

CURRICULUM VITAE

MAHMOUD MOHAMMAD Ali ABUALHAIJA.

Assistant Researcher of Environmental Sciences at The University of Jordan



Address

Amman, Jordan

Water, Energy, and Environment Center at the University of Jordan.

Email Address: m.abualhaija@ju.edu.jo

mah.abualhaija@gmail.com

Mobile: +962 (0)792148307.

Tel. Office: +962 (0) 65355000/ Ext 23895.

PERSONAL INFORMATION

Date of Birth: **15 Jan 1983**
Gender: **Male**
Nationality: **Jordanian**
Residence Location: **Amman, Jordan**
Marital Status: **Married**

EDUCATION

- **Ph.D. Degree in ENVIRONMENTAL SCIENCES (HYDROCHEMISTRY AND WATER QUALITY)**
Faculty of Science and Engineering November 2015
Liverpool University
Liverpool, United Kingdom
- **Master's Degree in ENVIRONMENTAL SCIENCES (HYDROCHEMISTRY AND WATER QUALITY)**
Faculty of Science (Evaluation: Excellent (rate: 91.9) 1st Class Honors). February 2009
Yarmouk University
Irbid, JORDAN
- **Bachelor's Degree in ENVIRONMENTAL SCIENCES**
Faculty of Science (2nd Class Honors). June 2005
Jordan University of Science & Technology
Irbid, JORDAN
- **General Secondary Education**
Irbid Secondary School June 2001
Jordan- Irbid

RESEARCH STUDIES (UNIVERSITY THESES AND GRADUATE PROJECTS)

- **In Ph.D., Thesis title:** "Chemical speciation of iron with humic ligands in estuarine and coastal waters".
- **In Master, Thesis title:** "Nutrients and Selected Heavy Metals in Water, Suspended Matter and Sediments of King Talal Dam".
- **In Master, special topics course:** research on "Long-Term Accumulation of Heavy Metals (Trace Elements) In Water, Sediments, and Biota of King Talal Dam".
- **In Bachelor's, Graduate Project:** entitled "Olive Mills Effluent (ZEBAR) as a Byproduct in Jordan".
- **In Bachelor's, Teamwork Project:** with Swiss MSc Students, entitled "Olive Mill Byproduct, Environmental Hazardous Substances, and Cleaner Production".

CURRICULUM VITAE

ONGOING RESEARCH PROJECTS ▾

- **A research project entitled** (Evaluation of Muwaqqar water harvesting project and interpretation of other existing data on the area -applicability to similar areas in the Badia region of Jordan), funded by INWRDAM (2023-2024).
- **A research project entitled** (Sustainable groundwater resources management by integrating earth observation derived monitoring and flow modeling results, RESERVOIR), funded by PRIMA (2020-2024).
- **A research project entitled** (An integrated approach for water resources sustainability of Yarmouk River Basin considering socioeconomic aspects using supply-demand water simulation model), funded by the ministry of higher education and scientific research/scientific research and innovation support Fund-Jordan (2018-2023).
- **A research project entitled** (Evaluation of Water Quality of Kufranja Dam in Jordan Using Physiochemical Parameters and Water Quality Indices), funded by The University of Jordan/Deanship of Scientific Research (2019-2022).

PROFESSIONAL EXPERIENCE ▾

2016 – up to date	Assistant Researcher – Water, Energy, and Environment Center. The University of Jordan-Amman, Jordan (www.ju.edu.jo).
2017-2019	Head of The Laboratory Department at Water, Energy and Environment Center. The University of Jordan-Amman, Jordan (www.ju.edu.jo).
2015-2016	Assistant Professor - Faculty of Basic and Marine Sciences. The University of Jordan-Aqaba, Jordan
2014– 2015	Teaching Assistant- University of Liverpool Liverpool, United Kingdom (www.liv.ac.uk).
2010 – 2011	Teaching Assistant- Faculty of Basic and Marine Sciences. The University of Jordan-Aqaba, Jordan
2007 – 2008	Research and Teaching Assistant - Faculty of Sciences- Department of Earth and Environmental Sciences Yarmouk University, Irbid, Jordan (www.yu.edu.jo)
2007-2010	Science Teacher (Biology, Geology, and Chemistry) for Secondary and Preparatory Schools at the Jordanian Ministry of Education. Several different schools -Irbid – JORDAN

RESEARCH INTERESTS ▾

- The biogeochemistry of natural waters.
- Water Quality.
- Environmental Pollution.
- Trace elements (heavy metals) and nutrients in natural waters.
- Voltammetry (metal speciation).
- Environmental management.
- Water Resources Management
- Environmental impact assessment.

CURRICULUM VITAE

PUBLICATIONS, CONFERENCES, WORKSHOPS, SEMINARS, etc. ▼

Publications

Published Research Articles:

- **Abualhaija, M.**, 2023. Applying the quality and pollution indices for evaluating the wastewater effluent quality of Kufranja wastewater treatment plant, Jordan. *Water Conservation and Management*, 7(1):22-27.
- **Abualhaija, M.** and Shammout, M., 2022. Effects of the COVID-19 Pandemic Lockdown on the Quality and Pollution of Irrigation Water in the Dams of Jordan. *Sustainability*, 14(21): 14596.
- **Abualhaija, M.M.** and Mohammad, A.H., 2021. Assessing Water Quality of Kufranja Dam (Jordan) for Drinking and Irrigation: Application of the Water Quality Index. *Journal of Ecological Engineering*, 22(9): 159-75.
- Maisa'a WS, Shatanawi K, Al-Bakri J and **Abualhaija MM** (2021). Impact of Land Use/Cover Changes on the Flow of the Zarqa River in Jordan. *Journal of Ecological Engineering*, (22): 40-50.
- Mohammad A.H., Hazimeh, W., Shatnawi, K. and **Abualhaija, M.M** (2020). Quantity not quality: promoting sustainable wastewater practices in Jordan. *Water Policy*: 1-14.
- **Abualhaija, M.M.**, Shammout, M.W., Mohammad A.H. and Abu Hilal, A.H (2020). Assessment of Reservoir Water Quality Using Water Quality Indices: A Case Study from Jordan. *International Journal of Engineering Research and Technology*. 13(03): 397-406.
- **Abualhaija, M.M.**, Shammout, M.W., Mohammad, A.-H. and Hilal, A.H.A., 2019. Heavy Metals in water and sediments of King Talal Dam the largest Man-Made Water Body in Jordan. *Water and Energy International*, 62(5): 49-62.
- Shammout, M.W and **Abualhaija, M.M.** 2020. An analysis of long-term yearly water flow trend and its impact on sediment yield in King Talal dam. *International Journal of Engineering Research and Technology*, 12(12): 3041-3049
- Mohammad, A., **Abualhaija, M.** and Shammout, M., 2018. Chemical Indices of Water Quality in the Zarqa River-Jordan: Concentrations of Major Cations and Water Suitability for Irrigation. *International Journal of Applied Engineering Research*, 13(1): 697-706.
- **Abualhaija, M.M.**, Whitby, H. and van Den Berg, C.M.G., 2015. Competition between copper and iron for humic ligands in estuarine waters. *Marine Chemistry*, 172(0): 46-56.
- Mahmood, A., **Abualhaija, M.M.**, van den Berg, C.M.G. and Sander, S., 2015. Organic speciation of dissolved iron in estuarine and coastal waters at multiple analytical windows. *Marine Chemistry*, 177(0): 706-719.
- **Abualhaija, M.M.** and van den Berg, C.M.G., 2014. Chemical speciation of iron in seawater using catalytic cathodic stripping voltammetry with ligand competition against salicylaldoxime. *Marine Chemistry*, 164(0): 60-74.
- Abu Hilal, A.H. and **Abualhaija, M.M.**, 2010. Nutrients in Water and Sediments of King Talal Dam-Jordan. *Jordan Journal of Biological Sciences (JJBS)*, 3(3): 87-100.

Submitted Research Articles for Publication:

- Mohammad A.H., Odeh, T., **Abualhaija, M.M**, Shatnawi, K., and Halalshah, M (2022). Comprehensive hydrogeological modeling of Wadi AlHasa's catchment/ Jordan through an integrated GIS and Remote Sensing approach. **Submitted to the Journal of Results in Engineering.**
- Shammout, M.W and **Abualhaija, M.M.** 2022. The influence of population growth and needs on the water resources of the Yarmouk River Basin in Jordan. **Submitted to Pakistan Journal of Biological Sciences.**

Conferences:

- The international conference entitled "Water security and climate change". Hanoi, Vietnam, 1-4 March 2021. (Attending)
- 5th IWA International Conference On "Water and Wastewater Technologies In Ancient Civilizations: Evolution Of Technologies From Prehistory To Modern Times" (Dead Sea Jordan, 11-13 September 2019). (Dr. Abualhaija was one of the organizing committee members) (Organizing and attending).
- Local conference about "Updates on infectious diseases and antibiotic resistance in Jordan", University of Jordan, Amman, 2018 (I attended this conference to consider the topic from an environmental perspective).
- The local conference entitled "The 16th Jordanian Chemistry Conference (Five Decades of Chemistry in Jordan: Challenges and Accomplishments)". 10 October 2019. ", University of Jordan, Amman. (Attending)
- The international Ocean Sciences 2016 Conference, 21-26 February 2016. New Orleans, Louisiana, USA (Participation).

CURRICULUM VITAE

((van den Berg, S.; **Abualhaija, M.**; Rijkenberg, M.J. Iron binding ligands in the ocean are similar to humic substances. American Geophysical Union 2016, 2016, CT31A-05)).

- International conference about "WEFE Nexus for Human Security in the Pandemic-Post Era "Building Bridges Towards Human Security". 26 September 2021. Amman, Jordan (Attending)
- International conference entitled "Water Security and Climate Change (WSCC2022) - Adaptation for sustainable and resilient development". Bangkok, Thailand. 1-3 October 2022. (Attending)
- The international conference entitled "Organic Ligands - a Key Control on Trace Metal Biogeochemistry in the Ocean". Talk and poster presentations about "Humic Substances and Iron Complexation in Shelf Seawaters Abualhaija, M.M." Croatia 2015. (Participation)
- Liverpool Marine Conference. Talk and poster presentations about "Iron Complexation by Humic Substances in Estuarine Waters Abualhaija, M.M.". The University of Liverpool. United Kingdom, January 2015. (Participation)
- International ElectrochemNW conference. Talk presentation about "Chemical speciation of iron in seawater using catalytic cathodic stripping Voltammetry Abualhaija, M.M.". University of Liverpool, United Kingdom. June 2014. (Participation)
- PGR conference at the University of Liverpool. Talk presentation. United Kingdom, May 2012, 2013, and 2014. (Participation)
- PRIMES (Postgraduate Research in Marine and Earth Science) conference. Talk presentation about "Speciation of Iron in Seawater Abualhaija, M.M.". Southampton University, United Kingdom. November 2013. (Participation)
- ASLO conference. Poster presentation about "Iron Complexation by Humic Substances in Estuarine waters Abualhaija, M.M.". The USA. 2013. (Participation)

Workshops, Seminars, Courses, and Other Activities

- I attended, organized, and coordinated a training course on "public safety in dealing with hazardous materials and proper procedures for dealing with chemical accidents in laboratories" in cooperation with the Civil Defense in Jordan. The course was held at the University of Jordan - Water, Energy and Environment Center. I was in charge of the Center's laboratories at that time.
- I attended, organized, and coordinated a training workshop on "the Ion Chromatograph device" in cooperation with the Swiss company (Metrohm). The workshop was held at the University of Jordan - Water, Energy, and Environment Center. I was in charge of the Center's laboratories at that time.
- I participated in organizing and coordinating a workshop entitled "To provide the highest quality biomaterials for a safer, healthier world" in collaboration with Al-Shaker Company and Al-Sami Company, where the workshop was held at the University of Jordan - Water, Energy and Environment Center. I was in charge of the Center's laboratories at that time.
- Co-organized a panel discussion in the Water, Energy and Environment Center, entitled "SWOT Analysis in Groundwater Management in the Jordanian Highlands".
- Participation in an online training workshop organized by (ELSEVIER) and entitled "How to Be Well Prepared Before Publishing".
- Participation in a training workshop entitled "Writing Research Papers Using LaTeX", which was held at the University of Jordan and organized by the Accreditation and Quality Assurance Center.
- Participation in the training workshop on "best practices to fill the initial application for the Scientific Research and Innovation Support Fund and answering researchers' questions", which was held at the Ministry of Higher Education and Scientific Research.
- Participation in the final workshop of the project towards sustainable production and consumption patterns and the extent of the impact of production and consumption patterns on the environment within the initiative of Switch Med funded by the European Union. (I was the representative of the University of Jordan in this workshop).
- Participation in a workshop entitled "Water Security in Jordan: From Data to Decision", which was held at the Geneva Hotel in Jordan. (I was the representative of the University of Jordan in this workshop).
- Participation in a workshop about "Developments in Solid Waste Management in Jordan", which was held at the Jordan Engineers Association in Jordan. I was the representative of the University of Jordan in this workshop).
- Participation in a training workshop on "Web of Science". The workshop was held at the University of Jordan and organized by the Accreditation and Quality Assurance Center.
- Participation in a training workshop organized by the Accreditation and Quality Assurance Center at the University of Jordan, where the workshop title is (Designing Effective PowerPoint Presentations - Camtasia software).

CURRICULUM VITAE

- Participation in a workshop organized by Springer Nature. The title of the workshop is (Step-by-step Guide on How to Prepare a Successful Paper-Jordan).
- Participation in a workshop organized by Springer Nature, the workshop's title is "Academic Publishing & Enhancing Research Effectiveness".
- Participation in a training course organized by the Accreditation and Quality Assurance Center at the University of Jordan, where the course title was "How to publish in Scopus & Web of Science: Facts and Tips".
- Participation in a workshop entitled (Proposal writing for H2020 EU funding opportunities) was organized by HCST. (I was the representative of the University of Jordan in this workshop)
- Attending a lecture on "introducing European projects (Erasmus Plus)", which was held at the University of Jordan, and organized by the Accreditation and Quality Assurance Center.
- Participation in a training course on dealing with websites for teaching members, which was held at the University of Jordan and organized by the Accreditation and Quality Assurance Center.
- Participation in a training course on e-learning, held at the University of Jordan, hosted by the Centre for Accreditation and Quality Assurance.
- Participation in a training course on "the statistical program (SPSS)", which was held at the University of Jordan and was organized by the Deanship of Scientific Research.
- Participation in a training course about "quality assurance procedures and models". It took place at the University of Jordan and was organized by the Accreditation and Quality Assurance Center.
- Participation in a workshop titled held at the University of Jordan Library entitled "practical training on how to search in (ProQuest) databases ".
- As a speaker and a member of the host committee, I participated in a workshop titled "Mercury and Mercury Compound: Results of Mercury Initial Assessment in Jordan". The workshop was held at the Water, Energy, and Environment Center at the University of Jordan in cooperation with (UNDP) and the Jordanian Ministry of Environment.
- Attended a seminar entitled "Message of Tolerance and Harmony", which took place at the University of Jordan on the occasion of His Majesty King Abdullah II being awarded the "Templeton Prize".
- I attended an online seminar organized by Springer Nature entitled "How to find the information you need for your research?".
- Participation in a training course organized by the Accreditation and Quality Assurance Center of the University of Jordan and the title of the course was "How to increase your citation".
- Participation in a training course organized by the Deanship of Scientific Research at the University of Jordan, where the title of the course was "How to apply for PRIMA projects"
- Participation in a training course organized by the Deanship of Scientific Research at the University of Jordan, where the title of the course was: "How to write a research project for the Scientific Research and Innovation Support Fund".
- Attended a workshop organized by the Foundation that supports PRIMA projects in cooperation with the Higher Council for Science and Technology (HCST), which was held online and titled "PRIMA Proposal Writing Workshop and Info Session".
- Attended an international online scientific symposium organized by Separation Science Premier Learning for Analytical Scientists, the workshop was entitled "How to Improve Your Titration Results - Optimizing Performance and Trouble Shooting".
- Attending an international scientific webinar organized by SelectScience and titled "Volumetric titration: A step-by-step guide to correct results".
- Attending an international scientific webinar organized by SelectScience and titled " Ensuring accuracy: An expert guide to selecting fit-for-purpose reference materials".
- Participation in the training course entitled "Introducing the support mechanism provided by the Francophonie Agency for Scientific Cooperation Projects between Universities", which was held at the University of Jordan and organized by the Deanship of Scientific Research.
- Participation in a workshop organized by (Wiley) and entitled "How to Get Published in an Academic Journal".
- Attending an international scientific webinar organized by SelectScience and titled "Determination of Inorganic Anions and Organic Acids in Lithium-Borated Nuclear Power Plant Waters using IC".
- Participation in the Frontiers Forum session organized by Frontiers, where the title of the session was "The case for climate optimism" The session speaker was former US Vice President (AL Gore). (I was the representative of the University of Jordan).

CURRICULUM VITAE

- Attending an international scientific webinar organized by SelectScience and titled "How to seamlessly integrate the supply of purified water in new laboratory construction".
- Attending a workshop entitled "Gray Water Treatment Technology", which was held at the University of Jordan-Water, Energy and Environment Center.
- Attended an international workshop on "Speciation of Iron in Seawater". I spoke in the workshop about "speciation of iron in seawater using Catalytic Cathodic Stripping Voltammetry with ligand competition against salicylaldehyde". Liverpool University, United Kingdom. April 2014.
- I attended, organized, and coordinated a training workshop on " Mass spectroscopy devices" in cooperation with the Swiss company (Metrohm). The workshop was held at the University of Jordan - Water, Energy, and Environment Center. I was in charge of the Center's laboratories at that time.
- One of the members of the Organizing Committee for the celebration of World Water Day, which was organized by the Water, Energy, and Environment Center in cooperation with the University of Jordan Library.

COMPUTER COURSES & SOFTWARES ▾

Course Title

Course in computer applications
(Word, Excel, PowerPoint, Access, Windows, IT, DOS)
C++ Course
Geographic Information System (GIS) Course
Autolab NOVA - Advanced software for electrochemistry
GPES (an electrochemical analysis software)
e-learning
SPSS
ProQuest database

Location

JUST University, Jordan &
Liverpool University, UK.
Yarmouk University-Jordan
JUST University-Jordan
Liverpool University-UK
Liverpool University-UK
The University of Jordan
The University of Jordan
The University of Jordan

SKILLS & INTERESTS ▾

Teamwork, initiative, excellent social activities, reading, and a good ability to learn.

COMPUTER EXPERIENCE ▾

- Microsoft Office Applications
- Internet
- C++
- GPES software (an electrochemical analysis software)
- AquaChem software for water analyses
- Good Typing Skills
- Adobe Acrobat
- High ability to learn and handle computer applications

LANGUAGES ▾

<u>Language</u>	<u>Reading</u>	<u>Writing</u>	<u>Speaking</u>
Arabic (Mother Tongue)	Fluent	Fluent	Fluent
English	Fluent	Fluent	Fluent

REFERENCES ▾

Prof. Constant van den berg. Liverpool University, UK.
Dr. Pascal Salaun Liverpool University, UK.
Dr. Ivanka Pižeta Croatia

Professor of water electrochemistry
Associate professor of water chemistry
Professor/Senior researcher of
Environmental Chemistry

Reference letters are available upon request.