



The Climate Connection

Join the global climate conversation

Discover. Share. Act.
www.britishcouncil.org/climate-connection
#TheClimateConnection

Green careers guide

Dr. M Imran Majid
Pakistan



Dr. M Imran Majid

Commonwealth PhD Scholar, 2006-10

Commonwealth Fellow 2017



My journey on the path of green energy

I studied Electrical Engineering during bachelor and space engineering during my Master studies at Space and Environment Campus, Kiruna, Sweden. I was inspired to pursue a career in electrical engineering with applications in satellite engineering. I pursued stratospheric balloon experiment, BEXUS II during Masters to ascertain near earth environmental anomalies. My first internship in Surrey Satellite Technology Limited, UK related to geo magnetic mapping of variable density sensors motivated me to pursue further research in analytical design of smart cities and I returned to University of Surrey in 2006 to pursue my Commonwealth funded PhD in Electronic Engineering in Information theoretic analysis of clustered cellular systems. I have co-founded and performed as Regional Coordinator, Asia Pacific SGAC, a UN NPO for promoting peaceful uses of space and youth. The experience was valuable in building my networking skills to liaise with international partners. This was useful in pursuing my research career path as PhD, and later as Head Optics Team, Space Flight Laboratory in Toronto, Canada.

I have been recently involved in proposing for green building prototype and legislations, energy accountability and use of pico hydro power generation using movement of streams. I started as MS Thesis Coordinator and set up various initiatives including Industry Advisory Board, MS Thesis inductions, MS in Electrical Engineering program as well as Occupational Health and Safety in Engineering Labs as well as Maker Space. Currently I am Head of electrical engineering department at Institute of business Management, Karachi , Pakistan.

A prototype of a green building to save the energy being wasted in different project management endeavors in Karachi was discussed. A complete proto type was developed and further extension to the work is being implemented with the professor of NED University of Engineering and Technology. The provision under the new laws include preventing loss of heat, energy and lack of efficiency not only in terms of material selection but also in terms of occupancy, people density and other practical implications. Energy accountability of a utility was a similar project undertaken for K-Electric where more than 15 different energy theft techniques were identified and an ingenious method to prevent one of the most frequently used methods was described, proposed and presented at ICSIMA 2017. Some suggestions for the local government was also put in place.



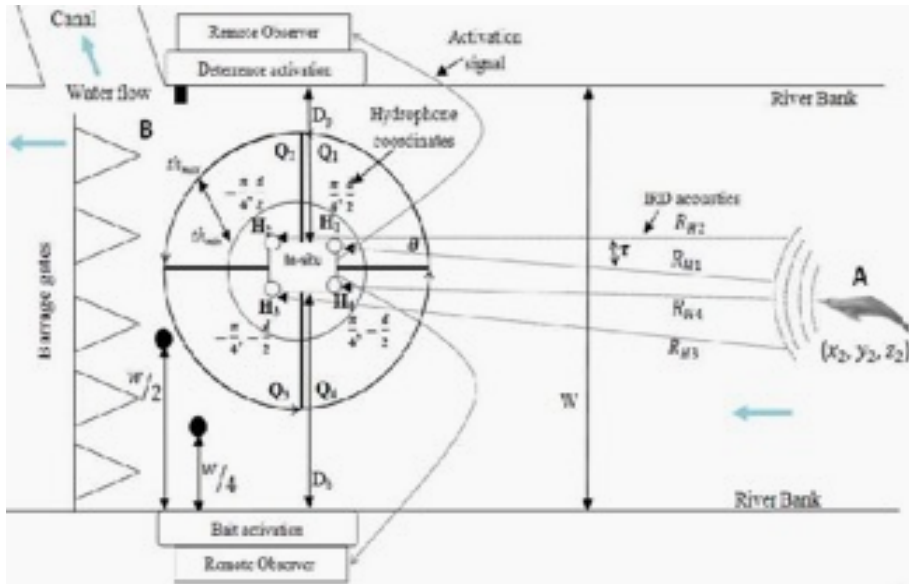


Figure 1 IRDHM (Indus River Dolphin Habitat Monitoring System)

In the meanwhile, two patent draft applications are in place to utilize the flow of sewage water in slum areas of developing countries to produce renewable energy. The later patent focuses on energy saving detection and habitat monitoring system for indus river dolphin conservation. Similarly projects and research articles are in process to highlight energy harvesting using smart paths, tidal waves as well as using stream flow. The IoT based Tidal Energy Transducer was awarded a grant of about Rs 50k by Government of Pakistan's Ignite program.

For people looking for a career in green energy, try to localize problems but keep an open mind for possible solutions on a global level.

