

REGISTRATION FORM

One Week National Level Online Short Term Training Program (STTP)

on

“Trends and Challenges in Design and Implementation of Reconfigurable Antennas for Increased Spectrum Access in Cognitive Radio Communication” (STTP-III)

Dates: 14th -19th September, 2020

Name: _____

Designation: _____

Institution/Organization: _____

Address: _____

Contact Number: _____

Email: _____

Qualifications: _____

Experience in years: _____

Teaching: Research: Industry: _____

Signature of the Participant

Last date for Registration: 10th September 2020

Address for Communication:

Dr. A. Jhansi Rani

Professor, ECE Dept.

V.R. Siddhartha Engg. College

Kanuru, Vijayawada-520007, AP

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Sri N. Venkateswarlu, President,
Siddhartha Academy of General & Technical
Education (SAGTE), Vijayawada

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Dr. N. N. Sastry, Prof. of ECE & Dean R & D
Dr. B. Panduranga Rao, Prof. of CE & Dean SA

Convener

Dr. P. V. Subbaiah
Professor & Head of ECE

Organizing Advisory Committee

Faculty members of ECE Department

Registration link:

<https://tinyurl.com/VRSEC-ECE-STTP-III>

Eligibility

The STTP is open to faculty members of AICTE approved Institutions, Research scholars and persons from industry and R&D organizations from all over country.

Registration Fee: *NIL*****

Online meeting link will be provided through **whatsapp**.

The number of Participants will be limited to 150

***Note:** E- Certificates will be provided to those participants who attend all the sessions of the program and also appear for the online test as per the norms of AICTE.

AICTE Sponsored



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on

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Implementation of Reconfigurable
Antennas for Increased Spectrum
Access in Cognitive Radio
Communication” (STTP-III)**

Dates: 14th -19th September, 2020

Coordinators

Dr. A. Jhansi Rani, Prof. of ECE

Co Coordinators

Dr. M. Padmaja, Prof. of ECE

Mr. A. Raviraja Asst. Prof. of ECE

Organized by



Department of

Electronics & Communication Engineering

Velagapudi Ramakrishna

Siddhartha Engineering College

(Autonomous)

(Sponsored by Siddhartha Academy of General &
Technical Education)

Kanuru, Vijayawada-520007

Andhra Pradesh

www.vrsiddhartha.ac.in

☎: 0866-2582333, 2584930

About the College:

Velagapudi Ramakrishna Siddhartha Engineering College (VRSEC) was established in the year 1977 as the first Self-financing Engineering College in the state of A.P. It is located in a vast expanse of 24.05 acres of land on the outskirts of Vijayawada city at a distance of about 6Kms from the city centre. The college is offering 7 UG (B.Tech) Courses with intake of 1140, 9 PG- M.Tech with 180, MBA with 60 and MCA with 60. The college has been accredited four times by National Board of Accreditation (NBA) of All India Council for Technical Education (AICTE), New Delhi in respect of all Engineering disciplines and also certified for ISO 9001:2008. It is affiliated to Jawaharlal Nehru Technological University, Kakinada, AP. Autonomous status was conferred by UGC in the year 2006 and extended for 10 years upto 2027-28 without visit to the college, first in AP. It is one among the top 16 Engineering Colleges selected with Rs 6 crores funding under World Bank aid for R&D and PG enhancement programme called TEQIP –II (S.C.1.2) by MHRD, Govt. of India. The institute secured AAA ranking and all India 7th position for the participation by students and faculty in NPTEL/SWAYM. The College received Platinum Award in years 2017, 2018 & 2019 as a Best Industry Linked Technical Institute by AICTE-CII Survey. It is also recognized as “Scientific & Industrial Research Organization (SIRO)” by DSIR. MST, Govt. of India since August 2017.

About ECE Department:

Established in the year 1977, the department of ECE offers B.Tech Programme in Electronics & Communication Engineering with an intake of 240 and two M.Tech Programmes in Communication Engineering & Signal Processing and VLSI Design & Embedded Systems with an intake of 18 each. The department has been accredited by NBA of AICTE four times. More than 40% faculties are with Ph.D. qualification. Led by a team of highly qualified experienced faculty with specializations such as RF & Microwave, Antennae, Digital Signal

Processing, Wireless Communications, Digital Image Processing, VLSI and Embedded systems etc, the department provides excellent academic and research environment to the UG, PG and research students. A centre of Excellence (TIFAC CORE- DST) in Telematics was established in the year 2009 with the state of the art facilities. Having successfully completed many research projects funded by UGC, AICTE, NRSC-ISRO DLRL & ANURAG-DRDO etc., it is also recognized by JNTUK as "**Research Center.**" Faculty members extend guidance to research scholars, produce Ph.D.'s and publish their findings in peer reviewed national and international journals and conferences.

About STTP:

Cognitive radio (CR) is a cutting edge technology for wireless communications that requires the design of novel spectrum sensing schemes with high degree of reliability. These networks can dynamically allocate spectrum to multiple users, thereby easing network congestion. Reconfigurable antennas play important roles in smart and adaptive systems which offer several advantages such as multifunctional capabilities, low front-end processing efforts with no need for a filtering element, good isolation, and sufficient out-of-band rejection. These make them well suited for use in wireless applications such as 4G and 5G mobile terminals.

Note: The STTP is planned in three phases. The basic concepts and fundamentals in the first STTP, current technologies and applications in the second STTP and futuristic trends and challenges in the third STTP. However they are independent.

Objectives of STTPs:

The program focuses on Antenna design aspects and simulation for cognitive radio Communication with a synthesis approach and progressively builds up the background through an illustrative design and characterization set of learning activities of some of the basic concepts of spectrum access techniques

Course Contents:

- Information Centric Networking
- Optimization Techniques
- 6-G Wireless Networks: Artificial Intelligence
- Future of Reconfigurable Antennas: Research Directions
- Challenging issues in Cognitive Radio Communication
- System Integration and Opportunistic Scheduling in Cognitive Radio Networks
- Antennas for 5G Communication
- Array antenna design for cognitive radio application using RF switch
- Integrated circuits for high speed communications –Future trends
- Necessity of integration between 5G and Satcom
- Standardization Efforts
- Possible TN-NTN integration architectures and challenges
- Visible light based communications for beyond 5G networks
- Antennas for airborne and ground applications

Resource Persons:

Dr. Samar Shailendra, TCS Research & Innovation & Visiting faculty at IIT Bangalore

Dr. G. Rama Murthy, Prof. of CSE Mahindra University, Hyderabad

Dr. Dhananjay Kumar, Prof. and HoD of IT, Anna University, MIT Campus, Chromepet, Chennai

Dr. Abhinav Kumar, Associate Professor, Dept. of Electrical Engineering, IIT Hyderabad

Dr. P. Sreehari Rao, Assoc Prof. of ECE, NITW, Warangal

Dr. D. Vakula, Assoc Prof. of ECE, NITW, Warangal

Dr. A. Prakasa Rao, Assoc Prof. of ECE, NITW, Warangal

Dr. S. Anuradha, Assoc Prof. of ECE, NITW, Warangal
Dr. V. Srinivasa Rao, Scientist – F, RCI, Hyderabad

Dr. Sumit Kumar, Research Associate at the Interdisciplinary Centre for Security, Reliability, and Trust of the University of Luxembourg

Er. M. Vinoth Manoharan, Co-Founder & CTO Wilma Communications Groups (Asia | US | Europe)