

Dr. Waqar Mehmood (Professor)

Prof. Dr. Waqar Mahmood received his Bachelor's degree from University of Engineering and Technology (UET), Lahore in 1989, Masters and PhD from Georgia Tech USA in 1992 and 1996 respectively, all in Electrical Engineering. He has served in industry as well as academia in the North America and Pakistan. He served as Director Process Development in CIENA Corporation, Maryland; He was selected as voting member and US delegate to the IEC committee on optical interconnect standardization. He is currently serving as Sultan Qaboos IT Chair at UET, Lahore. In addition, he is the Director of Al-Khwarizmi Institute of Computer Science (KICS) - a center of excellence for ICT research and development in UET, Lahore. He is also the Director of Center for Energy Research and Development (CERAD) at the same University. He has served as faculty member in National University of Science and Technology (NUST) prior to joining KICS. His research interests include optical communications, process technology development, discrete event systems, Networking systems, wireless systems, energy optimization, power systems and renewable energy. He has consistently won research funding in a number of IT and renewable energy technologies. He has published over 80 reviewed papers and has 12 US patents to his credit.

Dr. Waqar Mahmood is an expert and holds leadership position in the research and development organizations in the areas of information technology and renewable energy. He has build vibrant R&D organizations from ground up in these critical areas of technology. He is the founding member and director for the Center for Energy Research and Development (CERAD), which is a leading research center in Pakistan for renewable technologies development, energy systems evaluation, component testing and validation, training and certification. The center also provides services for energy auditing, demand management, and consultancy for energy conservation in buildings, factories and homes. Under his leadership the Center has established Solar PV testing and validation facility, the only in Pakistan. The Center has developed solar concentrated power solutions, low cost invertors for PV systems, bio-fuel solutions based on the biomass available in the region, low head hydro power generation solutions, micro wind turbines and many more. The solutions developed by the center are focused on solving energy problem of the country through low cost viable indigenous technologies.

Dr. Waqar has initiated training programs in energy at Bachelors, Masters, and vocational level. The training at vocational level is most popular, as it helps create workforce for upcoming energy projects in the country. Dr. Waqar advises the energy department Punjab on various technology choices. He is a frequent speaker on choices of energy technologies and related policy matters. He is author of more then eighty peer reviewed papers and holds twelve US patents.

Latest Qualification : Ph.D

Teaching Courses

- Wireless and Mobile Communication
- Optical Communication
- Optical Networks
- Control System Design
- Research Methodology
- Electronics I, Electronics II and Electronics
- Digital System Design
- Signal and Systems
- Microwave and Antenna Design
- Electromagnetic Theory

Research Interest

- Modeling, Control and Optimization
- Discrete Event Systems
- Communication Systems
- Digital Signal Processing
- Integrating Technology and Business Planning
- Power Electronics