

Research statement “leadership”

Zaher Mundher Yaseen is an assistant professor and pioneer researcher in the field of civil and environmental engineering. During 2012-2017, Zaher has completed his master and PhD degrees at the National University of Malaysia which is ranked in the top 150 QS World Universities. Zaher is major in Environmental Science, Climate Engineering, Water Science, and Integrated Computer Aid Simulation Models. In addition, he has an essential interest in Artificial intelligence application, machine learning algorithms and advanced data analytics. Since 2014 up to date, he has published over 580 research articles ranked in in Web of Science (WoS), with a Google Scholar H-Index of 93, and over 28000 citations. Over 400 research articles are published in Quartile 1 WoS and more than 50% of his research output as the main author “**Corresponding**”. As per the Publons website, he has served as a reviewer for more than 100 international academic journals.

Over the past decade, I have expanded my fields of research interest from water resources engineering, hydrology and environmental engineering to several other civil engineering branches including Geotech, urban planning, renewable energy related to climate change, physics and astronomy, and earth and planetary sciences. I learnt multiple abilities through those collaborations. I have worked with several well-established scholars all around the world including Prof. Miklas Scholz (**UK**), Prof. Nadhir Al-Ansari (**Sweden**), Prof. Bjørn Kløve (**Finland**), Prof. Vijay P. Singh (**USA**), Prof. Ozgur Kisi (**Germany**), Prof. Hossein Bonakdari & Prof. Jan Adamowski (**Canada**), Prof. Shamsuddin Shahid (Malaysia), Prof. Ravinesh C Deo (**Australia**), Prof. Sancho Salcedo-Sanz (**Spain**), Prof. Cyril Voyant (**France**), Prof. Ercan Kahya (**Turkey**), Prof. Ahmed MA Sattar (**Egypt**), Prof. Sungwon Kim (**Korea**), Prof. Hossam Faris (**Jordan**), Prof. K. W. Chau (**Taiwan**), Prof. Vahid Nourani (**Iran**), Prof. Kamal Ahmed (**Pakistan**), Prof. Pijush Samui (**India**), Prof Salim Heddami (**Algeria**), Prof. Ahmed El-Shafie (**United Emirates**), Prof. Saleh Awadh (**Iraq**), Leonardo Goliatt (**Brazil**) and several others “over 70 countries”. My collaborations proved my experience in innovative, industry-relevant and collaborative research.

In developing research themes, it is essential to not only have an interest, but also be able to identify potential areas and research problems that are of interest to outside parties, because they may have an interest in funding the research. I work collaboratively with partners to identify issues, but remain as the person initiating, managing and sustaining the research. The collaborative skills that I have are an indication of the level of research achievement that I am capable of. Through research, I have developed writing skills, oral communication, team research, time management and programming. This has enabled me develop skills in a multidisciplinary domain under the umbrella of civil engineering, which are national priority areas. Thus, I am an “interdisciplinary researcher in civil engineering”. This is of interest to several universities vision for strengthening their research. It also concurs with the proposed academic restructure for collaborative platforms to pursue the ‘one university’ research theme. These experiences have built my confidence and an interest in teaching as well.

With respect to the employment history, after my graduation from the National University of Malaysia in 2017. I have directly joined Ton Duc Thang University (TDTU) as a senior lecturer and researcher major in water and environmental sciences. During 2017-2020, I was fortunate to supervise two PhD candidates with water resources and environmental engineering. In parallel with my job at TDTU, I was able to get project fund at the Universiti Teknologi Malaysia, Malaysia. I have joined this project as research fellow post-doctoral. The project

was focused mainly on the implementation of computed aid model presented in the form of machine learning models in simulating hydrological processes. In march 2021, I have joined Asia University, Taiwan (Acting as scientific researcher), and Al-Ayen University, Iraq (acting as research center director). Starting from 2022 September I have joined King Fahd University as star faculty with title of Assistant Professor, the position up to date. In KFUPM, I was fortunate to supervise several master and PhD students. In addition, currently I am working with the IRC of water membrane and water security working on several projects and guiding post-doc candidates for those projects.

My research interests are very consistent with those of the targeted by many universities. I have extensive research and publications in multidisciplinary areas of hydrology, environment, geo-science, energy, climate and agricultural modelling, of which are the priority areas of many regions all around the globe. I am having discussions with several scholars to work in common issues in climate change and water resources engineering prospective. My water resources engineering research experience is in equivalence with those of the climate change/environmental modelling, coastal geomorphology, coastal hydrodynamics and soft computing modeler with whom I hope to, collaborate for future projects.

In terms of bringing external collaborations and research funds, I have associations with several academic scholars who are external advisors on a proposed project on different disciplines that will be submitted for grant. At present, I do have couple internal projects at KFUPM as principle investigator (PI) and CO-PI. IN addition, I am exploring options for engaging in teaching and learning project with the couple organizations and department to enhance student-learning experiences. My appointment on this continuing position will enable me to seek such collaborations with through internal and external grants and create research association with several of these academics and with others in the Engineering Academy and externally.

Without the support of local communities, business communities and professional associations, Universities would find it difficult to establish their relevance and importance. I am working to develop, enhance, and invest in linkages with such groups. Qualities that I possess that would help develop such relationships include networking skills; tact; listening skills; the ability to understand the importance of fostering such relationships; and an interest in developing such relationships through collaboration.