#### **Curriculum Vitae**

Name: Wa'el Abdul-Bari Hussien

**Contact Information:** 

Current Address: 252 Karwan Road, 1012 JA, Duhok, Iraq

Mobile: +964 750 443 1513

E-mail: wael@uod.ac, wael.abdulbari@gmail.com

#### **Personal Information**

Name: Wa'el Abdul-Bari Hussien

Date and place of birth: Nov 20, 1978 (Baghdad, Iraq)

Nationality: Iraqi Marital status: Single

### **Educational Background**

 Doctor of philosophy in Water Supply Management Engineering, University of Exeter, Exeter, UK, 2017

 Master of Science in Water Resources Engineering, University of Babylon, Babylon, Iraq, 2006.

• Bachelor of Science in Irrigation and Drainage Engineering, University of Duhok, Dohuk, Iraq, 2000.

# **Personal Skills and Competences**

Language skills: Kurdish, Arabic and English Computer skills: SPSS (statistical analysis);

AutoCAD (create 2D and 3D drawing);

Simile & Vensim (Environmental modeling &

simulation);

Microsoft Office (Word, Excel and Power Point).

Equipment operating skills: Fluid mechanic laboratory machines

#### **Societies**

• Member of Kurdistan Engineers Union

## **Teaching Experience**

Date (from - to)

Sep 2017 – Now

Position

Head of Water Resources Engineering Dep./Lecturer

Name of employer

Water Resources Engineering Department / College of engineering / University of Duhok.

Main activities and responsibilities

- Preparing up-to-date lectures in <u>Analysis of Water Resources Systems</u>, and <u>Water Resources Economy and Management</u>.
- Teaching fourth stage students and provide them effective instructions during the lecture or office hours and also by sending Emails.
- Evaluate reports, exams and assignments of undergraduate and post-graduate students.
- Assess graduation projects of Water Resources Engineering Department students.
- Review Duhok University Journals and give suggestions to improve it.
- Conduct research in Water Resources Engineering and publish an article in a high impact factor journal (Cleaner Production: 5.651.
- Attending local seminars and presentations for college staff and students.
- Participate as a presenter in a workshop (Non-Revenue Water Management) for local directorates engineers.

Date (from - to)

Apr 2013 – Jul 2017

Position

Assistant lecturer (PhD student)

Name of employer

College of Engineering, Mathematics and Physical Sciences, University of Exeter, Exeter, UK

Main activities and responsibilities

- Teaching undergraduate students various modules, such as Fluid Mechanics, Engineering Statistics and AutoCAD software.
- Evaluate reports, exams and assignments for undergraduate students.

- Provide students effective instructions during the lecture or office hours and also by sending E-mails.
- Conduct a detailed survey in over 400 households in Duhok city for winter and summer season. The aim of this surveys was to investigate the impact of household characteristics and seasonal variation on per capita water-energy-food consumption.
- Investigate the impact of using various water conversation strategies on water and energy demand.
- Develop a regression models to estimate per capita water-energy-food consumption as a function of various factors.
- Participate in some conferences and workshops.

 $Date \ (from-to)$ 

Oct 2006 – Jul 2012

Position

Assistant lecturer

Name of employer

Water Resources Engineering Department / College of Engineering / University of Duhok.

Main activities and responsibilities

- Heading the quality assurance of Water Resources Engineering Department. The aim was for applying new methods of teaching through the new instructions of how to modernize the teaching methods, prepare a course book for the students, and taking into account the student's feedback and evaluation.
- Prepare lectures and teach various modules (e.g., <u>Engineering Hydrology</u>, <u>Water Resources Planning</u>, <u>Water Resources Economy and Management</u>, <u>Fluid Mechanic</u>, <u>Design of Hydraulic Structures</u>, <u>Engineering Statistics</u>).
- Member in the examination committee for four years.
- Evaluate students' progress and marking their reports, exams, assignments, etc.
- Supervise students graduation projects.
- Install and assemble the instruments and equipment of the new Fluid Mechanic laboratory.

#### **Work Experience**

Date (from – to) Oct 2002 - Oct 2003

Position Project Organiser Engineer

Name of employer UNDP – Under Ground Cable Project – Z73 – Duhok

Office.

Type of business Under Ground Cable

Main activities and responsibilities
 Design and draw the trenches of the cable with all the

other fittings for the project.

• Estimate the quantity of structural and other types of

materials.

• Supervise and survey the project in different locations.

Date (from – to) Nov 2001 - Sep 2002

Position Hydrologist Engineer

Name of employer UNDP, Mini Hydro Power Project, Duhok office, Iraq

Type of business Investigate and design mini hydro power projects

Main activities and responsibilities

• Measure discharge of various rivers and streams in Duhok governorate using water measuring devices (e.g., OTT, conductivity instrument).

• Analyse the data to find duration curve, rating curve and calculate design flood.

• Prepare monthly reports.

Date (from – to) May 2001 - Oct 2001

Position Site Engineer.

Name of employer Hayran Company & Duban Company

Type of business Construction of Houses in Sarsink subdistrict and

Tirwanish village

Main activities and responsibilities • Survey and plan the site using survey devices.

• Supervise the project according to the specifications.

• Estimate the quantity of construction materials for plastering, masonry, shuttering, etc.

• Assist in the preparation of tenders (e.g., cost

## estimation) for the company.

Date (from - to) Jan 2001 - Apr 2001

Position Site Engineer

Name of employer UNFAO – Irrigation unit – Duhok office, Iraq

Type of business Construction of Irrigation Channels (Sindor, Tildef, Kizo

villages)

Main activities and responsibilities

• Supervise the project according to the specifications.

• Leveling the channels using survey devices to give it the uniform suitable slope.

• Estimate the quantity of construction materials.

• Write monthly reports to show the implementation ration.

• Conducting field and laboratory experiments and take samples of materials (e.g., sand, gravel, cement, steel) to the Testing Laboratory of Construction Materials.

### **Training and Short Courses**

• Energy, sustainability and resource efficiency.

Birmingham, UK May 2017

• The Water – Energy – Food nexus: Balancing our (in) securities.

Reading, UK May 2017

• Learning and teaching in higher education

Exeter, UK' Jan 2014

# **Publications (Journals)**

- Hussien, W.A., Memon, F.A. and Savic, D.A., 2016. Assessing and modelling the influence of household characteristics on per capita water consumption. Water Resources Management, 30(9), pp.2931-2955.
- Sadr, S.M., Memon, F.A., Jain, A., Gulati, S., Duncan, A.P., Hussein, W.A., Savić, D.A. and Butler, D., 2016. An Analysis of Domestic Water Consumption in Jaipur, India.

- Hussien, W.A., Memon, F.A. and Savic, D.A., 2017. An integrated model to evaluate water-energy-food nexus at a household scale. Environmental Modelling & Software, 93, pp.366-380.
- Hussien, W.A., Memon, F.A. and Savic, D.A., 2017. A risk-based assessment of the household water-energy-food nexus under the impact of seasonal variability. Journal of Cleaner Production. DOI: 10.1016/j.jclepro.2017.10.094.

#### **Publications (Conferences)**

- Sadr, S.M., Memon, F.A., Duncan, A.P., Jain, A., Gulati, S., Hussien, W.A., Savić, D.A. and Butler, D., An Investigation into Domestic Water Consumption and Water Use Habits in Indian Urban Areas. Water Efficiency Conference, 2015.
- Hussien, W.A., Memon, F.A. and Savic, D.A., Assessing and modelling the influence of household characteristics on per capita water consumption. Water Efficiency Conference, 2015.

#### **Thesis**

- Hussien, W.A., 2017. Multi-Scale Investigation of Water-Energy-Food Nexus. PhD. thesis, University of Exeter.
- Hussien, W.A., 2006. Reliability of Iraqi Reservoirs. M.Sc. thesis, University of Babylon.