



Scheme for Promotion of Academic and Research Collaboration



सत्यमेव जयते  
Ministry of Education  
Government of India



**Workshop on**  
**"Novel Beamforming and MIMO Antenna Design for 5G/6G Application  
Employing Time Modulation Techniques"**  
**10<sup>th</sup> to 16<sup>th</sup> March, 2025**

**Sponsored by**

**Scheme for Promotion of  
Academic and Research  
Collaboration (SPARC),  
MoE, GOI**

**Hosted by**

**Department of Electronics and  
Communication Engineering,  
National Institute of Technology  
Warangal, India**

**In collaboration with**

**Department of Electrical  
Engineering (ESAT),  
KU Leuven,  
Belgium**

**Preamble**

Scheme for Promotion of Academic and Research Collaboration (SPARC) is an initiative by the Ministry of Education, the Government of India, to improve the research ecosystem in India. It supports national premier educational institutions by facilitating academic and research collaborations between Indian institutions and the best and selected institutions across the world's 28 nations. The collaborative educational networks will work on common issues of national or international relevance. It encourages international faculty, Indian institution visits and long-term stays to teach courses and conduct workshops for the benefit of Indian researchers and students in the selected research area. Also, it funds Indian students to visit and access the premier laboratories worldwide for training and experimentation. As an outcome patents, monographs, and world-class publications will be produced.

**About NIT Warangal and Department**

The National Institute of Technology (NIT), Warangal is the first in the chain of 31 NITs, Institutes of National Importance established by Act of Parliament. Late Pandit Jawaharlal Nehru laid the foundation stone for this institute on October 10, 1959. The institute is well-known for its R&D, Industrial Consultancy, Continuing Education and Training programs. The institute celebrated Diamond Jubilee in 2018. Warangal is known for its rich historical and cultural heritage. It is situated at a distance of 190 km from Hyderabad airport. Warangal is well connected by rail and road. National Institute of Technology, Warangal campus is 2 Km away from Kazipet

railway station and 12 km away from Warangal railway station.

The ECE Department at NITW has an international reputation for excellence in teaching, research and service. With excellent laboratory facilities and dedicated faculty, the department of ECE offers a broad range of programs that include undergraduate (B.Tech) and postgraduate (M.Tech) in Electronics Instrumentation, Communication Systems and VLSI System Design, and research (Ph.D.) programs. Some of the recent sponsored project undertaken by the department includes Radar Emitter Identification using Neural Networks sponsored by DLRL.

**About KU Leuven**

Katholieke Universiteit (KU), Leuven, was founded in 1425. KU Leuven has risen two places compared to last year's Times Higher Education (THE) World University Ranking, securing the 43rd spot globally while maintaining its position as the top-ranked university in Belgium.

The Department of Electrical Engineering (ESAT) of KU Leuven conducts research at a high international level and provides academic education in the fields of electrical engineering, electronics and information processing. With its 400 or so Ph.D. students, 80+ postdocs and 160 staff members of which 70+ professors, ESAT is a strong international research and education department. ESAT works on numerous contemporary technical innovations in the field of energy, integrated circuits, intelligent systems, information processing, image and speech processing and telecommunication Systems.

## Program Overview

This workshop will provide you a comprehensive introduction to **Beamforming and MIMO antenna design** for 5G/6G applications using time modulated arrays. Key highlights are include:

- ✚ Theoretical lectures from leading experts.
- ✚ Practical sessions with real-world applications.
- ✚ Hands-on training and interactive discussions.

Participants who successfully complete the test at the end of the workshop will receive a **Certificate** signed by all speakers.

## Speakers



**Prof. A. E. Guy Vandebosch**  
Department of Electrical Engineering (ESAT), KU Leuven, Belgium.

[Speaker Profile](#)



**Dr. Gopi Ram**  
Department of Electronics and Communication Engineering, National Institute of Technology, Warangal, Telangana State, India

[Speaker Profile](#)



**Dr. G. Arun Kumar**  
Department of Electronics and Communication Engineering, National Institute of Technology, Warangal, Telangana State, India.

[Speaker Profile](#)



**Prof. S. Anuradha**  
Department of Electronics and Communication Engineering, National Institute of Technology, Warangal, Telangana State, India

[Speaker Profile](#)

## Registration Details

- ✚ **Fee:** Participation is **free of charge**, but timely registration is mandatory.
- ✚ **Capacity:** Limited to 35 faculty/research scholars and 10 industry Participants.

### Registration Link:

<https://forms.gle/X3oz5M9rMd8KmCft7>

## Selection Criteria

Participants will be selected based on Merit. Applicant must be:

- ✚ Fill out the Registration form.
- ✚ Upload an Updated CV.

Selected participants will be notified via email.

## Workshop Materials

- ✚ Working lunch and refreshments will be provided.
- ✚ A Registration kit will be provided.
- ✚ Online access to workshop materials after the event.

## Accommodation

Limited accommodation is available for participants in the Visitors Block of NIT Warangal on **twin sharing basis** (payment required). Participants may contact below for accommodation after receiving the selection Email.

- ✚ Email: [ghnitw@nitw.ac.in](mailto:ghnitw@nitw.ac.in)
- ✚ Phone: +91 870-2468020

## Important Dates

**Application deadline: 28.02.2025**

**Selection notification (Email): 01.03.2025**

**Confirmation from participants: 02.03.2025**

**Workshop Dates: 10<sup>th</sup> to 16<sup>th</sup> March 2025**

## Contact

### Coordinators

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