### **KEYNOTE SPEAKERS:**

**Dr. Saad Mekhilef,** IEEE Fellow, Distinguished Professor, School of Software and Electrical Engineering, Swinburne University of Technology, Australia.

**Prof. Bidyadhar Subudhi**, IET (UK) Fellow, INAE Fellow, IEEE Senior Member, Dean (Research & Development), Professor, School of Electrical Sciences, Indian Institute of Technology - Goa.

Dr. Swagatam Das, Editor-in-Chief, Swarm and Evolutionary Computing (Elsevier), IEEE Senior Member, Head, Electronics and Communication Sciences Unit, Indian Statistical Institute, Kolkata, India.

### **TECHNICAL PROGRAM COMMITTEE CHAIRS:**

**Prof. Ramesh Bansal, IET (UK) Fellow, IEEE Senior Member, Professor,** Electrical Engineering Department, University of Sharjah, UAE.

Dr. Taha Selim Ustun, Head, Smart Grid Cybersecurity Laboratory,

Fukushima Renewable Energy Institute (FREA), National Institute of Advanced Industrial Science and Technology (AIST), Japan.

**Dr. S.M. Suhail Hussain,** Professor, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia.

**Prof. Radhakant Padhi, IEEE Senior Member,** Professor, Aerospace Engineering Department, IISc Bangalore, India.

### **Paper Submission Guidelines**

Simultaneous submissions (papers already submitted to other conferences/journals) are not allowed.All papers must follow the conference template strictly for the submission.

The author's identity such as name, affiliation and e-mail address need to be provided in Microsoft CMT.

Please do not submit plagiarized papers (Similarity index must be less than 15%).
 Paper must be in PDF format and must satisfy following requirements
 Paper Length: 6 pages, including figures, tables & references.
 No page numbering on the manuscript is allowed.

# **Registration Fees**

Category	Early Bird Rates Upto March 30 <sup>th</sup> 2024		Standard Rates From March 31st 2024 To April 15th 2024	
	IEEE	Non-IEEE	IEEE	Non-IEEE
Indian Author (Academia)	7000	7500	7500	8000
Indian Author (Industry)	9000	9500	9500	10000
Indian Student Author	6000	6500	6500	7000
Indian Non-Author Attendee	3000	3500	3500	4000
Foreign Author	\$250	\$300	\$300	\$350
Foreign Student Author	\$200	\$250	\$250	\$300

#### Registration includes

Publication Fees, Conference Lunch and Banquet Dinner.

All accepted and presented papers will be submitted to IEEE Xplore for the possible publication (Scopus indexed)

### **Important Dates:**

Paper submission opens: March 31st, 2023
Paper submission closes: December 31st, 2023
Paper acceptance notification: March 01st, 2024
Registration Dates: March 15th, 2024 - April15th, 2024

Last Date of Camera-ready paper submission: March 15th, 2024 - April 15th, 2024

Last Date of Registration: April 15th, 2024

Conference: 18th - 19th July, 2024

# **Organizing Committee for ICCIGST-2024**

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Dr. Subhojit Dawn, Asst. Prof., EEE Dept., VRSEC, Vijayawada Dr. K. Dhananjay Rao, Asst. Prof., EEE Dept., VRSEC, Vijayawada

### CONTACT:

Dr. Subhojit Dawn, Dr. K. Dhananjay Rao Conference Chairs, ICCIGST-2024

Department of Electrical and Electronics Engineering Velagapudi Ramakrishna Siddhartha Engineering College (Autonomous) Vijayawada, Andhra Pradesh, India

Cell: +91-9064513119, +91-7978221461 | Mail ID: iccigst@vrsiddhartha.ac.in

2024 International Conference on

# Computational Intelligence for Green & Sustainable Technologies (ICCIGST-2024)

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# VELAGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGE

(AUTONOMOUS)

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VIJAYAWADA

### **Welcome to ICCIGST-2024**

The conference plays a vital role to stir the grey cells to bring about the latest and the most innovative recent areas of researches in the field of advanced and modern application of Computational Intelligence in Green and Sustainable Technologies. In which the researchers' zeal for innovation and passion are tested to the limit. The conference also aims to bring people together from various field but having the common interest and passion for research in further advancement in the field of intelligent systems. Such an amalgamation of various research oriented minds will bear prolific results in future, which might lead to further advancements in future in such an era where anything is possible.

International Conference on Computational Intelligence, Green and Sustainable Technologies (ICCIGST-2024), will be held in Department of Electrical and Electronics Engineering, Velagapudi Ramakrishna Siddhartha Engineering College (VRSEC), Andhra Pradesh, India, during 18th-19th July, 2024.

### **About VRSEC**

Velagapudi Ramakrishna Siddhartha Engineering College (VRSEC) is the first Private Engineering College in the united state of Andhra Pradesh (AP) and was established in the year 1977. VRSEC is offering 9 UG Programmes (B.Tech) and 5 PG Programmes (M.Tech) in Engineering with various specializations. In addition, the institute is offering PG Programmes of Masters in Business Management (MBA) and Masters in Computer Applications (MCA). 6 UG programs in engineering are accredited by NBA in Outcome Based Education Format (OBE). Autonomous since 2006 and extended for 10 years, upto 2027-28 without visit to the collage, first in Andhra Pradesh. Ranked below 200 by NIRF, GOI, successively for the last five years and adjudged as one of the best engineering college in the country by national survey agencies such as India Today and Data Quest. VRSEC was accredited by NAAC with 'A+' grade and certified with ISO 9001:2015

The institute has totally 326 faculty members with 155 Doctrates from various premier institutions. Six engineering departments are recognized as Research Centres by JNTUK, Kakinada. The faculty and students are regularly publishing their research articles in indexed journals and conferences across the globe. The institute has strong industry partnership and signed 60 MOUs with various organizations. The institute has established various advanced Labs and Center of Excellence in collaboration with industries like Siemens, DASSAULT Systems, IBM, Oracle, Cisco, ADRIN-ISRO, National Instruments, Avantel and University of West Alabama.

### **Technical Tracks of ICCIGST-2024**

### **Track 1: Smart Optimization & Computing**

- ✓ Artificial Intelligence
- ✓ Machine Learning Techniques
- ✓ Cloud Computing & Fog Computing
- ✓ Wide Area Monitoring, Protection and Network Control
- ✓ Neural network and Fuzzy Computation
- ✓ Evolutionary Algorithms
- ✓ Intelligent and Hybrid System
- ✓ Cyber Security
- ✓ Block Chain

# Track 2: Smart, Green and Sustainable Technologies

- ✓ Micro grid/Smart Grid Control
- ✓ Renewable Energy Sources and Technology
- ✓ Power, Control and Energy Systems
- ✓ Recent Innovations in Design Engineering and Smart City Infrastructure
- ✓ Sustainable Technology for Aerospace Engineering
- ✓ Electric Vehicles
- ✓ Converter Topologies
- ✓ Energy Storage
- ✓ Green Energy Issue
- ✓ V2G and G2V Technology and Challenges
- ✓ Demand Side Management

### Track 3: Biomedical and Instrumentation

- ✓ Advanced Sensors
- ✓ Industry 4.0
- ✓ Virtual Instrumentation
- ✓ Health Care Systems
- ✓ Intelligent Control Systems
- ✓ Process Optimization and Control
- ✓ Robotics & Control
- ✓ Analytical Instrumentation
- ✓ Biomedical Signal & Image Processing
- ✓ Industrial Automation & Instrumentation

### **Track 4: Communication and Signal Processing**

- ✓ Embedded Systems and Automation
- ✓ Multimedia and Applications, 5G and 6G Technology Network Protocols, Mobile Computing
- ✓ Mobile Ad-hoc Networks, Mobile Agents
- ✓ Cross-layer Design/Optimization, Design and Performance Evaluation
- ✓ Traffic Control, Wireless Systems
- ✓ MU-MIMO Systems
- ✓ Optoelectronics and Optical Communication
- ✓ Image Processing, Computer Vision, Bio-image Processing, Audio/video Processing
- ✓ Data Processing, Estimation and Identification, Remote Sensing, Information Fusion
- ✓ Brain Computer Interface
- ✓ Signal Transforming and Filtering
- ✓ Digital System Design and Structures

## **Track 5: Computing Devices and Circuits**

- ✓ Advanced CMOS, Post-CMOS, Quantum Computing
- ✓ Cryogenic Circuits
- ✓ Novel Devices, Novel Computing Paradigms
- ✓ Tunnel FET, Negative Capacitance FET
- ✓ 2D Materials, Nanowires, Quantum Dots
- ✓ Topological Insulators, Phase Transitions Transistors
- ✓ Qubit Devices for Quantum Computing Enablement
- ✓ Cryogenic Circuits
- ✓ Magnetic Logic, Spintronics, Plasmonics