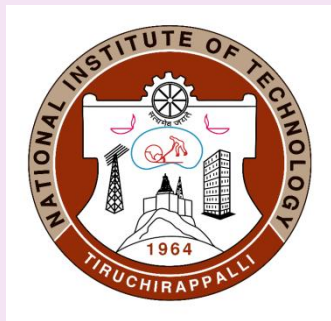




**Scheme for Promotion of Academic and Research Collaboration (SPARC)**  
**Sponsored Two Weeks Workshop on**  
**“Recent Trends on Metamaterial Antennas for Wireless Applications and Deep Learning Techniques”**

**15<sup>th</sup> – 26<sup>th</sup> February 2021**



**Organized by**  
**Department of Electronics and Communication Engineering**  
**National Institute of Technology**  
**Tiruchirappalli, Tamil Nadu-**  
**620015, India**

**COORDINATORS**

**Dr.R.Pandeeswari**

National Institute of Technology  
Tiruchirappalli, Tamil Nadu

**Dr.V.Sudha**

National Institute of Technology  
Tiruchirappalli, Tamil Nadu

**Dr.S.Deivalakshmi**

National Institute of Technology  
Tiruchirappalli, Tamil Nadu

**Course content:**

- MIC Components design Made Easy
- Thirty Six Planar transmission lines for MIC
- Antenna Design and simulations
- Smart Antenna Basics
- Metamaterial Basics
- Matematerial inspired Antennas and equivalent circuits
- Challenges in 5G Network
- New waveforms for 5G
- Reconfigurable Intelligent Surface for future wireless communications
- Miniaturization research issues of RF Circuits
- Broadband monopulse Microstrip Antenna Array for radar Applications.
- DL computations, computer arithmetic in DL, DL processor-FPGA, DL processor - ASIC,
- Advanced memory technology
- SW and HW co design (numerical precision and network compression), DL processor evaluation.
- Biomedical Imaging application, Agriculture application, Biomedical imaging application, Super Resolution application.

**About NIT Trichy**

National Institute of Technology Tiruchirappalli is one among the premier Institutions of India and is well known for its high standards in teaching and research. It offers 10 Undergraduate and 23 Postgraduate programs in the disciplines of Engineering, Science, Architecture and Management. The Government of India under NIT Act has declared it as an Institute of National Importance. NITT retained its 1st position amongst its 31 counterparts in the country in the National Institutional Ranking Framework (NIRF) 2019 Ranking (Engineering) released by the Union Ministry of Human Resource Development and found place in top 10 in engineering colleges in the country.

**About the Department**

The Electronics and Communication Engineering (ECE) Department was established in the year 1968. The vision of the department is to provide valuable resources for industry and society through excellence in technical education and research. The Department offers Under graduate, Post Graduate, Research Degrees (M.S. & Ph.D.) programs. Research in the Department focuses on various disciplines such as Communication Systems, Wireless Networks, Signal and Image Processing, RF MEMS, Microwave Antennas, MIC, Optical Communication, Photonics and VLSI systems.

**About the Program**

This workshop is being organized by NIT-Trichy, University of Saskatchewan, Canada as part of SPARC project and scheduled at Department of Electronics and Communication Engineering, NIT Trichy, Tamil Nadu. The Scheme for Promotion of Academic and Research Collaboration (SPARC) aims at improving the research ecosystem of India's Higher Educational Institutions by facilitating academic and research collaborations between Indian Institutions and the best institutions in the world from 28 selected nations to jointly solve problems of National and International relevance.

## Objectives of the Program

1. To understand the importance of Metamaterial structures and their applications in electromagnetics
2. To utilize the derived characteristics of Metamaterials into design of advanced antennas.
3. To understand the significance of Artificial Intelligence.
4. To understand the modern wireless standards that are crucial for next generation communication.

## Who can participate

- Faculty members.
- Research Scholars, UG and PG students.

## Resource persons

- Dr. Anh Dinh, Professor, Electrical and Computer Engineering, University of Saskatchewan, Canada.
- Dr. Seokbum Ko, Professor, Electrical and Computer Engineering, university of Saskatchewan, Canada.
- Faculty members from NIT, IIST.

## Registration Details

Fill the details and upload the signed copy in

<https://forms.gle/K6EqF4MqTjUHXzhq7>

Last Date of registration:

12<sup>th</sup> February 2021

## Contact information

For any further queries and clarifications,  
Ms. K Harsha sri (8639644560),  
Mr. Ananda Reddy, Mr. Sandhana Mahalingam, Mr. Yugendar Mood  
Mr. M Suman kumar (8338026381),  
Mr. Yaman Yadav

Feel free to contact through e-mail ID  
[sparcnittece@gmail.com](mailto:sparcnittece@gmail.com)

## Mode of Delivery

Online platform – Cisco WebEx

E-certificate will be provided after successful completion of workshop.



## Registration Form

SPARC Sponsored Two Weeks Workshop on  
“Recent Trends on Metamaterial Antennas for  
Wireless Applications and Deep Learning  
Techniques” 15th-26th, February 2021

Name of the Participant: \_\_\_\_\_

Department : \_\_\_\_\_

Gender : \_\_\_\_\_

Designation : \_\_\_\_\_

Qualification : \_\_\_\_\_

Organization : \_\_\_\_\_

Mobile Number : \_\_\_\_\_

Email : \_\_\_\_\_

I agree to abide by the rules and regulations governing the Workshop.

Place:

Date:

Signature of the Participant

Mr./Ms./Dr./\_\_\_\_\_ is a student/employee of our Institution and is permitted to attend this programme.

Place:

Date:

Signature of the Head  
Institution with seal