The registration fee includes the instructional materials, refreshments between sessions and lunch. Accommodation will be provided to the outstation participants on payment basis, subject to the availability within the campus. Separate request is to be submitted in advance for the accommodation arrangement. TA/DA will not be paid for any participants.

SELECTION AND MODE OF PAYMENT

Selected candidates will be intimated through e-mail. They have to remit the necessary course fee to the bank/through DD as per the details given below before the deadline.

Participants from abroad: US $100
Industry/ Research Organizations: INR 5000
Academic Institutions: INR 2500
PhD Scholars/UG/PG students: INR 1000

Account Name**:**
REGISTRAR (Sponsored Research) MNIT Jaipur
Account No**: 676801700388**
Bank**: ICICI BANK LTD**
Branch**: MNIT Jaipur**
Branch Code**: 006768**
IFSC**: ICIC0006768**
MICR Code**: 302229031**

The DD/Receipt of NEFT and the original registration form must reach to the coordinator on or before 8th 14th Aug. 2017. Early registrants will be given preference in the short-listing process (seats are limited).

ABOUT THE GIAN SCHEME

MHRD, Govt. of India has launched an innovative program titled "Global Initiative of Academic Networks (GIAN)" in higher education, in order to gather the best international experience. As part of this, internationally renowned academicians and scientists are invited to augment the country's academic resources and accelerate the pace of quality reforms. *www.gian.iitkgp.ac.in*

ABOUT MNIT JAIPUR

The Institute was established in 1963 as Malaviya Regional Engineering College, Jaipur as a joint venture of the Government of India and the Government of Rajasthan, Subsequently; on June 26, 2002 it has been given the status of National Institute of Technology and on 15 August 2007, proclaimed Institute of National Importance through Act of Parliament. The Institute is fully funded by Ministry of Human Resource Development (MHRD), Government of India. More than 12,000 students have already been graduated since its establishment.

ABOUT THE DEPARTMENT

Bachelor's course in Electronics & Communication Engineering was first started in 1981-82, initially in the Electrical Engineering Department. In 1994, the Department of Electronics & Communication Engineering came into existence as a separate entity. The first Master's degree programme was started in 1992-93. The Department also offers PhD programme in relevant areas. The Department has received grants from government & semi- government agencies such as MHRD, AICTE, Ministry of information Technology, UKEIRI, DST and ISRO. The Department has active collaborations with renowned Institutes & research institutes in India and abroad.

CONTACT DETAILS

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GIAN Course on

Research Challenges in Wireless Technologies for 5G

28 Aug – 1 Sep, 2017

Call for Registration and Participation

International Faculty
Dr. Vinod Kumar
Director (retd) Wireless Research Programme in ALU Bell Labs, France.

Host Faculty / Course Coordinator
Prof. V. Sinha
Academic Chairperson, E & ICT Academy

Dr. Vijay Janyani
Course Coordinator
Dept. of Electronics & Communication Engg.
Malaviya National Institute of Technology, Jaipur.

Organised by
Dept. of Electronics & Communication Engg
Malaviya National Institute of Technology,
JLN Marg, Jaipur, Rajasthan, India.
Pin: 302017

OVERVIEW OF THE COURSE

It is well recognized that the need for fast access to information and data forms an integral part of life in the present day "digital world". The foremost requirement of 5G wireless and mobile communication networks is the ability to support transmission speeds of the order of 100s of Mb/sec to 1Gb/sec. Such transmission speeds associated (at times) with very low latency are a must for satisfying the stringent QoE (Quality of Experience) requirements of upcoming applications. The networks of future (towards 2025) would thus be required to cater for an overall 1000x capacity increase in comparison to the systems deployed during the earlier part of the present decade. These objectives will be achieved through the introduction of new technologies both in Radio Access Networks (RAN) and in Core Network (CN). Additionally, judicious combinations of newly designed 5G technologies and enhanced versions of the present 3GPP (LTE Advanced) and IEEE 802.xx family of technologies are expected to prove useful in efficiently meeting the above requirements.

COURSE CONTENT

➢5G Relevant Wireless Network Performance Metrics;
➢ Key radio interface technologies for 5G
➢Advanced MIMO & Massive MIMO (Large Scale Antenna Systems);
➢Error Correction Coding for Ultrareliable Transmission in 5G;
➢Heterogeneous Networks (HetNets) in 5G;
➢Very High Bit Rate Coverage in 5G with mmWave Technology;
➢Challenges of Integrating IoT Solutions in 5G
➢ Trade-offs in RF product design impacted by network evolution for 5G
➢ Co-operation mechanisms between international research bodies; funded research programmes and standardisation bodies for 5G

COURSE FACULTY

Dr Vinod Kumar has 35+ years of experience in R&D in mobile communication systems. During 27 years of his tenure in Alcatel-Lucent he has initiated and contributed to multiple research projects in 2G to 5G technologies namely GSM, GPRS, EDGE, UMTS, HSPA, LTE, LTE-A and LTE-pro systems and in wireless ad-hoc networking. additionally, he has been involved in standardisation and marketing support activities and in Patent Management related to above technologies. Dr Kumar is Director (retd) in Wireless Research programme in ALU Bell Labs, France. He holds 33 patents and has 70+ publications. During the past 20 years, he has been visiting professor in Wireless Communications in several institutions in France e.g ENST-Paris; Central-Supelec and Eurecom and has widely lectured on "5G" in IEEE events.

Prof. V Sinha, an IEEE Fellow, has more than 50 years of progressive professional experience in teaching and research. Major part of his professional career has been at the Indian Institute of Technology, Kanpur in various academic capacities. He obtained his DSc in Electrical Engineering from University of Ljubljana, Slovenia. He has the experience of working in Europe (IJS,Ljubljana; RWTH Aachen, Germany; EPFL Lausanne, Switzerland), South America (INPE, Sao Paulo, Brasil) as well as in North America (Puerto Rico). His areas of interests are technical education, mobile communication, error control coding, satellite communication and telematics.

Dr Vijay Janyani obtained Bachelor's and Master's degrees in E&C Engg. from MNIT Jaipur and PhD from University of Nottingham, UK under Commonwealth Scholarship Plan. He has over twenty years of teaching and research experience and is currently working at the Department of ECE at MNIT Jaipur with research interests in communication techniques, including optical communication, free space optics and photonic devices. Dr. Janyani is SMIEEE, FOSI, SMOSA, SMSPIE, and FIETE.

WHO CAN PARTICIPATE?

(1) Practicing Engineers, Business Executives (Tech) as well as researchers from vendor, operator and government organizations including R&D laboratories.
(2) Graduate and Post-graduate students (BTech/MSc/MTech/PhD) as well as Faculty from academic institutions and technical institutions.

HOW TO REGISTER?

Step 1: Web Portal Registration:
Visit GIAN Website at the link: http://www.gian.iitkgp.ac.in/GREGN/index and create login User ID and Password. Fill up the blank registration form and do web registration by paying Rs.500/- online through Net Banking/ Debit/ Credit Card as per instructions given there in. This provides the user with life time registration to enroll in any number of GIAN courses offered. Skip this step, if already registered.

Step 2: Course Registration:
Login to the GIAN portal again with the user ID and password already created in Step1. Click on course registration option at the top of registration form. Select the course titled "Research Challenges in Wireless Technologies for 5G" from the list and click on Save option. Confirm your registration by clicking on Confirm Course. Also, send the filled-in registration from to the contact address by post/e-mail.

IMPORTANT DATES

Last date for receiving the GIAN registration form and fee deposition: ~~08~~ **14 Aug 2017**
Course dates: **28th Aug -1st Sep 2017**
 Selection will be as per the eligibility, and on FCFS basis.

For more details/latest updates, please visit:
www.mnit.ac.in, or
http://mnit.ac.in/news/news.php?news_id=2072