

Statement of Research Interest

Applicant: Abdul Baset Sultani

I have a craving desire to earn my Master's degree in Water Resources Management and Engineering. Since my childhood, I have wanted to learn science and be a professor to do research on the phenomena of the earth. This gave me the impetus to select my major in geosciences and study geology at Bamyan University. Having studied this major for a period of four years broadened my understanding on a variety of geological aspects of planet earth, especially the structural geology of my country-Afghanistan. I also had taken part in a water research project as a field engineer and laboratory experimenter. This contributed to my understanding of many things about water-related issues, and this stimulated my interest in the field of water resources engineering.

My learning experience at Bamyan University was a rich one. Among all those courses I had taken for the graduate standards at Bamyan University, Geological Mapping and Geological structure, Geohydrology and hydrology, and GIS were my most areas of interest. During my last academic year, I took part in a research project which was part of Prof. Hasan Malistani project entitled "Geology, geochemistry and economic evaluations of Sughlugh volcanic, North Bamyan Plateau." Being involved in this project broadened my knowledge about the changes that because of water take shape on the surface of the earth. Working with professor Dr. Malistani capacitated me with many crucial skills as a field Engineer and added up to my professional experience.

I was also directly involved in a water research project entitled "Preliminary Assessment of Physico-Chemical Quality of Water Resources in Bamyan Central District", led by several professors and researchers of Bamyan University as a field engineer and Lab experimenter. My search for facts, concept, and elements of water got multifaceted layers. And this helped me to develop my skills and computer engineering programs like AutoCAD, Remote sensing, and ArcGIS software. My analytical skills were sharpened due to numerous challenging assignments and tasks. Working in different areas especially hydrology, Renewable Energy systems, natural resource and conservation engineering, water conservation engineering, RS, and GIS which further motivated me in water resources engineering.

Aside from my interest in this area, I choose to do my Master's because the presence of war, civil conflicts, lack of management, in many past years, left a legacy of wasting or illegal exploitation of many natural resources, especially water resources in my country-Afghanistan. As a person who wants to be a professor and as a youth of this land, I have so much more to learn about the field of water resources engineering, and then I will be able to contribute back to my country.

Water systems planning and management are the topics of discussion for every country. Currently, Afghanistan is suffering from many water-related issues. In the South and East, for example, water resources are being wasted for the benefit of Iran and Pakistan while, in some other parts of the country, droughts take a heavy toll on the Afghan people and their livelihood. Moreover, water is the center for building Infrastructure and fragmented rural institutions. And

yet, there is no clear vision about this issue because of a lack of human resources here in Afghanistan.

After doing my masters and upon my return to Afghanistan, I want to take part in finding the solutions to those water-related challenges and join academia so that I can take part in the development of Afghanistan. Currently, no university in Afghanistan offers a master's study in the field of water. Thus, I choose IITKGP because of its professional academics and good research infrastructural opportunities. That means I can explore and expand the breadth of my expertise. I want to be able to continue learning in the field of Water Resources Management & Engineering.

With all that said, I strongly believe that the Indian Institute of Technology (IIT) Kharagpur is the right place for me to pursue my master's degree in MTech Water Resources Management and Engineering. Having gained a bachelor degree in geology, and my work experience in the field of water make me a strong deserving applicant. I wish to get the chance to do my Masters' study at IITKGP, which fulfills my dreams to be a university professor and an expert researcher in my desired field.