Faculty Development Programme



"Recent Trends in Microwave and beyond Techniques"



Organised by Department of Electronics and Communication Engineering, SRM University-AP, Andhra Pradesh, India

About the University

SRM University-AP, Andhra Pradesh is a multi-stream research intensive university established in 2017 with a focus on diverse fields from Engineering to Sciences and Liberal Arts to Management. Dept. of Electronics and Communication Engineering aims to impart quality and value-based education to the students/ researchers to meet the growing challenges in the industry. The students carry out multidisciplinary research to solve societal problems using state of the art technology.

About the programme

This FDP is 6-day online Programme aimed to enhance research capabilities primarily for the researchers and professionals working in RF/ Microwave, Millimeter Waves, 5G communication, and Metamaterial domain. Eminent Scientists and professors from renowned institutes will share their research experience with budding researchers, and experts from industries will offer Hands-on-Sessions.

Topics

Space exploration and technical challenges in Mars Landing || Metamaterials | RF Energy Harvesting || Microwave Amplifiers/Microwave absorbers || 5G Beam forming Techniques/5G Antenna Implementation and challenges || Characteristic Mode Approach to Antenna and Array analysis || FSS for Aerospace applications: radome and antenna || Dielectric Resonator Antennas for Futuristic Applications || Near and Far-Field Wireless Power Transfer: Trends, Techniques and Recent Developments

Who can participate

Faculty members and PhD scholars of different Universities/ Colleges from Engineering and Sciences. This program will be especially helpful to those participants who are doing or planning to start research career in RF/ Microwave-Millimeter wave domains.

November 15 (8 to 9 pm) | November 16-19 (2 to 5 pm) | November 20 (10 am to 12 pm)





(Certificate will be provided to all the participants for attending the majority of the sessions)

Programme Coordinators

Dr Divya Chaturvedi | Dr Goutam Rana | Dr Ramesh Vaddi **Contact:** events.ece@srmap.edu.in | 7208044054

Speakers and Topics

Day 1: November 15, 2021



Dr Goutam Chattopadhyay Senior Research Scientists NASA-Jet Propulsion Laboratory California Institute of Technology

Topic: Mars Landing and Related Technical Challenges

(L) 8:00 to 9 PM IST; 7:30 to 8:30 AM PDT

Day 2: November 16, 2021



Prof V Subramanian Professor, Department of Physics, IIT Madras

Topic: Electromagnetic Metamaterials basics and application aspects

2:00 to 2:50 PM IST



Dr Mrinal Kanti Mandal Associate Professor IIT Kharagpur

Topic: Rectennas for RF power harvesting

3:00 to 3:50 PM IST **Topic:** Recent Developments In Dielectric Resonator Antennas For

Futuristic Applications



Dr Ravi Dutt Gupta Ace Technologies

4:00 to 5:00 PM IST

Day 3: November 17, 2021



Dr Arokiaswami Alphones Associate Professor, School of Electrical and Electronic Engineering, NTU Singapore

Topic: 5G Beamforming Techniques

2:00 to 2:50 PM IST; 4:30 to 5:30 PM SST



Sumith S Pillai EMAG Solution Engineer, CST Microwave studio, VIAS private limited

Topic: 5G Antenna implementation and challanges

3:00 to 5:00 PM IST

Day 4: November 18, 2021



Mr Sandeep Ghoshal Software Developer, Maths work (Antenna & RF)

Topic: Characteristic Mode Approach to Antenna and Array analysis

2:00 to 3:00 PM IST



Dr Shiv Narayan Principal Scientist, NAL Bangalore

Topic: FSS for Aerospace applications: radome and antenna

3:00 to 3:50 PM IST



Swapnil Gaul Founder - NUMEREGION

Topic: Advanced EM Simulations using Tarang

4:00 to 5:30 PM IST

Day 5: November 19, 2021



Dr Arani Ali Khan Assistant Professor, Dept. of Electrical Engineering IIT Jodhpur

Topic: Microwave Amplifiers

2:00 to 2:50 PM IST



Dr Saptrishi Ghosh Assistant Professor, Dept. of Electrical Engineering IIT Indore

Topic: Microwave Absorbers

3:00 to 3:50 PM IST



Dr Debdeep Sarkar Assistant Professor, Dept. of Electrical Communication, IISc Banglore

Topic: MIMO Antennas and Radars: An EM Perspective

Topic: High-performance Microwave and

Suspended Substrate Transmission Line (SSL)

Millimetre Wave Components Utilizing

4:10 to 5:00 PM IST

Day 6: November 20, 2021



Prof S K Koul Emeritus Professor, CARE, IIT Delhi

10:00 to 10:50 AM IST **Topic:** Near and Far-Field Wireless



Dr Chinmoy Saha Associate Professor, Dept. of Space, IIST Thiruvananthapuram

Power Transfer: Trends, Techniques and Recent Developments

(L) 11:00 AM to 12 PM IST