

Eligibility

Faculty of Engineering and Technical Institutions, Ph.D./ M.S. Research Scholars and Scientist/ Engineers from R&D organizations/Industry.

Registration Fee

Research Scholars	Rs. 1000/-
Faculty members	Rs. 1000/-
R&D organizations/Industry	Rs. 1000/-

* Registration fee payment can be done through online mode (NEFT/IMPS) only.

Registration fee includes workshop kit, course materials, lunch and refreshment for all days of course. No T.A., D.A. will be paid to the participants The registration fee does not include the accommodation charge. The institute offers limited accommodation facility on payment basis at the institute Executive Development Centre (EDC) / Hostels.

The external participants are limited to forty (40) and will be selected on “first come first serve” basis. The selection of participants will be confirmed through email by **May 13, 2019**.

How to reach Prayagraj

Prayagraj is well connected with flights, rail and road transport to the other parts of the country. The Bamrauli airport is 15KM from heart of the city and air link is available from Delhi Mumbai only. Air-connectivity to other parts of India is available from Lucknow (200KM) and Varanasi (130KM). UPSRTC buses connect Prayagraj to most of cities in the Uttar Pradesh. Prayagraj is the headquarters of North Central Railway and is the part of Howrah– Delhi grand rail network.

Chief Patrons:

Prof. Rajeev Tripathi, *Director, MNNIT Allahabad*
Prof. J.P. Pandey, *Director, KNIT Sultanpur*

Patron:

Prof. Sudarshan Tiwari, *MNNIT Allahabad*

Chairpersons:

Prof. Vijaya Bhaduria
Head, ECED, MNNIT Allahabad
Prof. A. K. Singh
Head, Electronics Engineering, KNIT Sultanpur

Workshop Coordinators:

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Dr. Som Pal Gangwar, Elec. Eng., KNIT Sultanpur
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Contact :

Pritam Keshari Sahoo (+91– 7376044112)
Yogesh Tripathi (+91- 6387565145)

Important Dates:

Last Date for registration : May 10, 2019

Confirmation of participation : May 13, 2019

Bank Details:

A/C Name: AWON 2019,
A/C No. 718401013000003
Bank: Vijaya Bank, Branch: MNNIT Allahabad
IFSC: VIJB0007184

One Week 2nd National Workshop On Advances in Wireless and Optical Networks (AWON-2019)

May 27-June 01, 2019

Sponsored by

**TECHNICAL EDUCATION QUALITY
IMPROVEMENT PROGRAMME (TEQIP -III)**

Jointly Organized by

**Department of Electronics and
Communication Engineering**



**MOTILAL NEHRU NATIONAL INSTITUTE OF
TECHNOLOGY ALLAHABAD, PRAYAGRAJ-211004, INDIA
&
KAMLA NEHRU INSTITUTE OF TECHNOLOGY
SULTANPUR- 228118, INDIA**

About MNNIT

Motilal Nehru National Institute of Technology (MNNIT) Allahabad is an Institute with total commitment to quality and excellence in academic pursuits with over fifty years of experience and achievements in the field of technical education. With the enactment of National Institute Technology Act- 2007, the Institute has been granted the status of Institute of National importance. It has been selected as a lead Institution under World Bank funded Government Programme TEQIP-I, TEQIP-II and again for TEQIP-III.

About KNIT

KNIT was initially established as the Faculty of Technology in the year 1976 by Kamla Nehru Memorial Trust. Later, in the year 1983 it was registered as a separate society and renamed as the Kamla Nehru Institute of Technology. The Institute is one of the leading technical Institutions of the region and is responsible for producing best engineers with skill sets comparable with the best in the world.

Course Objective

This workshop aims to bring together the researchers who are interested in Wireless and optical networking to share and discuss the latest research developments and innovative implementations in the design of smart network architectures, protocols, algorithms, services, and applications.

Course Outline

Optical & Wireless Networks

- Introduction to optical communication and networks
- Optical Communication devices
- Free space optical communication
- Wavelength-routed optical networks
- Routing and wavelength assignment
- Algorithms, Optical burst switching
- Network control and management
- Wireless and Ad Hoc Networks

- IoT and Sensor Networks
- Adaptive Communication Systems and Networks
- Wireless Networks Modeling, Algorithms, and Simulation
- Cognitive Radio Networks and Spectrum Management
- Vehicular Communication and Networking
- Hands on training on IoT devices, Network Simulator, and SystemVue Simulator along with signal generator & analyzer
- Hands on training on Spectrum analyzer, OTDR, Optical communication & devices simulators

Speakers

Prof. Rajeev Tripathi, MNNIT Allahabad
Prof. Sudarshan Tiwari, MNNIT Allahabad
Prof. S. S. Pathak, IIT Kharagpur
Prof. M.M. Gore, MNNIT Allahabad
Prof. Bijoy Krishna Das, IIT Madras
Prof. Vishnu Priye, IIT(ISM) Dhanbad
Prof. Manav Bhatnagar, IIT Delhi
Prof. Y.N. Singh, IIT Kanpur
Prof. Shekhar Verma, IIIT Allahabad
Prof. Neeraj Tyagi, MNNIT Allahabad
Prof. Ghanshyam Singh, MNIT Jaipur
Prof. Chiranjeep kumar, IIT(ISM) Dhanbad
Prof. J.P. Saini, NSUT Delhi
Dr. Shailendra Kumar Varshney, IIT Kharagpur
Dr. Brajesh Kumar Kaushik, IIT Roorkee
Dr. Vivek Singh, BHU Varanasi
Dr. Rajiv Tripathi, NIT Delhi
Dr. Rajat Singh, IIIT Allahabad
Dr. Nitesh Purohit, IIIT Allahabad
Dr. K. P. Singh, IIIT Allahabad
Dr. Manish Kumar, IIIT Allahabad

**Department of Electronics and
Communication Engineering
Motilal Nehru National Institute of Technology Allahabad**

&

Kamla Nehru Institute of Technology, Sultanpur

REGISTRATION FORM

**One Week 2nd National workshop
on**

**Advances in Wireless and Optical Networks
(AWON-2019)
Under TEQIP-III
May 27-June 01, 2019**

Name: _____

Designation: _____

Department: _____

Institute:/Organization _____

Highest Qualification: _____

Address For Correspondence: _____

Phone: _____ Mobile No.: _____

Email: _____

Accommodation Required: YES/NO

Registration Fee Details: Amount: _____

Transaction. No. : _____ Date: _____

Issuing Bank Details: _____

Signature of Applicant with Date

N.B.: The scanned copy of completed registration form and online payment details can be sent by e-mail to the course email id: awon2k19@gmail.com with a copy to the coordinator by **May 10, 2019.**

**ELECTRONICS AND COMMUNICATION
ENGINEERING DEPARTMENT**

27th May



01st June

2019

ORGANISING

**TEQIP-III-SPONSORED
2nd NATIONAL WORKSHOP**

ON

Advances in Wireless and Optical Networks

LIST OF SPONSORES
Announced Soon

AWON-2019



**MOTILAL NEHRU NATIONAL INSTITUTE OF TECHNOLOGY
ALLAHABAD**

&

**KAMLA NEHRU INSTITUTE OF TECHNOLOGY
SULTANPUR**



ABOUT THE WORKSHOP

In today's information age, the need for fast, accurate and reliable communication systems is paramount. The increase in electronics methods for manipulating, interpreting and communicating information has revealed the limits of traditional communication technologies such as radio waves and copper wires. In the modern age of information technology, the Optical communication, which transmit information in the form of short optical pulses over long distances at exceptionally high speed with minimum loss. In practice, the communication networks that provide internet connectivity both to homes and mobile devices on optical, wireless and wired networks for the transport of data. As we know that, wireless and optical communications technologies underpin many of the services and devices that are a part of modern society. In practice mobile phone wirelessly connected to the optical communications network. In optical communications network, mobile phone wirelessly connected through to photonic and wireless sensors that enable devices. The demand for increasing bandwidth, channel capacity and coverage to support new and enhanced services in both fixed and mobile locations requires faculties with a good understanding of both wireless and Optical communication technologies, ranging from device concepts to system design.

Now a day's optical wireless network (OWN) is rapidly gaining popularity as an effective means of transferring data at high rates over short distances. The OWN terminal includes an optical transmitter and a receiver positioned, for example, on high-rise buildings separated by several hundred meters. Light beams propagating through the atmosphere carry the information from the transmitter to the receiver. OWC boasts many advantages over its rivals. Notably, OWC facilitates rapidly deployable, lightweight, high-capacity communication without licensing fees and tariffs. However, OWC still faces many challenges, including how to improve communication performance in adverse weather conditions or during building sway. So, we will evaluate/discuss some of the exciting new research approaches that have been suggested to deal with these issues, including optimization of optical and wireless networks, and solutions at the network level.

OBJECTIVES

One of the specific objectives of the workshop is to offer training programmes on current topics that cover important state-of-the-art technologies employed in a telecommunication network infrastructure.

The training programmes intend to create awareness of the evolving telecom environment and provide details to the professionals from industry and academia.

The interaction with participants during the course period and even subsequently is likely to lead to useful research collaboration with the participating organizations, while providing useful feedback to improve the scope of the course in future.

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Dr. Vivek Singh, BHU, Varanasi
Dr. Rajat Singh, IIIT Allahabad
Dr. Nitesh Purohit, IIIT Allahabad
Dr. K. P. Singh, IIIT Allahabad
Dr. Manish Kumar, IIIT Allahabad

OVERVIEW

AWON-2019

Introduction to optical communication and networks

Optical Communication devices

Free space optical communication

Wavelength-routed optical networks

Routing and wavelength assignment

Algorithms, Optical burst switching

Network control and management

Wireless and Ad Hoc Networks

IoT and Sensor Networks

Wireless Networks Modeling, Algorithms, and Simulation

Cognitive Radio Networks and Spectrum Management

Adaptive Communication Systems and Networks

Vehicular Communication and Networking

Hands on training on IoT devices, Network Simulator, and SystemVue Simulator along with signal generator & analyzer

Hands on training on Spectrum analyzer, OTDR, Optical communication & devices simulators

CHIEF PATRONS

Prof. Rajeev Tripathi, *Director, MNNIT Allahabad, Prayagraj*

Prof. J. P. Pandey, *Director, KNIT Sultanpur*

PATRON

Prof. Sudarshan Tiwari, *ECE Dept., MNNIT Allahabad*

CHAIRPERSONS

Prof. Vijaya Bhaduria, *Head ECED, MNNIT Allahabad, Prayagraj*

Prof. A. K Singh, *Head Electronics Engineering, KNIT Sultanpur*

WORKSHOP COORDINATORS

Dr. Y. K. Prajapati, *ECED, MNNIT Allahabad, Prayagraj*

Dr. Arun Prakash, *ECED, MNNIT Allahabad, Prayagraj*

Dr. Som Pal Gangwar, *Electronics Engineering, KNIT Sultanpur*

CATEGORY	COURSE FEE
Full-time Research Scholars/Student	INR. 1,000/.
Faculty Members	INR. 1,000/.
Industry Person	INR. 1,000/.

+ Registration Fee includes free working lunch and refreshment for all workshop attendees. Institute offers Accommodation and Dining facilities on payment basis (for Breakfast and Dinner) at the institute Executive Development Centre (EDC) / Hostels.

+ No TA/DA will be given to the participants from the institute.

HOW TO REGISTER ?

+ Registration fee payment can be done through online mode (NEFT/IMPS) only. The scanned copy of completed registration form and online payment details can be sent by e-mail to the course e-mail id: awon2k19@gmail.com with a copy to the coordinator by May 10, 2019.

+ Confirmation mail will be sent to the interested applicants only after receiving the payment details.

+ Selection will be done on first come first serve basis and motivation of the candidate in addition to good recommendation.

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IFSC: VIJB0007184

LAST DATE OF REGISTRATION: May 10, 2019

CONTACT US

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FOR ANY QUERIES

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