## **ALL INDIA SEMINAR ON**

## CHALLENGES AND MITIGATION STRATEGIES FOR SDG-13: EMERGING TRENDS IN 10T TO COMBAT CLIMATE ACTION





## **Registration Fee/-**

Students (IEI Student Member & IEI Members): Rs. 300/-Students (Non-IE Members): Rs.500/-Delegates from Academic / Research Institutions: Rs.750/-Delegates from Industries: Rs.1,000/-

Last date of Registration :

21/08/2023

### **Closing Dates for Papers :**

Submission of Full Paper (Oral & Poster) : 12/08/2023 Communication of accepted paper : 14/08/2023

**VENUE:** Manakula Vinayagar Institute of Technology

## Payments

Payments are optional through Cheque/NEFT/UPI/G-Pay Demand Draft, drawn in favour of "The Institution of Engineers (India), Puducherry State Centre" payable at Puducherry.

## **Bank Details**

Name of Beneficiary :The Institution of Engineers (India) Puducherry State Centre Name of Bank : UCO Bank, Grand bazaar, Puducherry A/c No : 01300110014608, IFSC Code : UCBA0000130,

UPID: ioe@ucobank

#### BHIM UPI payment Accepted



For Registration



Transport Facility available from Puducherry, Villupuram, Cuddalore & Tindivanam Accommodation will be provided for outstation participants at nearby Hotel Rs. 250/day

# The Institution of Engineers (India]

(An ISO 9001:2015 Certified Organization) 8, Gokhale Road, Kolkata 700 020, www.ieindia.org (A Century of Service to the Nation)

## **ALL INDIA SEMINAR**

ON

CHALLENGES AND MITIGATION STRATEGIES FOR SDG-13: EMERGING TRENDS IN IOT TO COMBAT CLIMATE ACTION

AUGUST 24th & 25th 2023

**ORGANISED BY** 

The Institution of Engineers (India)

## **PUDUCHERRY STATE CENTRE**

(63, 3rd Floor, Circle-I Office, PWD Campus, Puducherry, 605001) www.ieipsc.org



Under the Aegis of Computer Engineering Division Board IE(I) In Association with Department of CSE (IoT & Cyber Security including Blockchain Technology)

> & R&D Cell



INSTITUTE OF TECHNOLOGY Approved by AICTE, New Delhi and Affiliated to Pondicherry University Accredited by NBA & NAAC 'A' Grade Kalitheerthalkuppam, Puducherry-605107 www.mvit.edu.in

Accredited by

NBA



#### THE INSTITUTION OF ENGINEERS (INDIA):

The Institution of Engineers (India) or IEI is the largest multidisciplinary professional body that encompasses 15 engineering disciplines and gives engineers a global platform from which to share professional interest. IEI has membership strength of over 0.8 million. Established in 1920, with its headquarters at 8 Gokhale Road, Kolkata - 700020, IEI has served the engineering fraternity for over nine decades. In this period of time it has been inextricably linked with the history of modern-day engineering. In 1935, IEI was incorporated by Royal Charter and remains the only professional body in India to be accorded this honour. Today, its guest for professional excellence has given it a place of pride in almost every prestigious and relevant organization across the globe. IEI functions among professional engineers, academicians and research workers. It provides a vast array of technical, professional and supporting services to the Government, Industries, Academia and the Engineering fraternity, operating from 125 Centres located across the country. The Institution has established R&D Centres at various locations in the country and also provides grant-in-aid to its members to conduct research and development on engineering subjects. IEI has been recognized as Scientific and Industrial Research Organization (SIRO) by the Ministry of Science & Technology, Govt. of India and besides conducting its own research, provides Grant-in-Aid to UG/PG/ PhD students of Engineering Institutes & Universities. IEI holds the International Professional Engineers (IntPE) Register for India International Professional

#### ABOUT IEI PUDUCHERRY STATE CENTRE:

The Institution of Engineers (India), Puducherry State Centre was established on 31st July 2010 It is functioning at Public Works Department of Puducherry. IE (I), PSC Members are spread over in entire union territory of Puducherry Viz: Puducherry, Karaikal, Yanam, Mahe with a total strength of more than 700 Members, as per HQ Communication. There are three Institutional Member, 25 Students chapter started in six Engineering college with more than 1500 students.

IE(I)PSC conducted landmark program like conferment of Honorary Fellowship to Dr. Kiran Bedi, Lt, Governor of Puducherry in 2019, southern region students conclave in 2023 national and international conference in NIT Puducherry. Conducting traffic survey in Puducherry city with police department to provide data for traffic problem, celebrate all statutory days in grand manner.

#### ABOUT PUDUCHERRY

Puducherry. the capital of the Union Territory was once the original headquarters of the French in India, is situated on the Coromandel Coast of the Bay of Bengal and is about 135 kms. from Chennai Airport. The main languages spoken here are Tamil, Telugu, Malayalam, English and French. Pondicherry is a peaceful city. It is referred by names such as 'Quintessence of French Culture', 'India's Little France' and 'The French Riviera of the East'. There is French Consulate in Puducherry. The uniqueness of Pondicherry town invariably lies in skillful town planning and Franco Tamil architecture. The town is built on the model of "bastide", a fortified French coastal town of the late 18th Century.

#### Place to Visit

Manakula Vinayagar Temple, Auroville, Rock Beach, Sri Aurobindo Ashram, Botanical Garden, Basilica of the Sacred Heart of Jesus, Boat house.

#### About Manakula Vinayagar Institute of Technology

Manakula Vinayagar Institute of Technology (MVIT), a unit of Sri Manakula Vinayagar group of Institutions, started in the year 2008 is located inside the Medical College Campus, Kalitheerthalkuppam, Puducherry. It provides high quality technical education with a dynamic, experienced and dedicated faculty team, state of the art lab facilities, excellent ambience for learning. Outstanding academic record, more than 90% placement in top companies, good discipline, Outcome Based Education are the key features of our Institution.

Our Institution is accredited by NBA, New Delhi and NAAC with 'A' grade is an another milestone in the achievement history of MVIT.

#### **Courses Offered**

#### Under Graduate

B. Tech - CSE (IoT and Cyber security including Block chain Technology) //Mechanical Engineering/ Electrical and Electronics Engineering / Electronics and Communication Engg / Computer Science and Engineering / Information Technology / Robotics and Automation / Food Technology / Artificial Intelligence and Machine Learning

#### Post Graduate

 $\rm M.$  Tech – Electronics and Communication Engg / Computer Science and Engineering  $\rm MBA-Master$  of Business Administration

## About B. Tech - CSE (IoT and Cyber security including Block chain Technology), MVIT

Internet of Things (IoT), Cyber security and Block chain Technology are the most significant technological innovations which act as the big game Changer of the world. These technologies are becoming more important due to increased reliance on computer systems, the Internet and wireless network standards such as Bluetooth and Wi-Fi, and due to the growth of "smart" devices, including smartphones, televisions, and the various devices that constitute the "Internet of things". Owing to its complexity, both in terms of politics and technology, cybersecurity is also one of the major challenges in the contemporary world.

Therefore, this course has a fantastic future in different sectors such as supply chain management, digital advertising, forecasting, cyber security, networking etc. It is penetrating in every booming industry and witnessing demands in major sectors including IT with ITES, Banking, Insurance, Logistics, Healthcare, and Public Administration. To enhance the Technical Skills of the students, the Department also organizes various program such Value-added course, participative learning, Experiential learning, Project Expos and other co-curricular activities which would make them globally competitive.

#### Objectives

- ✓ Identify key challenges in integrating IoT technologies to combat climate change under SDG-13.
- ✓ Analyze the potential of IoT applications in various sectors (e.g., energy, transportation, agriculture) to contribute to climate action.
- Assess the environmental impacts of IoT devices and infrastructure to ensure sustainable implementation.
- To highlight the challenges, opportunities, and ethical considerations of using internet of things for sustainable development.

#### Overview

This seminar aims in combining IoT technologies with climate action efforts presents promising opportunities to address global environmental challenges. By adopting the mitigation strategies, stakeholders can leverage the potential of IoT to combat climate change effectively, contributing to the achievement of SDG-13 and building a more sustainable future.

#### Topics to be covered

✓ Climate Change Threats: Impacts, Adaptation, and Vulnerability.

- ✓ Monitoring and Prediction of the Weather, Water and Climate.
- $\checkmark$  Recent advances and future challenges for prediction of climate action.
- ✓ Sensor technology for climate predictions.
- ✓ Prediction of global climate change with IOT.
- $\checkmark$  Applications, challenges of IOT in climate change.

#### Expected outcome

The seminar will provide insights into the latest advancements and potential applications of internet of things for sustainable development. It will also promote collaborations and partnerships among researchers, scientists, policymakers, and stakeholders to develop innovative solutions for sustainable development.

#### **Resource persons**

Sessions will be handled by Experts from NIT, Pondicherry University and Puducherry Technological University, Industry and Govt sector.

#### Who can attend?

The faculty members and students from Engineering colleges, Polytechnics, Universities, Research Institutions and Industries are eligible to participate in this All India Seminar on "Challenges and Mitigation strategies for SDG-13: Emerging trends in IOT to combat climate action "

#### **Call For Papers**

All interested participants are requested to contribute technical/ research papers and case studies detailing concept, innovation, idea or practical experiences for oral as well a poster presentation. Each paper should begin with a synopsis of about 200 words and preferably within 3000 words excluding figures, tables and references. A brief bio-data (not more than half a page, affixing a photo) of the author(s) should accompany the paper.

#### Cash Prizes

## Cash Prizes worth of Rs. 5000/- in total will be given to best papers presented

#### Publication

Technical Volume of the seminar will be published incorporating all accepted papers including write-ups on the subject for general appreciation and made available to the registered participants.

## NATIONAL ADVISORY COMMITTEE

Chairman: President, IEI

**Co Chairman**: Dr. Nirmal Das, FIE, Chairman, CPDB **Convenor**: Dr.N. Poonguzhali, MIE, ASP & HOD/CSE (IoT), MVIT Members: Computer Engineering Division Board, IEI

Dr. Amit Kumar Das, FIE Prof (Dr) Chandrashekara S N, FIE Dr. Labh Singh Bhari, FIE

### ORGANIZING COMMITTEE

## **Chief Patron:**

Shri. M. Dhanasekaran, Chairman and Managing Director

Shri. S. V. Sugumaran, Vice Chairman & Treasurer

Dr. K. Narayanasamy, Secretary

Shri. D. Rajarajan, Treasurer SMVE Trust

#### Patron:

Dr. S. Malarkkan, Principal, MVIT

#### Chairman:

Dr. B. Radjaram, FIE, Chairman IEI, Puducherry State Centre Organising Secretary:

Dr. S.Thirougnaname, FIE, Honorary Secretary IEI, Puducherry State Centre

#### uuuuniny state e

## Member:

Dr. D.Loganathan, MIE

#### **TECHNICAL ADVISORY COMMITTEE**

Dr.R.Valli., Head R & D, MVIT Dr.S.Pariselvam, HOD / CSE, MVIT Dr.P.Sivakumar,FIE/HOD / IT, MVIT Mr.V.Kumaraguru, AP/IoT, MVIT Mrs. K.C. Nithyasree, AP/IoT, MVIT

#### CONVENOR

Dr.N. Poonguzhali, MIE, ASP & HOD/CSE (IoT), MVIT Phone : 9487062008, Email: <u>poonguleecse@mvit.edu.in</u>

#### **Co-ordinators**

Dr. R.Rajalakshmi, Associate Professor / Civil Engg, MVIT. **Phone**: 9443667753 **Email** : <u>rajalakshmicivil@mvit.edu.in</u> Ms.S. Adolphine Shyni, AP/IoT, MVIT Mr.J. Vengatachalam, AP/IoT, MVIT Mr.P. Jayasowndarian, AP/IoT, MVIT

## CONTACT

#### Dr. B. RADJARAM, FIE, Chairman

The Institution of Engineers (India) Puducherry State Centre, Professor & Head,

Department of Mechanical Engineering, MVIT, Puducherry. Phone: 9443748471

Email: hodmechanical@mvit.edu.in / radjaram@rediffmail.com Dr. S.THIROUGNANAME , FIE

#### Honorary secretary,

The Institution of Engineers (India) Puducherry State Centre & Executive Engineer, Public Work Dept, Govt. of Puducherry. **Mobile:** 9443356700

Email: thirou16@gmail.com