

## Osama Eisa Mohawesh, Ph.D.

Full Professor

Water Resources and Environmental Engineering

Department of Plant Production, Faculty of Agriculture

Mutah University, P. O. Pox (7), Karak 61710, Jordan

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**Researchgate:** [https://www.researchgate.net/profile/Osama\\_Mohawesh](https://www.researchgate.net/profile/Osama_Mohawesh)

**Academia:** <https://mutah.academia.edu/OsamaMohawesh>

**Linkedin:** <https://jo.linkedin.com/pub/osama-mohawesh/18/31b/56a>

**Google Scholar:** <http://scholar.google.com/citations?user=FNnxaQQAAA&hl=en>

### Educational Background

Date	Educational institute	Country	Major	Degree
April 2004- March 2007	Tokyo University of Agriculture and Technology	Japan	Biosystem Engineering (Irrigation and Drainage)	Ph.D.
April 2002- March 2004	Utsunomiya University	Japan	Water Resources and Environmental Engineering	M.Eng.
Aug. 1991- June 1996	Jordan University of Science and Technology	Jordan	Water Resources and Environmental Engineering	B.Eng.

### Honors & Awards

Date	Awards
1991-1996	Royal Award scholarship for undergraduate study, <b>Jordan.</b>
2001-2007	Research and study scholarship from Japan Ministry of higher education for postgraduate study ( M.Eng. & Ph.D.), <b>Japan.</b>
June 2010- Sep. 2010	Research scholarship from German Research Foundation (DFG) to Rostock University, <b>Germany.</b>
June 2011- Sep. 2011	Research scholarship from German Research Foundation (DFG) to

	Rostock University, <b>Germany.</b>
June 1-June 15 2012	Research and training visit to Ministry of Environment and Conservation/ Water Resource Management Division, Newfoundland, <b>Canada.</b>
June 2012- Sep. 2012.	Research scholarship from German Academic for Exchange Services (DAAD to Braunschweig University of Technology, <b>Germany.</b>
March 2015-Jan. 2016	Research scholarship from Japan Society for the Promotion of Science (JSPS), Kyoto University, <b>Japan.</b>
May 2016- Aug. 2016	Research scholarship from Norman E. Borlaug International Agricultural Science and Technology Fellowship Program (Borlaug Fellowship), U.S. Department of Agriculture (USDA), University of Georgia, <b>USA.</b>
Oct. 15-25 Oct. 2019	Research Fellow on implementation of a study on Biochar technology and valorization research and consultants, <b>China.</b>
Feb. 1 <sup>st</sup> 2021-Aug. 31 2021	Fullbright Fellowship (Visiting Professor), Texas Tech University, <b>USA.</b>
Sep. 1 <sup>st</sup> , 2021- until now	Visiting professor, Jordan University of Science and Technology, <b>Jordan.</b>

### **Courses Taught**

- **Faculty of Agriculture (Undergraduate courses)**
  - ✓ Soil science
  - ✓ Irrigation and drainage
  - ✓ Plant soil, water relationship
  - ✓ Seminar course
  - ✓ Experimental Design
  - ✓ Soil Fertility and Fertilizers
  - ✓ Irrigation management
- **Faculty of Agriculture (Graduate courses)**
  - ✓ Surface water hydrology
- **Faculty of Engineering/Civil Engineering Department**
  - ✓ Hydrology

- ✓ Water Resources Engineering

### Teaching Experience

<b>Date</b>	<b>Positions / Work experience</b>
Sep. 2017 - present	<b><u>Professor</u></b> , Department of Plant Production, Faculty of Agriculture, Mutah University.
Jan. 2014- Jan. 2015	<b><u>Lecturer</u></b> , Dept. of Civil Engineering, Faculty of Engineering, Mutah University.
Sep. 2012- Aug. 2017	<b><u>Associate Professor</u></b> , Department of Plant Production, Faculty of Agriculture, Mutah University.
April 2007- Sep. 2012	<b><u>Assistant Professor</u></b> , Department of Plant Production, Faculty of Agriculture, Mutah University. (Taught several courses in Irrigation, Drainage, soil science, Plant Soil, Water relationship, and Seminar Course).
April 2001- March 2007	<b><u>Research Assistant</u></b> , Department of Environmental Engineering, Faculty of Agriculture, Utsunomiya University, Japan. (Involved in different research fields in modeling water movement, carbon sink, and helping in teaching practical courses in Soil Biophysics and soil contamination).
Jan. 1998- April 2001	<b><u>Laboratory supervisor and teaching assistant</u></b> , Department of Plant Production, Faculty of Agriculture, Mutah University. (Taught several laboratories in Irrigation and drainage, Soil science, Plant Soil, Water relationship, and Irrigation system design).

### Administrative Working Experience

<b>Date</b>	<b>Positions</b>
April 2019-Aug. 2021	<b><u>Dean</u></b> , Deanship of Scientific Research, Mutah University.
Sep. 2018–April 2019	<b><u>Vice Dean</u></b> , Deanship of Scientific Research, Mutah University.
Sep. 2016 –Aug. 2017	<b><u>Vice Dean</u></b> , Faculty of Agriculture, Mutah University.
Sep. 2013- Aug. 2015	<b><u>Director</u></b> , Prince Faisal Center for the Dead Sea, Environment and Energy Research, Mutah University,
Sep. 2011- Sep. 2012	<b><u>Director Deputy</u></b> , Prince Faisal Center for the Dead Sea, Environmental and Energy Research, Mutah University,
Sep. 2010- Sep. 2011	<b><u>Head of Plant Production Department</u></b> , Faculty of Agriculture, Mutah University.
Sep. 2009- Sep. 2010	<b><u>Assistant Dean for student affairs</u></b> , Faculty of Agriculture,

	Mutah University.
April 2001- March 2007	<b>Research Assistant</b> , Department of Environmental Engineering, Faculty of Agriculture, Utsunomiya University, Japan. (Involved in different research fields in modeling water movement, carbon sink, and helping in teaching practical courses in Soil Biophysics and soil contamination).

### **Membership in Professional Committee**

❖	Chairman of Agricultural and Veterinary Science Sector Committee, Scientific Research and Innovation Support Fund, Ministry of Higher Education & Scientific Research, Jordan.
❖	Member, Mutah University Dean's Council, Mutah University, 2018- Present.
❖	Member of the Editorial Board of Mutah University Humanities Journal for Research and Studies, 2018-present.
❖	Member of the Editorial Board of Mutah University Natural and Applied Journal for Research and Studies, 2018-present.
❖	Member of the Higher Scientific Research Committee Board of Mutah University, 2016-present.
❖	Member of the Higher Graduate study Committee Board of Mutah University, 2016-present.
❖	Member of Journals approval for promotion and publication improvement.
❖	Member of Agriculture Faculty board, 2015-2017.
❖	Head of Higher Education committee at Department of Plant Production, 2015-2017.
❖	Head of Higher committee of Qs and THE at Mutah University.

### **Publications: In Refereed Journals**

No.	Article	Impact Factor/ Scopus Rank*(2021)
1	Ammar Albalasmeh, <b>Mohawesh O.</b> , Mamoun Gharaibeh, Sanjit Deb, Lindsey Slaughter, Ali El Hanandeh. (2022). Artificial neural network optimization to predict saturated hydraulic conductivity in arid and semi-arid regions. Catena 217: 106459	Q1
2	Tuqa Al-Mrayat, Husam Al-Hamaiedeh, Tayel El-Hasan, Salah H Aljbour, Ziad Al-Ghzawi, <b>Mohawesh O.</b> (2022). Pyrolysis of Domestic Sewage Sludge: Influence of	Q1

	Operational Conditions on the Product Yields Using Factorial Design. Heliyon 8 (5): e09418	
	Ammar A. Albalasmeh, Ma'in Z. Alghzawi, Mamoun Gharaibeh, <b>Mohawesh O.</b> (2022). Assessment of the Effect of Irrigation with Treated Wastewater on Soil Properties and on the Performance of Infiltration Models. Water 14: 1520	<b>Q1</b>
<b>1</b>	Ammar Albalasmeh, <b>Mohawesh O.</b> , Mamoun Gharaibeh, Abdulaziz Alghamdi, Mohammad Alajlouni, Ahmad Alqudah. (2022). Effect of hydrogel on corn growth, water use efficiency, and soil properties in a semi-arid region. Journal of the Saudi Society of Agricultural Sciences (Accepted) <a href="https://doi.org/10.1016/j.jssas.2022.03.001">https://doi.org/10.1016/j.jssas.2022.03.001</a> .	<b>Q1</b>
<b>2</b>	<b>Mohawesh O.</b> , Albalasmeh A., Deb S., Singh S., Simpson C., AlKafaween N., Mahadeen A. (2022). Effect of Colored Shading Nets on the Growth and Water Use Efficiency of Sweet Pepper ( <i>Capsicum annum L.</i> ) Grown Under Semiarid Conditions. Horttechnology 32(1): 21-27.	<b>0.668 (Q2)</b>
<b>3</b>	<b>Mohawesh O.</b> , Albalasmeh A., Gharaibeh M., Deb S., Simpson C., Singh S., Al-Soub B., El Hanandeh A. 2021. Potential Use of Biochar as an Amendment to Improve Soil Fertility and Tomato and Bell Pepper Growth Performance Under Arid Conditions. Journal of Soil Science and Plant Nutrition 21: 946–2956	<b>3.872 (Q1)</b>
<b>4</b>	Unami K., <b>Mohawesh O.</b> , Fadhil R. (2021). Statistical analysis of flash flood events for designing water harvesting systems in an extremely arid environment. Hydrological Processes 35( 9): e14370.	<b>3.256 (Q1)</b>
<b>5</b>	Unami K., Fadhil R., <b>Mohawesh O.</b> (2021). Bounding linear rainfall-runoff models with fractional derivatives applied to a barren catchment of the Jordan Rift Valley. Journal of Hydrology 593:125879.	<b>4.5 (Q1)</b>
<b>6</b>	Balasmeh A., Gharaibeh M., <b>Mohawesh O.</b> , Alajlouni M., Quzaih M., Masad M., El Hanandeh A. (2020). Characterization and Artificial Neural Networks Modelling of methylene blue adsorption of biochar derived from agricultural residues: Effect of biomass type, pyrolysis	<b>3.517 (Q1)</b>

	temperature, particle size. Journal of Saudi Chemical Society 24 (11): 811-823.	
7	<b>Mohawesh O.</b> , Balasmeh A., Al-Hamaiedeh H., Qaraleh S, Maaitah O., Bawalize A., Almajali D. (2020). Controlled land application of Olive Mill Wastewater (OMW): enhance soil indices and barely growth performance in Arid Environments. Water, Air, & Soil Pollution 231:214.	2.52 (Q2)
8	Unami K., <b>Mohawesh O.</b> , Fujihara M. (2020). Prototype and model of a solar-driven desalination plant in arid environment. Thermal Science 24 (2A): 903-914.	1.625 (Q2)
9	Magero E., Unami K., <b>Mohawesh O.</b> , Yamaguchi M., 1 Fujihara M. (2020). Nonlinear growth dynamics of date palms responding to environmental parameters. Food Research 4(6):60-63.	
10	<b>Mohawesh O.</b> , Al-Hamaiedeh H., Balasmeh A., Qaraleh S., Haddadin M. (2019). Effect of olive mill wastewater (OMW) application on soil properties and wheat growth performance under rain-fed conditions. Water, Air, & Soil Pollution 230:160.	2.52 (Q2)
11	Koichi U., <b>Mohawesh O.</b> , Fadhil R. (2019). Time periodic optimal policy for the operation of a water storage tank using the dynamic programming approach. Applied Mathematics and Computation 353: 418-431.	4.091 (Q1)
12	<b>Mohawesh O.</b> , Durner W. (2019). Effect of bentonite, hydrogel, and biochar on soil hydraulic properties and water holding capacity from saturation to oven dryness. Pedosphere 29(5):598-607	3.911 (Q1)
13	Alamro M., Mahadeen A., <b>Mohawesh O.</b> (2019). Effect of degradable mulch on tomato growth and yield under field conditions. Bulgarian Journal of Agricultural Science 25 (6):1122–1132.	0.69 (Q3)
14	Mohawesh O., Coolong T., Aliedeh M., Qaraleh S. (2018). Greenhouse evaluation of biochar to enhance soil properties and plant growth performance under arid	0.69 (Q3)

	environment. Bulgarian Journal of Agricultural Science 24 (6):1012-1019.	
15	Miller L., Vellidis G., <b>Mohawesh O.</b> , Coolong T. (2018). Comparing a Smartphone Irrigation Scheduling Application with Water Balance and Soil Moisture-based Irrigation Methods: Part I—Plasticulture-grown Tomato. HortTechnology 28 (3):354-361.	<b>0.668 (Q2)</b>
16	Unami K., <b>Mohawesh O.</b> (2018). A unique value function for an optimal control problem of irrigation water intake from reservoir harvesting flash floods. Stochastic Environmental Research and Risk Assessment 32 (11): 3169-3182.	<b>3.379 (Q1)</b>
17	<b>Mohawesh O.</b> , Janssen M., Lennartz B. (2017). Assessment of structured and homogenized soil samples' effect on soil hydraulic properties. Eurasian Soil Science 50 (9):1077-1085.	<b>1.016 (Q2)</b>
18	<b>Mohawesh O.</b> (2016). Utilizing deficit irrigation to enhance growth performance and water-use efficiency of eggplant in arid environments. Journal of Agricultural Science and Technology 18 (1):265-276.	<b>0.897 (Q2)</b>
19	Mohawesh O. (2016). Field evaluation of deficit irrigation on tomato growth performance, water use efficiency, and control of parasitic nematode infection. South African Journal of Plant and Soil 33(2):125-133.	<b>1.11 (Q3)</b>
20	Karajeh M., Mohawesh O. (2016). Root-Knot Nematode ( <i>Meloidogyne javanica</i> ) – Deficit Irrigation Interactions on Eggplant Cropped under Open Field Conditions. Journal of Horticultural Research 2016, vol. 24(1):73-78	<b>(Q3)</b>
21	<b>Mohawesh O.</b> , Karajeh M. (2015). Greenhouse evaluation of deficit irrigation on the growth of tomato and eggplant and their interactions with <i>Meloidogyne javanica</i> . South African Journal of Plant and Soil 32(1): 55-60.	<b>1.11 (Q3)</b>

22	Koichi U., <b>Mohawesh O.</b> , Sharifi E., Takeuchi J., Fujihara M. (2015). Stochastic modeling and control of rainwater harvesting systems for irrigation during dry spells. Journal of Cleaner Production 88:185-195.	9.297 (Q1)
23	<b>Mohawesh O.</b> , Karajeh M. (2014). Effects of deficit irrigation on growth performance of tomato and eggplant and their infection with the root-knot nematode ( <i>Meloidogyne javanica</i> ) under controlled conditions. Archives of Agronomy and Soil Science 60 (8):1091-1102.	2.85 (Q1)
24	<b>Mohawesh O.</b> , Mahmoud M., Janssen M., Lennartz B. (2014). Effect of irrigation with olive mill wastewater on soil hydraulic and solute transport properties. International Journal of Environmental Science and Technology 11:927-934.	2.860 (Q1)
25	<b>Mohawesh O.</b> (2014). Development of pedotransfer function for estimation soil retention curves and saturated hydraulic conductivity in the Jordan valley. Jordan Journal of Agricultural Sciences 10(1):67-82.	-
26	<b>Mohawesh O.</b> (2013). Assessment of Pedotransfer Functions (PTFs) in Predicting Soil Hydraulic Properties under Arid and Semi-Arid Environments. Jordan Journal of Agricultural Sciences 9(4):475-492.	-
27	Tadros M., AL-Mefleh N., <b>Mohawesh O.</b> (2012). Effect of irrigation water quality on <i>Leucaena</i> germination and early growth stage. International Journal of Environmental Science and Technology 9(2):281-286.	2.860 (Q1)
28	<b>Mohawesh O.</b> (2011). Evaluation of evapotranspiration models for estimating reference evapotranspiration in arid and semiarid environments. Plant Soil and Environment 57(4):145-152.	1.3799 (Q2)
29	<b>Mohawesh O.</b> (2013). Artificial neural network for	2.85 (Q1)



	estimating monthly evapotranspiration in arid and semi-arid environments. Archives of Agronomy and Soil Science 59 (1):105-117.	
<b>30</b>	<b>Mohawesh O.</b> Talazi S. (2012). Comparison of Hargreaves and FAO56 equations for estimating monthly evapotranspiration for semiarid environment. Archives of Agronomy and Soil Science 58(3):321-334.	<b>2.85 (Q1)</b>
<b>31</b>	Mahadeen A., <b>Mohawesh O.</b> , Al-Absi K., and Al-Shareef W. (2011). Effect of irrigation regimes and frequency on water use efficiency and tomato fruit ( <i>Lycopersicon esculentum</i> Mill.) grown under an arid environment. Archives of Agronomy and Soil Science 57:105-114.	<b>2.85 (Q1)</b>
<b>32</b>	<b>Mohawesh O.</b> , Al-Absi K., Tadros M. (2010). Effect of antitranspirant application on physiological and biochemical parameters of three orange cultivars grown under progressive water deficit. Advances in Horticultural Sciences 24(3):183-194.	<b>0.61 (Q3)</b>
<b>33</b>	<b>Mohawesh O.</b> (2010). Spatio-temporal calibration of Blaney-Criddle equation for calculating ETo in an arid and semiarid environment. Water Resources Management 24: 2187–2201.	<b>3.517 (Q1)</b>
<b>34</b>	Al-Absi K., <b>Mohawesh O.</b> (2009). Olive oil mineral content of two local genotypes as influenced by recycled effluent irrigation under arid environment. Journal of the Science Food and Agriculture 89 (12):2082-2087.	<b>3.638 (Q1)</b>
<b>35</b>	<b>Mohawesh O.</b> , Al-Absi K. (2009). Physiological response of two apple genotypes to different water regimes under semiarid conditions. Advances in Horticultural Sciences 23(3):158-165.	<b>0.61 (Q3)</b>
<b>36</b>	<b>Mohawesh O.</b> , Ishida T., Fukumura K., Yoshino K. (2008). Assessment of spatial variability of penetration resistance	<b>1.611 (Q2)</b>

	and hardpan characteristics in a Cassava field. Australian Journal of Soil Research 46(3):210-218.	
37	<b>Mohawesh O.</b> , Fukumura K., Ishida T., Yoshino K. (2005). Assessment of spatial variability of soil and canopy properties in a Cassava field. Journal of Japan Society of Hydrology and Water Resources 18 (5): 501-509.	-
38	<b>Mohawesh O.</b> , Fukumura K., Ishida T., Yoshino K. (2005). Soil hydraulic properties in a Cassava field as a function of dry bulk density. Journal of Japan Society of Hydrology and Water Resources 18 (2):156-166.	-

### CONFERENCES

1. Singh A., **Mohawesh O.**, Deb S. 2021. Effects of Biochar on Soil Physical and Hydraulic Properties and Plant Responses in a Drip-Irrigated Early-Planted Cotton, ASA-CSSA-SSSA International Annual Meeting, November 7-10, Salt Lake City, UT.
2. Unami K., Fadhil R., **Mohawesh O.** 2021. Survey of Stochastic Process Models Applicable to Water Resources Management, Mediterranean Geosciences Union (MedGU), first MedGU Annual Meeting (MedGU-21), 25–28 November, Istanbul, Turkey.
3. **Mohawesh O.**, Al- Hamaiedeh H., Qaraleh S. 2018. Effect of olive mill wastewater (OMW) application on soil properties, and plant growth performance under rainfed conditions. The 13th Conference on Sustainable Development of Energy, Water and Environment Systems-SDEWES Conference, Palermo, Italy.
4. Unami K., **Mohawesh O.** 2018. A prototype of a micro-irrigation scheme in the Jordan Rift Valley and its mathematical modeling. International Green Capitals Congress, 8-12 May, Konya, Turkey.
5. **Mohawesh O.**, Aliedeh M. 2017. The potential use of biochar to enhance soil properties and plant growth performance under an arid environment. The Fifth Arab-American Frontiers Symposium, 2-4 November, Rabat, Morocco.
6. **Mohawesh O.**, Al-Hamaiedeh H., Qaraleh S., Haddadin M., Almajali D., Bawalize A. 2017. Effect of olive mill wastewater (OMW) application on soil properties, and plant growth performance under rainfed conditions. International Conference on Water Management in Arid and Semi-arid Land, 7-10 October, Irbid, Jordan.

7. **Mohawesh O.**, Unami K., Fujihara M. 2016. Designing and modeling on-farm desalination system using dew collection technology. The Third International Conference on Agricultural and Food Engineering (CAFEi2016), 23-25 August, Kuala Lumpur, Malaysia.
8. Miller L., Coolong T., Vellidis G., Porter W., Smith E., **Mohawesh O.** 2016. Alternative Irrigation Scheduling: Kc and SMS-based watering effects on watermelon production. The ASHS Annual Conference, American Society for Horticultural Science, 8-11 August, Atlanta, Georgia, USA.
9. Sharifi E., Koichi U., **Mohawesh O.**, Fujihara M. 2016. Operational rules for micro-dams solving stochastic control problems. Water Resources in Arid Areas: The Way Forward, Sultan Qaboos University, Muscat, Oman.
10. Sharifi E., Unami K., **Mohawesh O.**, Nakamichi T., Kinjo N., Fujihara M. 2015. Design and construction of a hydraulic structure for rainwater harvesting in an arid environment. E-proceedings of the 36th IAHR World Congress 28 June – 3 July, The Hague, the Netherlands.
11. **Mohawesh O.**, Batarseh M., Jiries A., El-Hasan T., Al-Hamideh H., Khan H. 2014. Transboundary Water Governance and Climate Change in the Hashemite Kingdom of Jordan. Aqaba International Conference on Marine and Coastal Environment, Status and Challenges in the Arab World, 27-29 October, Aqaba, Jordan.
12. Koichi U., **Mohawesh O.**, Sharifi E., Takeuchi J., Fujihara M. 2013. Optimal irrigation strategies in rainwater harvesting systems during dry spells. The 8th Conference on Sustainable Development of Energy, Water and Environment Systems-SDEWES Conference, 22- 27 September, Dubrovnik.
13. **Mohawesh O.**, Mahmoud M., Lennartz B. 2011. Long-Term Application of Olive Mill Wastewater Alters Soil Hydraulic and Solute Transport Properties. MALTA Conferences Foundation Malta V Conference, December 8, UNESCO, Paris, France.
14. **Mohawesh O.**, Fukumura K., Ishida T. 2004. Spatial variability of soil hydraulic properties and canopy properties in a Cassava field in Thailand. Proceedings of Participatory Strategy for Soil and Water Conservation Conference, ERECON, Tokyo, Japan.

**M. Sc. Supervision (Advisor & co-advisor)**

1. Majed Al zu'bi. 2022. Effect of Partial root drying (PRD) and deficit irrigation (DI) on the Growth and Water Use Efficiency of Jalapeño Pepper Grown under Semi-arid Conditions. (Jordan University of Science and Technology).
2. Amani Khuleib. 2021. Effect of biochar as a soil amendment on soil properties and plant growth performance under rainfed conditions. (Jordan University of Science and Technology).
3. Duha Zeadeh. 2021. Impact of Different Shading Colors and Intensities on Evaporation Suppression Efficiency from Water Surfaces. (Jordan University of Science and Technology).
4. Batool Mayyas. 2021. Effect of Colored Shading Nets and Intensities on the Growth and Water Use Efficiency of Jalapeño Pepper Grown under Semi-arid Conditions. (Jordan University of Science and Technology).
5. Mysoon Al-Amer. 2018. Effect of degradable plastic mulch on tomato growth and yield under field conditions. (Mutah University).
6. Nour Kfaween. 2017. The potential use of biochar to enhance soil properties and plant growth performance. (Mutah University).
7. Bayan, A. 2015. The potential use of biochar to enhance soil properties and plant growth performance. (Mutah University).
8. Isra, M. 2013. Assess the impact of Olive Mill Wastewater on the Environment and its Potential Use by the Local Community in Northern Jordan. (Jordan University of Science and Technology).
9. Altarawneh, R. 2010. Physiological responses of apple trees to the interactive effect of irrigation deficit and salinity. (Mutah University).

**P.h.D. Supervision (Advisor & co-advisor)**

1. Maram, A. 2016. Effect of soil amendment with olive mill wastewater (OMW) on soil properties, soil humic content, and plant growth performance under semi-arid conditions. Jordan University.

**M. Sc. Examination Committee**

1. Ismael, D. 2013. (Mutah University)
2. Aza, N. 2013. (Jordan University of Science and Technology).
3. Habib, L. 2014. (Jordan University of Science and Technology).
4. Mubeideen, M. 2018. (Mutah University).
5. Ghadi, A. 2018. Olive mill wastewater treatment produced from olive mills using Moringa seeds as a natural coagulant. (Jordan University of Science and Technology).
6. Ashour, A. 2018. Effect of Salvia spinosa L. seeds extracts on the physical and hydraulic properties of sandy soil. (Jordan University of Science and Technology).
7. Heba Al-Ali. 2022. Drought Assessment in North Jordan Using Remote Sensing and GIS

Technologie. (Jordan University of Science and Technology).

#### **Ph.D. Examination Committee**

1. Mahmoud, M. 2011. Long-term impact of olive mill wastewater (OMW) irrigation on soil hydraulic properties. (Germany, Rostock University).
2. Fatima, B. K. 2018. Evaluation of the DSSAT Vertical Drainage Model for Vertisols. (Jordan, University of Jordan).

#### **MEMBERSHIP**

- Higher studies committee
- Jordan Engineers Association (1996-until now)

#### **RESEARCH PROJECTS**

- ✓ **Scientific Research Deanship (2022), *Effect of Partial root drying (PRD) and deficit irrigation (DI) on the Growth and Water Use Efficiency of Jalapeño Pepper Grown under Semi-arid Conditions.*** Jordan University of Science and Technology
- ✓ **Scientific Research Deanship (2022), *Effect of biochar as a soil amendment on soil properties and plant growth performance under rainfed conditions.*** Jordan University of Science and Technology
- ✓ **Scientific Research Deanship (2022), *Impact of Different Shading Colors and Intensities on Evaporation Suppression Efficiency from Water Surfaces.*** Jordan University of Science and Technology
- ✓ **Scientific Research Deanship (2022), *Effect of Colored Shading Nets and Intensities on the Growth and Water Use Efficiency of Jalapeño Pepper Grown under Semi-arid Conditions.*** Jordan University of Science and Technology
- ✓ **Fulbright Paying it Forward Alumni Grant (2022), *Utilizing Biochar Technology for Sustainable Agriculture in Jordan Valley.*** In collaboration with Jordan University of Science and Technology, Department of Natural Resources and Environment.
- ✓ **Japan Society for Promotion Science (JSPS) (2021), *Novel methods to develop renewable water resources, to mathematically model their dynamics together with that of existing water resources, and to deduce and validate optimal water resources portfolio.*** In collaboration with Kyoto University, Graduate School of Agriculture, Water Resources Division.
- ✓ **UPM (Umwelt Projekt Management, Munich/Germany) (2019), *Feasibility Study & Capacity Building Assistance to identify sustainable sludge treatment options and recover values from sludge delivered at Al-Ekaider waste and wastewater management area.*** In collaboration with the Ministry of Water and Irrigation (MWI) and Water Authority of Jordan (WAJ) in Amman/Hashemite Kingdom of Jordan and the Yarmouk Water Company (YWC) and Irbid Governorate.

- ✓ **Japan Society for Promotion Science (JSPS) (2017), *A novel dew collection method in the harsh environment***, In collaboration with Kyoto University, Graduate School of Agriculture, Water Resources Division.
- ✓ **NATO, *Transboundary water resources and climate change in Jordan (2012)***. In collaboration with the Ministry of Environment and Conservation, Water Resources Management Division, Newfoundland and Labrador, Canada.
- ✓ **EU-SRTD-II (2015), *Utilizing Biochar Technology for sustainable agriculture and water resources management in Jordan***, In collaboration with National Center for Agricultural Research and Extension.
- ✓ **Scientific Research fund (SRF) (2014), Ministry of Higher Education, *Effect of amendment with olive mill wastewater on soil properties, soil humic content, and plant growth performance under semi-arid conditions***. In collaboration with National Center for Agricultural Research and Extension.
- ✓ **Scientific Research fund (SRF) (2012), Ministry of Higher Education, *Effect of Deficit Irrigation regimes on root-knot nematode and its host plant. Jordan Scientific Research Fund***. In collaboration with Jordan valley Authority.
- ✓ **Scientific research fund, Mutah University (2010), *Evaluation and development of Pedotransfer Functions (PTF) for predicting Soil Moisture Retention Curve (MRC), available water, and saturated hydraulic conductivity (Ks) for Jordanian agricultural soils***. In collaboration with Jordan valley Authority.
- ✓ **ICARDA (2010), *Water scarcity, and sustainable growth: Using water harvesting techniques, pitcher irrigation, and greywater to combat desertification, building green belts to improve livelihood opportunities for people through securing food in arid regions***. In collaboration with the National Center for Agricultural Research and Extension and Jordan University of Science and Technology.

#### **Journal Referee**

- ✓ Journal of Hazardous materials
- ✓ Scientia Horticulturae
- ✓ Agricultural water management
- ✓ Archive of Agronomy and Soil Science
- ✓ Clean- Soil, Air, Water
- ✓ Jordan Journal of Agriculture Science
- ✓ Archive of Agronomy and Soil Science

#### **REFERENCES**

- ☒ **Dr. Sanjit Deb**, Associate Professor of Soil Physics, Department of Environmental Engineering, Faculty of Agriculture, Department of Plant and Soil Science, Texas Tech University, USA. E. mail: [sanjit.deb@ttu.edu](mailto:sanjit.deb@ttu.edu)

- ☒ **Dr. Ammar Albalasmeh**, Associate Professor of Environmental Systems /Soil Physics, Department of Natural Resources and Environment, Jordan University of Science and Technology, Jordan. E. mail: [aalbalasmeh@just.edu.jo](mailto:aalbalasmeh@just.edu.jo)
- ☒ **Dr. Unami Koichi**, Prof. of Water resources management, Computational hydraulics, Graduate School of Agriculture, Kyoto University, Japan. E. mail: [unami@adm.kais.kyoto-u.ac.jp](mailto:unami@adm.kais.kyoto-u.ac.jp)
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### **Additional Information**

#### **Languages**

**Arabic:** Mother Tongue

**English:** Very Good

**Japanese:** Good