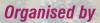




International Conference on Electronics, Photonics and Smart Technologies (ICePhaST-2020)

16-18 November 2020



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Faculty of Engineering & Technology SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

Kattankulathur – 603 203

Phone: 044-27452270, 27453380.

Website: www.srmist.edu.in

In association with















ABOUT THE INSTITUTION

SRM Institute of Science and Technology (formerly known as SRM University) is one of the top ranked universities in India with over 50,000 students and 3,177 faculty members, offering a wide range of Undergraduate, Postgraduate and Doctoral Programs in Engineering, Medicine & Health Sciences, Management, Science & Humanities, Law, and Agricultural Sciences. Over the last three decades, it has set standards in experiential learning and knowledge creation across various fields. It has reached beyond borders to universities and corporate across India and around the World. There are four sprawling campuses - three in and around Chennai, and one near New Delhi - spread across 250 acres with all facilities. It had conducted 98th Indian Science Congress in January, 2011 which was attended by 7,000 delegates from India and abroad, including six Nobel Laureates and several eminent scientists. SRM IST is the first private university in India to launch a Nano-satellite, named SRMSAT, into space, on board the PSLVC18 from Sriharikota on October 12, 2011.

SRMIST is accredited by NAAC with the highest Grade of 'A++' with a CGPA of 3.55/4.0 which is valid till 2023. QS, the world-renowned international ranking agency, has rated SRMIST as a "4 Star" institute with "5 Star" ratings in Teaching, Employability and Inclusiveness and QS-IGAUGE has awarded Diamond Rating to SRMIST. SRMIST is classified as Category I University by UGC/MHRD and enjoys 12B status too under UGC Act. SRMIST has been continually and consistently ranked by QS and THE (Times Higher Education) under various categories – World, Asian, BRICS and Indian.

SRMIST always focuses on research which is a hallmark of any institute going by the 'University' tag. Its H index is at 68. The research publications have doubled over the last 5 years. More than 200 patents filed, 70 published and 9 granted. National IP Award 2018 in the category of Top academic institution for Patents and Commercialization by Ministry of Commerce and Industry, GoI and establishment of NewGen IEDC (Innovation & Entrepreneurship Development Cell) at SRM with a funding of 2.87 Crores by NSTEDB (National Science & Technology Entrepreneurship Development Board), DST, GoI have given further impetus in addition to NAAC accreditation. Over the past years governmental agencies have sanctioned close to Rs. 120 Crores worth of projects for SRMIST. Six departments of SRMIST boast of bagging the prestigious FIST awards. Over 500 doctoral degrees have been awarded so far.

ABOUT THE DEPARTMENT

The Department of Electronics and Communication Engineering (ECE) was established in 1991. The department has strong collaboration with industries such as Central Electronics Engineering Research Institute (CEERI) Chennai, Nuvoton Technology Corporation, Taiwan, National Instruments and ALTERA. It received research grants from Department of Science and Technology (DST) under Funds for Improvement of Science and Technology (FIST), Defense Research and Development Organization (DRDO), Board of Research in Nuclear Science (BRNS) and Indian Space Research Organization (ISRO). The B.Tech (ECE) program of Kattankulathur campus of SRMIST is accredited by EAC of ABET, www.abet.org.

ABOUT THE CONFERENCE

The Department of Electronics and Communication Engineering, SRM Institute of Science and Technology is happy to organize an **online International Conference on Electronics**, **Photonics and Smart Technologies** (**ICePhaST-2020**) **during 16-18 November, 2020**. There has been rapid research and development in technology related to these areas during the past few years and has resulted in change in techniques adopted in various applications. The scope for further development always exists and the conference would provide the opportunity to discuss the state of art research contributions and to explore the avenues for future work. This conference is aimed to bring researchers, practicing engineers, faculty members and students to a common platform to share their research work.

This paves way to attain solution to various research problems by sharing technical knowledge to enhance the opportunities in the areas of focus. Many eminent researchers from different countries are expected for participation and will interact with the young students and budding researchers of various institutions who are a part of this conference. The conference will be held on Zoom platform in parallel sessions. No doubt, the conference (ICePhaST- 2020) would explore the research contributions in recent technologies to aid future development.

Submissions for ICePhaST-2020 conference include topics related to Electronics, Photonics and Smart Technologies but not limited to the following.

Electronics

Analog and Digital Circuits
Application Specific Integrated Circuits (ASIC)
Electromagnetic and Applied Superconductivity
Electronic Instrumentation
Electronic Materials
Microprocessor and Microcontroller
Nano electronics and micro electronics
Nonlinear Circuits and Systems

Power and Applied electronics Semiconductor Technology System-on-a-Chip (SoC)

Very Large-Scale Integration (VLSI)

Photonics

Beam Control
Laser / Micro resonators
Laser 3D Manufacturing
Mode locking of fiber lasers
Nonlinear Frequency Mixing Processes
Nonlinear Metamaterials and Metasurfaces
Nonlinear Properties of Plasmonic Materials
Nonlinear pulse propagation in optical fibers
Novel Optical Materials and Applications
Optical Sensors and Imaging Systems
Photonic Integration
Quantum electronics
Signal Processing in Photonic
Simulation and Fabrication of Optical Components
Solitons

THz Sources and Detectors
Ultrafast Spectroscopy and its Applications
Ultrashort pulse modeling

Smart Technologies

Automated Transportation Cyber-physical systems and society Data management in IoT e - Healthcare Intelligent data processing Intelligent sensors and Control process **IOT** devices Localization in IoT **Robotics and Automation** Signal Processing **Smart City applications** Smart Wearable Devices **Underwater Communication** Vehicular Communication Systems Wireless Communication and Wireless Sensor networks Selected and presented papers will be published in scopus indexed Journal



Invited Talks from Eminent Researchers



Padma Shri Dr. Mylswamy Annadurai 'The Moon Man' Director, Indian Space Research Organisation Satellite Centre, (ISAC), Govt. of India, Bangalore, India.



Stephen C. Rand, Director, MURI Center for Dynamic Magneto-Optics, University of Michigan,



Prof. Hiroshi Inokawa Shizuoka University, Japan.



Tu N. Nguyen
Director of Network Science, Optimization,
Purdue University Fort Wayne.



Prof. Chennupati Jagadish Australian National University, Australia.



Prof. Hugh Barr Gloucestershire Hospitals, NHS Foundation trust, United Kingdom.



Prof. Bhuvan Unhelkar University of South Florida, Sarasota-Manatee, Australia.



Dr. Thinagaran Perumal Universiti Putra Malaysia, Malaysia.













Dr. Vamsi Krishna Velidi Indian Space Research Organization (ISRO) Govt. of India, Bangalore, India.



Prof. Dipak K. Palit UM-DAE Centre for Excellence in Basic Sciences, Mumbai, India.



Prof. P. K. Datta Indian Institute of Technology, Kharagpur, India.



Dhruba Jyoti Biswas Bhabha Atomic Research Centre, Mumbai, India.



Prof. Subir Kumar Sarkar Jadavpur University, Kolkata, India.



K. R. Murali Mohan Mission Director, NM-ICPS Department of Science & Technology, New Delhi, India.



Dr. Deepa Venkitesh Indian Institute of Technology, Madras, India.



Dr. Balaji Srinivasan Indian Institute of Technology, Madras, India.











Dr. Binsu J Kailath

Indian Institute of Information Technology Design and Manufacturing, Madras, India.



Dr. Madan Kumar Lakshmanan

Council of Scientific & Industrial Research Ministry of Science and Technology, Government of India.



AUTHOR GUIDELINES

Manuscript should be in single column format with line spacing 1.5 and Arial 12 font size Manuscript should be Plagiarism checked and it should be less than 10 % Authors can send their manuscripts to icephast2020@gmail.com

REGISTRATION FEE DETAILS

Participant within India (INR)

From academia : 3000 From Industry : 4000 Participants outside India (USD) : 100

PAYMENT DETAILS

Payment Details (DD / NEFT / IMPS Transfer)

Bank : City Union Bank : Tambaram Extension

Branch Code : 117

Account Name : ECE Association

Account No : 11700 10008 84762

IFSC Code : CIUB0000117

IMPORTANT DATES

Last Date for Manuscript Submission : 01.11.2020
Acceptance Notification : 07.11.2020
Camera Ready Copy of Accepted Papers : 11.11.2020
Last Date for Registration : 11.11.2020

Address for Communication

CONVENOR, ICePhaST-2020

Department of ECE

SRM Institute of Science and Technology

Kattankulathur-603203, Tamilnadu, India.

Mobile No.: +91-7904950182, +91-9841631531

E mail: icephast2020@srmist.edu.in

Website: https://www.srmist.edu.in/icephast-2020









PATRONS

Dr. T. R. Paarivendhar, Chancellor, SRM IST

Mr. Ravi Pachamoothoo, Pro Chancellor (Administration), SRM IST

Dr. P. Sathyanarayanan, Pro Chancellor (Academics), SRM IST

Dr. R. Shivakumar, Vice President, SRM IST

ADVISORY COMMITTEE

Dr. Sandeep Sancheti, Vice Chancellor, SRM IST

Dr. C. Muthamizhchelvan, Pro Vice Chancellor (E&T), SRM IST

Dr. A. Ravi Kumar, Pro Vice Chancellor (Medical), SRM IST

Dr. R. Balasubramanian, Pro Vice Chancellor (S&H), SRM IST

Dr. N. Sethuraman, Registrar, SRM IST

Dr. T. V. Gopal, Dean (CET), SRM IST

Dr. S. Ponnusamy, Controller of Examinations, SRM IST

Dr. K. Ramasamy, Director Research, SRM IST

Dr. S. R. S. Prabaharan, Joint Director Research, SRM IST

Dr. B. Neppolian, Dean Research, SRM IST

Dr. Mohd Anuaruddin Ahmadon, Yamaguchi University, Japan

Dr. Shingo Yamaguchi, Yamaguchi University, Japan

Dr. Albert Lin, National Chiao-Tung University, Taiwan

Dr. Muhammad Ary Murti, Telkom University, Indonesia

Dr. Supavadee Aramvith, Chulalongkorn University, Thailand

Dr. Joonki Paik, Chung Ang University, Seoul, South Korea

Dr. K. Gurushankar, South Ural State University, Russia

Dr. Thinagaran Perumal, Universiti Putra Malaysia

Dr. Iskandar Ishak, Universiti Putra Malaysia

Dr. S. Bala Kumar, University of Madras

Dr. A. Kannan, Anna University

Dr. K. Malathi, Anna University

Dr. V. Sheshagiri Rao, SHAR, ISRO, Govt. of India.

Dr. S. Balaji, IIT Madras

Prof. G. P. Mishra, NIT Raipur

Dr. K. P. Pradhan, IIITDM Kancheepuram

Dr. Tejendra Dixit, IIITDM Kancheepuram

Dr. Asutosh kar, IIITDM Kancheepuram

Dr. Rupam Goswami, Tezpur University

Dr. Deepak Ku. Nayak, MNIT Jaipur

Dr. Rajesh Saha, MNIT Jaipur

Dr. S. S. Karthikeyan, NIT Trichy

Dr. D. Sriram Kumar, NIT Trichy

Dr. Madan Kumar Lakshmanan, CSIR-CEERI, PILANI

Dr. R. Govindaraj, CSIR-CEERI, PILANI

Dr. N. Venkateswaran, Chairman, IETE, Chennai centre

Mr. K. H. Shakthi Murugan, Honorary Secretary, IETE, Chennai centre

Mrs. T. J. Jeyaprabha, Honorary Treasurer, IETE, Chennai centre

Dr. P. T. Ravichandran, Chairman, IE(I), Kattankulathur Local Centre

Dr. T. Rama Rao, SRM IST

Dr. A. Vimala Juliet, SRM IST











Dr. K. Vijayakumar, SRM IST

Dr. C. Gomathi, SRM IST-VDP

Dr. P. Phani Kumar, SRM IST-RPM

CONVENOR

Prof. P. Aruna Priya

COORDINATORS

Dr. K. Kalimuthu

Dr. M. Sangeetha

Dr. Shyamal Mondal

ORGANIZING COMMITTEE

Prof. B. Ramachandran

Prof. R. Kumar

Prof. S. Malarvizhi

Prof. Shanthi Prince

Dr. A. Ruhan Bevi

Dr. J. Selvakumar

Dr. Diwakar R Marur

Dr. J. Manjula

Dr. P. Eswaran

Dr. V. Nithya

Dr. Sabitha Gauni

Dr. S. Dhanalakshmi

Dr. P. Vijayakumar

Dr. R. Manohari

Mrs. N. Saraswathi

Dr. J. Subhashini

Dr. M. Neelaveni Ammal

Dr. V. Sarada

Dr. E. Chitra

Dr. P. Radhika

Dr. R. Dayana

Dr. P. Malarvezhi

Dr. K. Vadivukkarasi

Dr. S. Krithiga

Dr. B. Srinath





