Short Term Course On Design of Microwave Antennas for Wireless Communication Applications

A Continuing Education Program of Indian Institute of Technology Kharagpur

Aug. 21, 2017 – Aug. 26, 2017



Coordinator

Dr. Akhilesh Mohan

Department of Electronics and Electrical Communication Engineering, I.I.T. Kharagpur, 721302.

E-mail: am@ece.iitkgp.ernet.in

Organized by

Department of Electronics and Electrical Communication Engineering, Indian Institute of Technology Kharagpur – 721 302

OBJECTIVES AND SCOPE

The requirement for efficient and lowprofile antennas has fuelled research work in the development of antenna structure with performances considerably enhanced over the traditional antenna structures and methodologies. In this context, the development of antennas for modern wireless communication systems has taken significant strides in overcoming fundamental limitations in the design of broadband and efficient antenna structures

Primary focus of this course is to introduce design challenges of several antennas and their possible solutions which should be further investigated for the future generation wireless communication networks. Major issues those will be addressed in the course are given below:

- Basic Antenna Theory
- Substrate Integrated Waveguide (SIW) Antennas
- Metamaterial Antenna
- Dielectric Resonator (DR) Antennas
- Leaky Wave Antennas
- On-chip Antennas
- Multiple Input Multiple Output (MIMO) Antenna
- Ultrawide Band (UWB) Antennas
- Microwave Components
- Open research issues.

COURSE FACULTY

Faculty members and experts from IIT Kharagpur and some other institutes.

WHO SHOULD ATTEND

Faculty members from University and Engineering Colleges, Research Scholars, M. Tech final year students, practicing RF engineers, professionals and functional managers, administrators in the mobile phone, satellite communication and radar industries.

ELIGIBILITY

B.E. / B. Tech./ M.E. / M.Tech. or equivalent degree in Electronics/ Telecommunication / Electrical Engineering.

LOCATION

The Institute is about 5 Km away from Kharagpur Railway Station. Taxis, Autorickshaws, are available as transport.

ACCOMMODATION

Efforts will be made to book accommodation in the guest houses on receipt of request from the participants by 14th August, 2017. Limited shared accommodation in the guest house is available which will be distributed according to the date of application received.

Registration: Faculties from AICTE approved Engineering Colleges/ Universities

Thirty seats are available under this category. There is no course fee for faculties from AICTE approved institutions. Free of cost shared accommodation in the guest house, food and registration kit will be provided. TA for participants is limited to AC-3 tier train fare by shortest route. Travel by car is not advisable. However, a Demand Draft of Rs. 5,000/- (drawn in favor of "CEP-STC, IIT Kharagpur" payable at Kharagpur) should be enclosed with the application form which will be refunded to the participants attending the course. Shortlisted applicants will be intimated by email.

Registration: for others

(a) Scientists / Technologists / Engineers from industry, government or other institutions:

Course fee: 20,000/-.

(b) Registered students **Course fee: 10,000/-.**

Under this category, candidates will be provided course materials, working lunch, tea & snacks during the course hours. However, TA, boarding and lodging expenses should be borne by the participants.

Candidates should send the Demand Draft according to their category drawn in favor of

"CEP-STC, IIT Kharagpur" payable at Kharagpur along with the completed registration form to Prof. Akhilesh Mohan, Department of E and ECE, I.I.T., Kharagpur – 721 302, West Bengal, INDIA.

All participants should bring a letter of nomination from their head of institution stating that they are being deputed for the course. Also they are requested to send a soft copy of the application form and the demand draft to the email addresses given below.

Certificate:

A certificate of participation would be issued to all the participants from the Office of Dean, Continuing Education, I.I.T. Kharagpur.

Enquires should be addressed to:

Dr. Akhilesh Mohan, Department of Electronics and Electrical Communication Engineering, IIT Kharagpur Kharagpur – 721 302

E-mail: <u>am@ece.iitkgp.ernet.in</u> <u>mishrasudha06@gmail.com</u>

Phone: 91-3222-283520 (O)

9434205153/8972433708

Fax : 91-3222-255303/283534

Short term course on "Design of Microwave Antennas for Wireless Communication Applications", August 21- 26, 2017

REGISTRATION FORM

Please complete the details below and mail it to the address overleaf along with the demand draft.

2. Designation:
3. Address (Office):
4. Phone (Mob.):
Phone (Res.):
E-mail (compulsory):
5. Male/ Female:
6. Highest academic qualification:
7. Accommodation Required (Y/N):
8. Bank Draft NoDate
RsBank.
Date: Signature of the Applicant
Place:
Compulsory for students:

Signature of Head of the Department with seal.