. Apart from the above, he has held leadership positions at both NSDP and NESC with five years (5) academic leadership experience. Tagore also has fifteen years experience as a Supervisor/Examiner of final year design projects at the BTech, BSc/MEng as well as Diploma levels.

DAY -III: WEDNESDAY, DECEMBER 3,  
PARALLEL SESSIONS

## DAY -III: Wednesday, December 3 10:30 – 13:00 (Asia/Bahrain)

### PARALLEL SESSION 01: SE02: SMART MONITORING AND SOLUTIONS - HEALTHCARE:

Hall Hall-A: [SESSION JOINING: HALL-A](#)

SESSION CHAIR: MS. SHIKHA VISHWAKARMA, MANAGER, AIRPORTS AUTHORITY OF INDIA

10:30 1571167685: Credit Card Fraud Detection.  
Pratik R Joshi, Vedant M Patil, Yashvardhan D Wayal and Priya Shelke (Vishwakarma Institute of Information Technology, India); Pallavi Rege (Vishwakarma Institute of Information Technology, Pune, India).

10:55 1571167793: Automated Detection of Parkinson's Disease Using Convolutional Neural Networks on MRI Scans.  
Vasundhara Dixit, Abhinav Mehta, Dhruv Rajhans, Bhumika Kunwar Hada and Priya Shelke (Vishwakarma Institute of Information Technology, India); Suruchi Gaurav Dedgaonkar (Vishwakarma Institute of Information Technology, Savitribai Phule Pune University, India & VIIT, Pune, India).

11:20 1571169181: MediSense AI: Intelligent Healthcare Insights and Risk Prediction.  
K Radhika and George Fernandez Inesa Muthu (Dayananda Sagar University, India); Anthoniraj Selvaraj (Jain & Jain Deemed to Be University, India); Saikat Gochhait (Symbiosis International Deemed University, India); Zafrul Allam (University of Bahrain, Bahrain).

11:45 1571169621: Medical VQA System Enriched with Grad-CAM Visualizations.  
Esra Balik and Mehmet Kaya (Firat University, Turkey); Reda Alhajj (University of Calgary, Canada).

12:15 1571170060: AI-Synthesized Speech Identification: Machine Learning Techniques for Discriminating Between Human and Artificial Voices.  
Vikneswaran Vijean (Universiti Malaysia Perlis, Malaysia); Rajkumar Palaniappan (University of Technology Bahrain, Bahrain); Sindhu Ravindran (Amrita Viswa Vidhyapeetam, India); Fizza Ghulam Nabi (University of the Punjab, Pakistan); Nagesparan Ainarappan (UCSI University, Malaysia).

12:40 1571170215: Smart Skills for Smart Cities: A Framework for Digital Public Service Readiness through Human Capital Development.  
Simran Rani (Himalayiya University, India); Ruchi Tyagi (Adjunct Asian Institute of Technology, Ex-Senior Faculty Birmingham City University, Part Time Faculty University Technology Mauritius); Trisha Sharma (Himalayiya University, India).

## DAY -III: Wednesday, December 3 10:30 – 13:00 (Asia/Bahrain)

### PARALLEL SESSION 02: SE03: SMART HOMES, SMART HOSPITALS, AND SMART CAMPUSES:

HALL      HALL- B: SESSION JOINING: HALL-B

SESSION CHAIR: DR. REEM SULTAN (UNIVERSITY OF BAHRAIN, BAHRAIN).

10:30 1571170246: Graph-Theoretic Modelling of Urban Evacuation Plans for Disaster Management in Smart Cities.  
Tarun Kumar Dey and Farhan Shakil (Amity University Kolkata, India); Subrata Paul (Brainware University, India); Stobak Dutta (St Thomas College of Engineering and Technology, India); Anirban Mitra (Amity University Kolkata, India).

10:50 1571170283: Synthetic Data Generation in Digital Health: A Survey of Generative AI and Large Language Models.  
Sedanur Sayer and Mehmet Karakose (Firat University, Turkey).

11:10 1571170303: Digital Financial Capability for Inclusive Urban Futures: Strengthening Social Equity in India's Smart City Ecosystems.  
Kavita Joshi (Amity University Noida, India & Amity College of Commerce and Finance India, India); Ruchi Tyagi (Adjunct Asian Institute of Technology, Ex-Senior Faculty Birmingham City University, Part Time Faculty University Technology Mauritius).

11:30 1571170304: Smart Homes, Human Lives: Towards Responsive Interior Design.  
Reem Sultan (University of Bahrain, Bahrain).

11:50 1571170929: Urban Mobility Demand Forecasting with a Hybrid Attention-XGBoost Model: A Case Study on NYC Taxi Data.  
Yongjian Huang (Shanghai University, China & University of Bahrain, Bahrain); Shucen Huo (Shanghai University, China).

12:10 1571170968: Mobile Healthcare for Traumatic Injury in Smart City Environments.  
Abdul Nasir Abd. Ghafar (UMP, Malaysia); Devin Babu (University Malaysia Pahang Al-Sultan Abdullah, Malaysia); Muhamad Ridzuan Radin Muhamad Amin and Mohd hanafi Muhammad sidik (Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia); Norain Binti Abdullah (Kindai University, Japan)

12:30 1571171035: Comparative Evaluation of Deep Learning Architectures for Environmental Sound Recognition to Assist Hearing-Impaired Users.  
Tan Qiao Zhen, Rosdiyana Samad, Mahfuzah Mustafa, Nor Rul Hasma Abdullah and Nurul Hazlina Noordin (Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia); Dwi Pebrianti (International Islamic University Malaysia, Malaysia & Universitas Budi Luhur, Jakarta, Indonesia).

12:45 1571171091: NeuroGuardian: A Wearable System for Continuous Monitoring and Real-Time Reporting in ASD Children.  
Prerna Ajmani, Anil Tandon, Shreya Aggarwal, Isha Negi, Nischal Wadhwa, Krish Goel and Varnika Jindal (Vivekananda Institute of Professional Studies-TC, India).

13:00 1571178542: Mental Health Disorder Detection Using Deep Learning and Natural Language Processing.  
Mohamad Zafar Badar and Zouhir Bahri (University of Bahrain, Bahrain).

## DAY -III: Wednesday, December 3 10:30 – 13:00 (Asia/Bahrain)

### PARALLEL SESSION 03: SE04: ROBOTICS AND SYSTEMS INTELLIGENCE:

#### HALL HALL-C: SESSION JOINING: HALL-C

CHAIR: PROFESSOR ISLAM HAMDI EL GHONAIMY, (UNIVERSITY OF BAHRAIN, BAHRAIN).

10:30 1571169860: Particle Swarm Optimization Algorithm Application for Proportional Derivative Control of Single-Link Planar Robotic System.  
Mohammed Ahmed (Abubakar Tafawa Balewa University Bauchi, Nigeria & Universiti Tun Hussein Onn Malaysia, Malaysia); Babul Salam Ibrahim (Gulf University for Science & Technology Kuwait, Kuwait).

10:55 1571169895: Elastic Net Regularization and Ensemble Models for Predicting Pilot Performance from High-Dimensional Physiological Data in VR Flight Simulators.  
Mohamed Fekrouni (Laboratory of Information and Communication Technologies (LabTIC) ENSAT Tangier, Morocco); Saad Chakkor (LabTIC, ENSA of Tangier, University of Abdelmalek Essaadi, Morocco).

11:20 1571170490: Freight Container Number Recognition System Based On Deep Learning Approach.  
Wan Nur Azhani Wan Samsudin, Nur Ain Syahiera Razali and Rohana Abdul Karim (Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia); Marlina Yakno (Universiti Malaysia Pahang Al-Sultan Abdullah & Universiti Sains Malaysia, Malaysia); Wan Syahirah Wan Samsudin (Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia).

11:45 1571170856: Co-Designing Inclusive Smart Wearables for Fall Detection and Gait Monitoring: A Case Study in Smart City Health Systems  
Iason Athanasopoulos (Prisma Electronics SA, Greece); Christos Spandonidis (Prisma Electronics, Greece); Vasileios Iliopoulos (Prisma Electronics SA, Greece); Areti Petsa (Prisma Electronics, Greece).

12:10 1571208807: EEG Robotics Learning Structures and Control Systems for Complex Tasks.  
Ebrahim Abdulla Mattar (University of Bahrain, Bahrain).

12:25 1571188635: Multi-Robot Coordination and Control Frameworks for Achieving Resilient Emergency Management in Hyperconnected and Sensor-Rich Smart City Environments.  
Dipti Dip (India); Vandana Roy (RGPV, Bhopal, India); Vandna Batra (K R Mangalam University, India); Deepak Patidar (IES College of Technology, India); Chetan Singhadiya (RK University, India).

12:45 1571193351: Optimizing pesticide use for real time precision spraying for tomato cultivation.  
Dhiyya B (Karpaga Vinayaga College of Engineering and Technology, India); Raja J (Adhiparasakthi Engineering College, India).

DAY -III: Wednesday, December 3 13:00 – 13:30 (Asia/Bahrain) - ZB3: Day-3 – Mid-Day Break

## DAY -III: Wednesday, December 3 13:30 – 16:30 (Asia/Bahrain)

### PARALLEL SESSION 01: SF00: SMART HEALTHCARE AND TECHNOLOGY SOLUTIONS:

HALL HALL-A: SESSION JOINING: HALL-A : SESSION CHAIR: DR. ZOUHIR BAHRI, (UNIVERSITY OF BAHRAIN, BAHRAIN).

13:30 1571160480: Predictive Analysis of Chronic Kidney Disease Using Feature Selection and Machine Learning Models.  
Sayed Elkenawy (Bahrain Polytechnic, Bahrain); Amel Ali Alhussan (Princess Nourah bint Abdulrahman University, P.O. Box 84428, Riyadh 11671, Saudi Arabia); Mahmoud Elshabrawy Mohamed (Computer Science and Intelligent Systems Research Center, USA); Marwa M Eid (Faculty of Artificial Intelligence, Delta University for Science and Technology, Mansoura 11152, Egypt).

13:50 1571160915: Optimizing Feature Selection in Medical Data: A Hybrid Grey Wolf-Particle Swarm Algorithmic Approach.  
Amel Ali Alhussan (Princess Nourah bint Abdulrahman University, India); Doaa Sami Khafaga and Amal Alharbi (Princess Nourah bint Abdulrahman University, Saudi Arabia); Mahmoud Elshabrawy Mohamed (Computer Science and Intelligent Systems Research Center, USA); Marwa M Eid (Delta University for Science and Technology, Egypt); Sayed Elkenawy (Bahrain Polytechnic, Bahrain).

14:10 1571161882: Skin Cancer Detection with Convolutional Neural Network (CNN) and Image Augmentation.  
Vishwanath Mishra, Priya Shelke, Arya Kuwar and Parth Shinde (Vishwakarma Institute of Information Technology, India); Amol Dhumane (University of Pune, India).

14:30 1571163919: A Robust Deep Learning Framework for Pneumothorax Diagnosis from Medical X-Ray Images. Narinder Kaur (Chandigarh University, India).

14:50 1571165540: ViT-Based Dual-Modality Fusion Model for Brain Tumor Classification.  
Merve Erkuş and Mehmet Kaya (Firat University, Turkey).

15:10 1571165684: Comparison of Multimodal Models In the Multi-Label Classification of Breast Cancer Subtypes.  
Diğdem Orhan and Mehmet Kaya (Firat University, Turkey); Reda Alhajj (University of Calgary, Canada).

14:30 1571166871: Tuberculosis Classification from Chest X-Rays Using Hybrid CNN-Transformer Architecture Leveraging LSTM Feature Selection.  
Saida Sarra Boudouh (LIM Laboratory University of Laghouat Algeria, Algeria).

14:50 1571167497: Enhancement of Microscopy Images by Stacking and EDSR Super-Resolution Methods.  
Ayşe Nur Aslan and Mehmet Kaya (Firat University, Turkey).

16:10 1571167743: Real-Time Mental Health Monitoring through Facial Emotion Detection.  
Kehan Jahangir Shaikh, Ruhan Tejwani and Sagar Ashok Sabale (Vishwakarma Institute of Information Technology, India); Priya Shelke (Vishwakarma Institute of Information, India); Suruchi Gaurav Dedgaonkar (Vishwakarma Institute of Information Technology, Savitribai Phule Pune University, India & VIT, Pune, India).

16:30 1571184557: SympTrack: Machine Learning Meets Medical Symptoms.  
Ratnam Doddla (Jawaharlal Nehru Technological University Ananthapur, India); Rabel Guharoy (Amity University, Kolkata, India); Manikanta Paka (CVR College of Engineering, Hyderabad, India); Alavalapati VishnuKanth Reddy (CVR College of Engineering, Hyderabad, India); Rahul Kichad and G.Raghuram Reddy (CVR College of Engineering, Hyderabad, India).

16:45 1571173969: BOTAC: Blockchain-Enabled One-Time Access Control for Secure Patient Data Sharing.  
Ashwin Verma (Institute of Technology, Nirma University, Ahmadabad, India); Sunil Pathak (Amity University, Jaipur, Rajasthan, India); Pronaya Bhattacharya (Amity University, Kolkata, India).



## DAY -III: Wednesday, December 3 13:30 – 15:40 (Asia/Bahrain)

### PARALLEL SESSION 03: SF03: DESIGN SOLUTIONS & SMART CITIES DESIGN-PART-B:

HALL      HALL-C: SESSION JOINING: HALL-C

SESSION CHAIR: MIRNAL MUNGRA, SCHOOL OF INNOVATIVE TECHNOLOGIES & ENGINEERING, UNIVERSITY OF TECHNOLOGY, MAURITIUS

13:30 1571181795: Experimental Validation of a Dual Fluxgate Eddy Current Probe for Surface Crack Detection in Steel.  
Nurul Ain Nadzri (Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia); Mawardi Saari (UMPSA, Malaysia); Mohd Aufa Hadi Putera Zaini (High Performance Computing Centre, Universiti Teknologi Petronas, Perak, Malaysia); Yasmin Abdul Wahab (Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia).

13:50 1571181851: StegNet: A Framework for Embedding Anomalies in Network Traffic Data Using Steganography for Enhanced Anomaly Detection.  
Qasem Abu Al-Haija and Hala Hamadeh (Jordan University of Science and Technology, Jordan).

14:10 1571183023: Security of City-scale Digital Twins: State of Art and Challenges.  
Yaqi Zhang (University of Bristol, United Kingdom (Great Britain)); Qiuchen Lu (University College London, United Kingdom (Great Britain)); Qian Xu and Theo Tryfonas (University of Bristol, United Kingdom (Great Britain)).

14:30 1571183516: Deep Learning-Based Medicinal Plant Identification Using Hybrid ConvNeXt-Large and RegNetY-3.2GF Feature Fusion.  
Shreya Khanna and Ashwin Tyagi (SCSET, Bennett University, India); Anushka Chaurasia (NIT Meghalaya, India); Ishan Budhiraja (Bennett University, Greater Noida, India); Vaibhav Tiwari (SCSET, Bennett University, India); Pronaya Bhattacharya (Amity University, Kolkata, India).

14:50 1571183835: Synergistic effects of multi-size polypropylene fibers on the ductility and durability of LC3 Concrete in extreme solutions.  
M. Aminul Haque (IRC for Construction and Building Materials, Saudi Arabia); Xiao-Ling Zhao (The Hong Kong Polytechnic University, Hong Kong); Md Arifuzzaman (King Faisal University, Saudi Arabia); U Gazder (UoB, Bahrain).

15:20 1571184191: Evaluating the Impact of Artificial Intelligence on Efficiency and Innovation in Mechanical Engineering Application.  
Fatima Rahi (Sandwell College, United Kingdom (Great Britain)); Kumeel Rasheed (Shenzhen University, China); Dr. Syed Saad (CECOS University, Pakistan).

15:40 1571184243: Securing Identity Through Movement: A Short Review of Deep Learning in Gait Analysis.  
Faizal Hajamohideen (University of Technology and Applied Sciences, Oman).

16:00 157118424: Deep Learning-Based Gait Analysis for Secure Access Control and Forensic Evidence Collection.  
Faizal Hajamohideen (University of Technology and Applied Sciences, Oman).



DAY -III: Wednesday, December 3 15:30 – 15:40 (Asia/Bahrain) – Short Break

Wednesday, December 3 15:40 – 16:00 (Asia/Bahrain)

CD-3: Closing Remarks of 9th IET SMART CITIES SYMPOSIUM, 2025

Closing Remarks of 9th IET SMART CITIES SYMPOSIUM, 2025

Session Chair: Professor Araddhana Deshmukh  
Professor, Symbiosis skills and Professional University, Pune-India

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MAIN-THEATRE HALL – FOR THE VIRTUAL ACCESS



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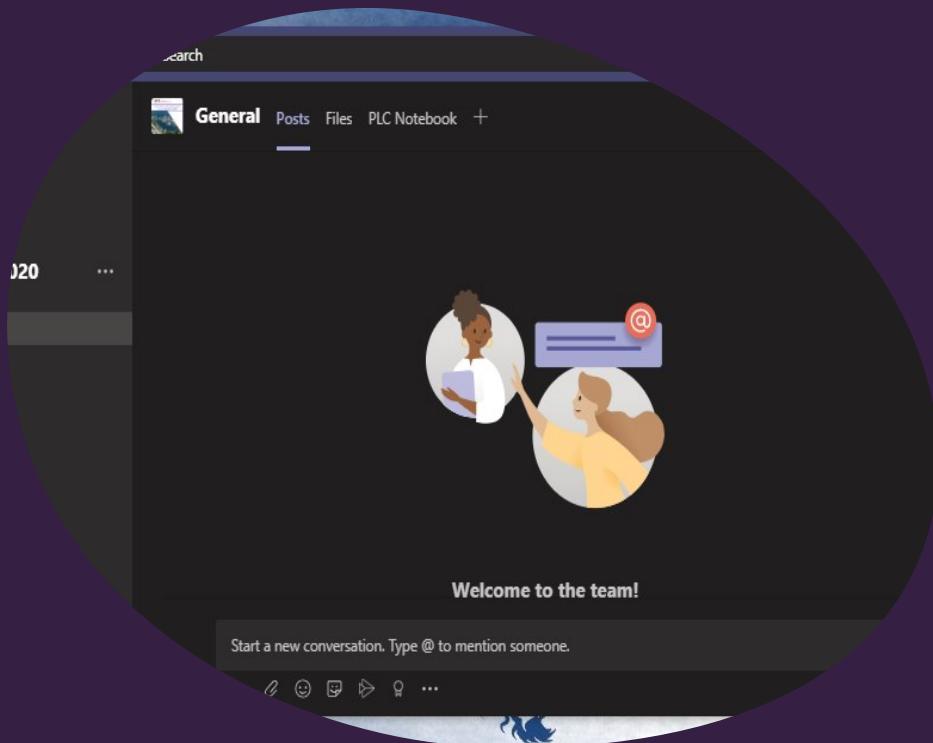
IET Registration Platform

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or at

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## ACCESSING: 9TH IET SCS-2025 – HALLS: A-E, DECEMBER 2025



To join sessions in Main Hall [MAIN THEATRE HALL – FOR VIRTUAL ACCESS](#)

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9TH IET SMART CITIES SYMPOSIUM PROGRAM

1-3 DECEMBER 2025

KEYNOTES AND PARALLEL SESSIONS DETAILS

MONDAY, 1<sup>ST</sup> DECEMBER 2025

Main-Hall: Main Hall Opening by 8:30 am

9:00 am

MAIN-THEATRE HALL – FOR VIRTUAL ACCESS

**OPENING SPEECH**

**MONDAY 1<sup>ST</sup> DECEMBER 2025, 09:05+03 - 09:10+03**

**WELCOME: WELCOME SPEECH**

**MONDAY THE 1<sup>ST</sup> OF DECEMBER 2025, 09:20+03 - 10:00+03**

**KN1: KEYNOTE SPEAKER -1**

**SMART MARITIME TRANSPORTATION:**

**ICT SOLUTIONS AND DIGITIZATION FOR EFFICIENT AND SUSTAINABLE PORTS AND SHIPPING**

**PROFESSOR, DR. MICHELE FIORINI**

Ing. (Mr), MBA, PhD, CEng, FIET is a principal engineer,  
Chartered Engineer at Leonardo SpA, Italy

**Session Chair:**

Dr. Imran Shafique Ansari, MIET, James Watt School of Engineering, UK

**MONDAY THE 1<sup>ST</sup> OF DECEMBER 2025, 10:00+03 - 10:30+03**

**KN2: KEYNOTE SPEAKER -2**

**DATA MINING AND CYBERSECURITY FOR SMART CITIES**

**DR. ROY HACHACHE, PH.D.**

Vice Chair – ASIS British Columbia Chapter | Co-Founder, The Lebanese IT Syndicate, Canada

**Session Chair:**

Dr. Suresh Vishwakarma, P.Eng., CEng, MIET, MBA, PhD, PostDoc, Honorary Professor, Amity University, India, IET-UK Representative for Western, Canada

Monday 1<sup>st</sup> December 2025: 11:00 +03 to 01:00 +03

Parallel Session: Hall-A  
SA01: Internet of Things and Smart Applications-PART-A  
SESSION JOINING: HALL-A

Parallel Session: Hall -B  
SA02: Artificial intelligence Computational Algorithms  
SESSION JOINING: HALL-B

Parallel Session: Hall-C  
SA03: Smart Environments -PART-A  
SESSION JOINING: HALL-C

13:00 +03 to 13:30 +03: ZB1: Day-1 - Mid-Day Break

Monday 1<sup>st</sup> December 2025: 13:30 +03 to 16:30 +03

Parallel Session: Hall-A  
SB01: Smart Environments -PART-B  
SESSION JOINING: HALL-A

Parallel Session: Hall-B  
SB02: Cybersecurity Solutions  
SESSION JOINING: HALL-B

Parallel Session: Hall-C  
SB03: Smart Transportation System  
SESSION JOINING: HALL-C

Parallel Session: Hall-D  
SB04: Smart Cities Solutions  
SESSION JOINING: HALL-D

CD-1: Closing of Day-1

TUESDAY, 2<sup>ND</sup> DECEMBER 2025

Main-Hall: Getting Ready: Main Hall Opening by 8:30 am

9:00 am

MAIN-THEATRE HALL – FOR VIRTUAL ACCESS

**KN4: KEYNOTE SPEAKER -3**

TUESDAY 2<sup>ND</sup> DECEMBER 2025, 09:00+03 - 09:30+03

SMART AND SUSTAINABLE MANUFACTURING:  
A STRATEGIC NECESSITY FOR CURRENT AND FUTURE SMART CITIES

Dr. Manish Billore, MTech, PhD, Principal, Sagar Institute of Science and Technology, Gandhinagar, Bhopal 462036,

Session Chair:

Dr. Suresh Vishwakarma, P.Eng., CEng, MIET, MBA, PhD, PostDoc, Honorary Professor, Amity University, India, IET-UK Representative for Western, Canada

**KN4: KEYNOTE SPEAKER-4**

TUESDAY 2<sup>ND</sup> DECEMBER 2025, 09:30+03 - 10:45+03

THE ROLE OF HYDROGEN ENERGY IN DEVELOPING SUSTAINABLE SMART CITIES

Dr. Suresh Vishwakarma, P.Eng., CEng, MIET, MBA, PhD, PostDoc, Honorary Professor, Amity University, India, IET-UK Representative for Western, Canada

Session Chair:

Dr. Ruchi Tyagi, Adjunct Asian Institute of Technology, Ex-Senior Faculty Birmingham City University, Part Time Faculty University Technology, Mauritius

TUESDAY 2<sup>nd</sup> December 2025: 10:30 +03 to 13:00 +03

Parallel Session: Hall-A  
SC02: Smart Algorithms Applications-A  
Session Joining: Hall-A

Parallel Session: Hall-B  
SC03: New Technologies for Smart Cities-PART-A  
Session Joining: Hall-B

Parallel Session: Hall-C  
SC04: New Technologies for Smart Cities-PART-D  
Session Joining: Hall-C

13:00 +03 to 13:30 +03: ZB1: Day-1 - Mid-Day Break

TUESDAY 2<sup>nd</sup> December 2025: 13:00 +03 to 15:15 +03

Parallel Session: Hall-A  
SD01: New Technologies for Smart Cities-PART-B  
Session Joining: Hall-A

Parallel Session: Hall-B  
SD03: Smart Energy Systems – Technology Solutions  
Session Joining: Hall-B

Parallel Session: Hall-C  
SD04: Smart Cities and AI Computational Algorithms  
Session Joining: Hall-C

CD-2: Closing of Day-2

DAY-III

WEDNESDAY, 3<sup>rd</sup> December 2025

Main-Hall: Getting Ready: Main Hall Opening by 8:30 am

9:00 am

MAIN-THEATRE HALL – FOR VIRTUAL ACCESS

**KN5: KEYNOTE SPEAKER -5**

**WEDNESDAY, 3<sup>RD</sup> DECEMBER 2025, 09:00+03 - 09:30+03**

**INTEGRATING SUSTAINABLE WASTE MANAGEMENT INTO THE DESIGN OF FUTURE SMART CITIES**

Dr. Ria Narula,  
Veterinary Technology, Connecticut State, USA

Session Chair:

Shefali Vishwakarma, the IET - Communities Committee America, Canada

**KN6: KEYNOTE SPEAKER -6**

**WEDNESDAY, 3<sup>RD</sup> DECEMBER 2025, 09:30+03 - 10:00+03**

**ADVANCED CRYPTOGRAPHIC TECHNIQUES FOR PROTECTING BIOMETRIC INFORMATION AND ENSURING  
DATA PRIVACY IN SMART URBAN ENVIRONMENTS**

Professor Dr. Garima Aggarwal

Department of CSE, Head, International Collaboration for Engineering & Technology, ASET  
General Co-Chair, Confluence 2025, Amity School of Engineering & Technology Amity University Uttar Pradesh, Noida-201313, India

Session Chair:

Sandeep Kulkarni - Vice President Marketing And Sales Operations at Harbinger Group, India

**KN7: KEYNOTE SPEAKER -7**

**WEDNESDAY, 3<sup>RD</sup> DECEMBER 2025, 10:00+03 - 10:30+03**

**TRANSFORMATION OF POWER SYSTEMS USING INTELLIGENT GRID TECHNOLOGY:  
ENABLING RESILIENCE, SUSTAINABILITY, AND INNOVATION IN SIDS**

Dr. Tagore Ramlal,  
PhD, REng, CEng, MIET, SMIEEE, F(ASl), Chair IET Trinidad and Tobago, Trinidad and Tobago

Session Chair:

Dr. Abhishek Chaubey, Principal, Sagar Institute of Science and Technology, Bhopal, India

Wednesday, 3<sup>rd</sup> December 2025: 10:30 +03 to 01:00 +03

PARALLEL SESSION: HALL-A

SE02: SMART MONITORING AND SOLUTIONS

SESSION JOINING: HALL-A

PARALLEL SESSION: HALL-B

SE03: SMART HOMES, SMART HOSPITALS, AND SMART CAMPUSES

SESSION JOINING: HALL-B

PARALLEL SESSION: HALL-C

SE04: ROBOTICS AND SYSTEMS INTELLIGENCE

SESSION JOINING: HALL-C

ZB-3: Mid-Day Break: 13:00 +03 to 13:30 +03

Wednesday, 3<sup>rd</sup> December 2025: 01:30 +03 to 15:30 +03

PARALLEL SESSION: HALL-A

SF00: SMART HEALTHCARE AND TECHNOLOGY SOLUTIONS

SESSION JOINING: HALL-A

PARALLEL SESSION: HALL-B

SF01: INTERNET OF THINGS AND SMART APPLICATIONS-PART-B

SESSION JOINING: HALL-B

PARALLEL SESSION: HALL-C

SF03: DESIGN SOLUTIONS & SMART CITIES DESIGN-PART-B

SESSION JOINING: HALL-C

PARALLEL SESSION: HALL-D

SF03: DESIGN SOLUTIONS & SMART CITIES DESIGN-PART-C

SESSION JOINING: HALL-D

Main-Hall: CD-3: Closing Remarks; 15:40 +03 to 16:00 +03

#### MAIN-THEATRE HALL – VIRTUAL ACCESS

Closing Remarks of 9th IET SMART CITIES SYMPOSIUM, 2025

Session Chair:

Dr. Suresh Vishwakarma, P.Eng., CEng, MIET, MBA, PhD, PostDoc, Senior Engineer, Vancouver Canada, and IET - Communities Resources Committee Member

SB-3: Day-3 - Symposium Ending

links to Virtual Halls: Please find the (emails for 9th IET Smart Cities Symposium -2025 at UOB).

**9th IET SCS-2025-Main-HALL (FOR KEYNOTES, OPENING, CLOSING SESSIONS):**

[General | 9th IET SCS-2025-Main-HALL | Microsoft Teams](#)

<https://teams.microsoft.com/l/channel/19%3AVzAFArs4fcUpqFm2nJhb-JsTz40K7ASdR5u0tRRdpuQ1%40thread.tacv2/General?groupId=bd6032c6-f8fd-4365-b66d-e9e88f46f63d&tenantId=026137b5-e313-46d1-9b2f-026ecb50c842>

**9th IET SCS-2025-HALL- A:**

[General | 9th IET SCS-2025-HALL-A | Microsoft Teams](#)

<https://teams.microsoft.com/l/channel/19%3Ad-vZSuG0xW4wV-w2-HOBK9SdRxW7PA0n9aq2le75a1%40thread.tacv2/General?groupId=11115a3e-ffd7-440b-a5dc-6363b480fdb8&tenantId=026137b5-e313-46d1-9b2f-026ecb50c842>

**9th IET SCS-2025-HALL- B:**

[General | 9th IET SCS-2025-HALL-B | Microsoft Teams](#)

[https://teams.microsoft.com/l/channel/19%3AcuR-509YCqv\\_BMjcVUf9lzd6vFGWbQ4gdDVN7vL561o1%40thread.tacv2/General?groupId=c18d7399-bf3f-417f-b90a-643e7cf64362&tenantId=026137b5-e313-46d1-9b2f-026ecb50c842](https://teams.microsoft.com/l/channel/19%3AcuR-509YCqv_BMjcVUf9lzd6vFGWbQ4gdDVN7vL561o1%40thread.tacv2/General?groupId=c18d7399-bf3f-417f-b90a-643e7cf64362&tenantId=026137b5-e313-46d1-9b2f-026ecb50c842)

**9th IET SCS-2025-HALL- C:**

[General | 9th IET SCS-2025-HALL-C | Microsoft Teams](#)

<https://teams.microsoft.com/l/channel/19%3AhLfGwt-5XRUjodzSCayGNrjon-jClhh-gUM83QPS1ok1%40thread.tacv2/General?groupId=0c08f9af-4e0b-4217-a6e8-72ca3ec63475&tenantId=026137b5-e313-46d1-9b2f-026ecb50c842>

**9th IET SCS-2025-HALL- D:**

[General | 9th IET SCS-2025-HALL-D | Microsoft Teams](#)

[https://teams.microsoft.com/l/channel/19%3Akascgn4pec5K0q2Vr8Px-NM4m\\_J6OkcTfJeTWbX6VGM1%40thread.tacv2/General?groupId=9416fe90-8e4d-4de1-b6cc-5e307f38b281&tenantId=026137b5-e313-46d1-9b2f-026ecb50c842](https://teams.microsoft.com/l/channel/19%3Akascgn4pec5K0q2Vr8Px-NM4m_J6OkcTfJeTWbX6VGM1%40thread.tacv2/General?groupId=9416fe90-8e4d-4de1-b6cc-5e307f38b281&tenantId=026137b5-e313-46d1-9b2f-026ecb50c842)

**9th IET SCS-2025-HALL- E: General | 9th IET SCS-2025-HALL-E | Microsoft Teams**

<https://teams.microsoft.com/l/channel/19%3ASoKBltYQ5tnMBJfQKg17Ehl5arCQ5oPIGgnA9aGoVwM1%40thread.tacv2/General?groupId=5bd191a0-7ff5-496e-9728-ac6dcac7d622&tenantId=026137b5-e313-46d1-9b2f-026ecb50c842>