AICTE Sponsored Short Term Course
On
Recent Advances on Passive and Active Components at High Frequencies

June 25-30, 2018

Organized by
Department of Electronics Engineering, IIT(BHU), Varanasi-221005

Quality Improvement Program Center
Indian Institute of Technology (BHU)
Varanasi – 221005, (U.P.)

Phone: 0542 - 2369434
Email: coordinator.qip@iitbhu.ac.in

About the Course
In the modern era, high frequency communications play very important role due to the availability of very high bandwidth. Most of the modern day’s communication take place either in microwave or in optical region. This leads to the demand of the devices to be made in compact form. While analytical modeling gives the physical inside of the device characteristics, simulations at high frequencies can provide the first hand information of various advanced microwave and optical devices without going through complex mathematical modeling and experiment followed by fabrication.

The basic objective of this short-term course is to introduce various modelling and simulation techniques used for the performance characterization of advanced high frequency devices including antenna, metasurface, frequency selective surfaces, photonic bandgap structures, quantum dots etc. to the young faculty members of various technical institutions.

Course Content
The tentative list of topics to be covered in this course are:

- Microwave Communication
- Antenna Systems
- Metasurfaces
- Optical Communications
- Modeling in Ansys HFSS
- Modeling in Microwave CST Studio

Course Coordinator
Dr. Somak Bhattacharyya
Department of Electronics Engineering
IIT(BHU), Varanasi-221005
Mobile: +91-7376297864
E-mail: somakbhattacharyya.ece@iitbhu.ac.in

List of Short Term Courses during 2018-19

<table>
<thead>
<tr>
<th>No.</th>
<th>Department</th>
<th>Course Coordinator</th>
<th>Title of Short Term Course</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Electronics</td>
<td>Dr. Somak Bhattacharyya</td>
<td>Recent Advances of passive and active components</td>
<td>25-30 June, 2018</td>
</tr>
<tr>
<td>2.</td>
<td>SMST</td>
<td>Prof. Rajiv Prakash, Dr. Akhilesh Kumar</td>
<td>Advance Materials for Sensors and Biosensors</td>
<td>02-07 July, 2018</td>
</tr>
<tr>
<td>3.</td>
<td>Biomedical</td>
<td>Dr. Shruti Sharma, Dr. Marshal</td>
<td>BioMEMS and Biomaterials</td>
<td>08-14 July, 2018</td>
</tr>
<tr>
<td>4.</td>
<td>Mathematics</td>
<td>Dr. Lavanya Selvaganesh</td>
<td>Advances in Graph Theory with applications to Network Sciences</td>
<td>06-11 Aug, 2018</td>
</tr>
</tbody>
</table>

5. Biochemical
   Prof. Subir Kundu
   Cell Processing Technology and Engineering - A New Paradigm
   13-18 Aug, 2018

6. Metallurgy
   Dr. Kaushik Chattopadhyay
   Mechanical Properties and Deformation Behavior of Structural Materials
   27 Aug-01 Sept, 2018

7. Biomedical
   Prof. Nira Misra
   Polymers as Bionanomaterials
   01-07 Sept, 2018

8. Civil
   Dr. Ankit Gupta, Dr. Nikhil Sahoo Shishir Gaur
   Recent Development in Pavement Analysis and Design
   17-22 Sept, 2018

9. Civil
   Dr. Anurag Ohri, Dr. Medha Jha, Dr. Shishir Gaur
   Principles and Applications of GIS
   24-29 Sept, 2018

10. Mechnical
    Prof. S.P.Tewari
    Recent Advances in Casting and Welding
    01-07 Oct, 2018

11. Mechanical
    Dr. Cherian Samuel
    Supply Chain Management
    08-13 Oct, 2018

12. Electronics
    Dr. N.S. Rajput
    Smart Sensors and Systems
    15-20 Oct, 2018

13. Mechanical
    Dr. Jahar Sarkar
    Efficient Energy Conversion in Harmony with Environment
    29 Oct – 02 Nov, 2018

14. Mining
    Prof. S.K.Sharma
    Sustainable Development vis-à-vis Technology
    25 Nov-01 Dec, 2018

15. Computer Science
    Dr. Pratik Chattopadhyay
    Machine Learning in Image & Video Analytics
    3-9 Dec, 2018

16. Computer Science
    Dr. Tanima Dutta, Prof. K.K. Shukla
    Deep Learning : Theory and Practice
    10-22 Dec, 2018

17. Mathematics
    Dr. Sunil Kumar
    Computational Methods for Integral and Differential Equations
    10-16 Dec, 2018

18. SMST
    Dr. Akhilesh Kumar, Dr. Chandan Upadhyay
    Material Characterization for Engineers
    24-29 Dec, 2018

19. Metallurgy
    Dr. G.S. Mahobia
    Metallurgical Failures
    11-16 Feb, 2019
Application Form for
QIP SHORT TERM COURSE
on
Recent Advances on Passive and Active Components at High Frequencies
June 25-30, 2018

1. Name (block letters):

2. Designation & pay scale:

3. Organization:

4. Address for communication with pin code:
   Mobile No.:         E-mail:

5. Highest Academic Qualification:

6. Specialization:

7. Experience (in years):
   (a) Teaching:              (b) Industrial:

8. Amount of TA for to-and-fro III AC railway fare (only for the AICTE approved college teachers):

9. Whether Accommodation (to be provided strictly on sharing basis) is required:

Please register me for the course on “Recent Advances on Passive and Active Components at High Frequencies” to be held at IIT (BHU) Varanasi during June 25-30, 2018.

Place:

Date: Signature of the applicant

SPONSORSHIP

Prof./Dr./Mr./Ms./Mrs./__________________________ is an employee of our AICTE approved institute and his/her application is hereby sponsored. The applicant will be permitted to attend the short-term course on Recent Advances on Passive and Active Components at High Frequencies at IIT (BHU) Varanasi during June 25-30, 2018 of the Short Term Course, if selected.

Date: Signature of Sponsoring Authority
    Designation: (Official Seal)

Refundable Security Deposit Details:
*DD No.: Date:
Bank: Amount: ₹ 2000/-

Signature of the Applicant

*DD should be drawn in favor of the Registrar, IIT(BHU), Varanasi-221005 payable at the SBI, IT Branch (Code:11445), BHU, Varanasi.

Registration for QIP Sponsored Teachers from AICTE approved Institutions: Participants should bring a letter of nomination from their head of institution stating that they are being deputed for the course. There is no registration/accommodation fee. However, a Demand Draft of INR 2,000/- (drawn in favor of “Registrar, IIT(BHU), Varanasi”) should be enclosed with the application form which will be refunded to the participants attending the course. Total reserved seats for QIP candidates is 30 which will not be awarded on first-cum-first served basis. The refund amount will not be returned to those who will be absent.

ABOUT THE DEPARTMENT

Department of Electronics Engineering came into existence as an offshoot of Electrical Engineering Department in the year 1971 (when Banaras Engineering College, College of Mining and Metallurgy and College of Technology had been amalgamated to form the Institute of Technology in its present form). The intake every year of the Department is 79 in the B.Tech. level and 47 in the M.Tech. level. Besides teaching students of our own discipline (Electronics Engineering), we also offer the basic courses in Electronics Engineering to almost all the Departments of the Institute, we also teach advanced-level courses to the students of Electrical Engineering and Computer Engineering Departments. We have a training and placement section in the Institute through which most of our students are professionally placed in various jobs.

HOW TO REACH

Varanasi Railway Station is well connected to almost all parts of the India. IIT (BHU) is also well connected to Mughal Sarai and Manduadih Railway Stations by regular auto and taxi services. The Lal Bahadur Shastri International Airport, Babatpur, Varanasi is also well connected via Air to Delhi, Mumbai, Kolkata, Hyderabad, and Bengaluru. There are frequent flight services from New Delhi. The Institute is located in the extreme south of the Varanasi city and about 7 km away from Varanasi Railway Station and 30 km from the Babatpur (Varanasi) airport. Pre-paid Taxis and Auto-Rickshaw can be hired from the airport and rail way stations.

Registration

Important Dates
Last date for receiving application
June 9, 2018
Confirmation of Participation
June 11, 2018

Contact Details
Dr. Somak Bhattacharyya
Department of Electronics Engineering
IIT(BHU), Varanasi-221005
Tel: 0542-2366638; Mobile: +91-7376297864
E-mail: somakbhattacharyya.ece@iitbhu.ac.in
qipstc.ece@gmail.com

Participation Certificate
Certificate of participation will be issued to all the participants only after completion of the course.

Important Dates
Last date for receiving application
June 9, 2018
Confirmation of Participation
June 11, 2018

Contact Details
Dr. Somak Bhattacharyya
Department of Electronics Engineering
IIT(BHU), Varanasi-221005
Tel: 0542-2366638; Mobile: +91-7376297864
E-mail: somakbhattacharyya.ece@iitbhu.ac.in
qipstc.ece@gmail.com