Chief Patron

Prof. Mushtaq Siddique,
(**Hon'ble Vice Chancellor, IUST**)

Patron/Convener

Prof. Ayaz Hassan Moon,
(**Dean School of Engineering and Technology, IUST**)

Co-ordinator

Dr. Shahid Mehraj Shah,
(*Assistant Professor, Dept. of ECE, IUST*)

Organizing Chairperson

Dr. Asifa Baba,
(*Assistant Professor, Dept. of ECE, IUST*)

Organizing Committe

Dr. Khalid Muzaffar (AP, Dept. of ECE, IUST)
Er. Zahid Khaki (AP, Dept. of ECE, IUST)
Dr. Burhan Khurshid (AP, Dept. of ECE, IUST)
Er. Aasim Ashai (AP, Dept. of ECE, IUST)
Dr. Imtiyaz Anwar (AP, Dept. of ECE, IUST)
Er. Nayera Nahvi (AP, Dept. of ECE, IUST)
Dr. Shoaib Banday (AP, Dept. of ECE, IUST)
Er. Aabida Yosuf (AP, Dept. of ECE, IUST)
Er. Aasif Bashir (AP, Dept. of ECE, IUST)
Er. Aarthi Rathi (AP, Dept. of ECE, IUST)

Target Audience and expected outcomes

The workshop is intended for research scholars, faculty members, graduate students and senior undergraduate students. The expected outcomes of the workshop are exposure to 5G technology, its theoretical and practical aspects and also hands on experience using 5G simulation software.

Workshop Contents

- The evolution of 5G technology
- Massive MIMO for 5G
- Cognitive Radio for 5G
- mmWave for 5G
- Multiple access in 5G
- Challenges and solutions in 5G implementation

Important Dates

Last Date for Registration
21 September 2018
Workshop date
24-26 September, 2018

Registration details

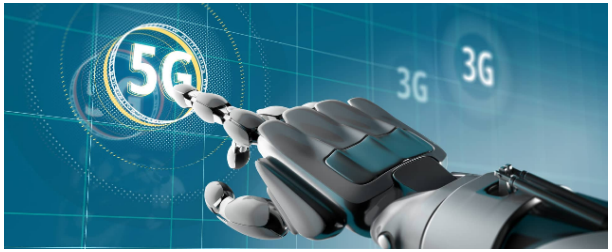
Faculty	Rs. 1000
Students	Rs. 500
Maximum seats	150

How to Register

Transfer registration fee to the following account:
A/C Number: **0334040100010759**
IFSC Code: **JAKA0AWANTI**
Branch: J&K Bank, Awantipora.
Name of account holder: Dr. Khalid Muzaffar
Then fill registration form **online** on
https://sites.google.com/view/5g-workshop-iust/home

Contact

Dr. Shahid Mehraj Shah (**9535145886**),
e-mail: **shahid.nit@gmail.com**



3-Day Workshop on

5G: An Evolution to Revolution

24-26 September 2018

Organized by

Department of **Electronics and Communication Engineering**,
School of Engineering and Technology

Sponsored by

TEQIP-III
Technical Education Quality Improvement Programme

Islamic University of Science and Technology
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About Workshop

The revolution of wireless communication has already impacted our lives in various ways. 4G mobile technology is already in place and providing high data rates, multimedia content and internet connectivity for every common mobile user. We are now heading towards 5G technology, which can be best described as an evolution to revolution. The key purpose of 5G technology is not just to connect mobiles, but to connect devices, machines, drones and medical equipments etc. It is right time for researchers, engineers to learn about 5G technology and also contribute to this technology in terms of new ideas and innovations. This workshop brings expertise from leading academia and industry together before its audience to exchange ideas, present new results, and provide future visions on 5G Technology.

About IUST

The Islamic University of Science and Technology (IUST) was established in 2005 with an objective to create a fertile environment for young minds to blossom and develop into well-grounded torch bearers of our future. The university provides an all round education to its students that encompasses academics, moral, physical and mental development.

About School of Engineering & Technology (SOE&T)

SOE&T constitutes the largest school of study in the University with around 2400 students on roll. The school is en-richened by the presence of large number of highly qualified faculty from institutes of excellence like IISc/IIT/NIT etc. SOE&T is comprised of seven departments offering B. Tech, M.Tech, MCA, M.Sc (IT) programmes. SOE&T shall be offering PhD programme from the current session also. SOE&T envisions to focus on outcome based education and achieve NBA accreditation for all its programmes by implementing TEQIP-III project.

About Department of ECE

ECE department was established in 2007. During short span of time, the department has achieved remarkable progress in terms of developing state of the art infrastructure as well as attracting highly qualified faculty. Currently the department offers B. Tech programme and PhD programme. The alumni of the department are well placed both in the government as well as in private sector and have been successful in creating a professional niche for themselves.

About the Resource Persons

Dr. Muhammad Zafar Ali Khan: received the B.E in ECE from Osmania University, M.Tech from IIT Delhi; and the Ph.D. degree in ECE from IISc Bangalore, in 1996, 1998 and 2003, respectively. He was a design engineer with Sasken, Bangalore in 1999, a senior design engineer with Silica Semiconductors, Bangalore from 2003–2005, a senior member of technical staff at Hellosoft, India in 2005, and an assistant professor at IIIT Hyderabad (2006–2009). He is currently with IIT Hyderabad as a professor and HOD department of EE. The space time block codes designed by him have been adopted by the WiMAX Standard. He is also a recipient of the INAE young engineer award 2006. His research is in coded modulation, space-time coding, and signal processing for wireless communications.

Dr. Nadeem Akhtar: received his B. Sc (Engg) from AMU, ME from IISc Bangalore and Phd from University of Surrey in 1998, 2000 and 2007 respectively. He has held key positions in industries like Motorola, Centre of Excellence in Wireless technology, Chennai. Currently he is Principal Wireless Architect at Mojo Networks based in Mumbai.

Dr. Aqib Patel: received the B. Tech. degree in ECE from NIT Warangal in 2010 and a Ph.D. from IIT Bombay in 2016. He is currently a DST INSPIRE faculty at IIT Hyderabad. Prior to joining IIT Hyderabad he was a research scientist at IIT Bombay. His research areas include information theory, cyber physical systems and Markov Decision Theory.

Dr. G. R. Begh: received B.E, M. Tech, PhD from department of ECE, NIT Srinagar. His research area is wireless communication, OFDM, cooperative communication, wireless security. He is Assistant Professor in ECE department of NIT Srinagar.

Mr. Gobind Khattar: received B.E in ECE from NIT Srinagar (erstwhile REC Srinagar) in 1986, MBA in 1996. He has more than 32 years of experience in public and private sector including JK industries, ALTTC. Currently he is General Manager of BSNL.

Dr. Aamir Ahsan: received B.Tech in ECE from NIT Jaipur in 2011, PhD in dep. of ECE, IIT Kanpur, and Postdoc from NYU, USA. He is also the Co-Developer of the ASM-GaN-HEMT Model, which is currently under consideration for industry standardization at the Compact Model Coalition. His current research interests include characterization, compact modeling, and parameter extraction of gallium nitride HEMTs.

Program Schedule

24th September, Monday	
9:30 AM	Registration
10:00 AM	Welcome Address *Prof. A. H. Moon*
10:15 AM	"Wireless Technology Evolution: the 5G Era", (*Dr. Nadeem Akhtar*)
11:45 AM	"5G Implementation: Challenges and solutions" *(Mr. Gobind Khattar)*
1:00 PM	Lunch Break
2:00 PM	Inaugral Session, Chief Guest **Mr. Khurshid Ahmad Ganai,** *IAS (Retd.*), *Hon'ble Advisor to His Excellency The Governor of J&K State.*
3:00 PM	"Next Generation devices for 5G", (*Dr. Aamir Ahsan*)
25th September, Tuesday	
10:00 AM	"Massive MIMO for 5G", (*Dr. Zafar Ali Khan)*
12:30 PM	Lunch Break
1:30 PM	"Cognitive Radio for 5G" *(Dr. Aqib Patel)*
3:30 PM	"Hands-on training using 5G simulator", (*Dr. Shahid M Shah)*
26th September, Wednesday	
10:00 AM	"Multiple Access for 5G" *(Dr. G. R. Begh)*
12:00 PM	"5G Antenna design", (*Dr. Khalid Muzaffar*)
1:00 PM	Lunch
2:15 PM	Valedictory Session and Vote of Thanks
3:15 PM	High Tea