

## SUMMARY OF QUALIFICATIONS

MAJED M ABU-ZREIG

Professor of Water Resources Engineering, JUST

Jordan University of Science and Technology

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### Academic posts: (1996 - to date)

- Distinguished Visiting Professor, Tsukuba U./IPDRE Tottori U., Japan, 10/2017 – 9/2020.
- Professor, Civil Engineering Department, JUST, since 12/2006
- Professor, Water & Environmental Engineering, German Jordanian U., 09/2013 – 09/2015
- Associate professor, JUST, 04/2002 – 2/2007
- Assistant Professor, JUST, 03/1996- 4/2002

### Education: rated excellent

- Ph.D., Water Resources Engineering, Univ. of Guelph, Canada, 1995 (**GPA: A**)
- M.Sc., Water Resources & Environmental Engineering, JUST, 1990 (**GPA 86.7%**)
- B.Sc., Civil Engineering, Yarmouk University, Jordan, 1985 (**GPA: 80.8%**).
- General Secondary School certificate, Ramtha Secondary School, 1981 (**GPA 94.6%**)

### Research:

The current field of research include water management, arid land hydrology, non-point source pollution and modeling, water harvesting and wastewater treatment and reuse.

- Publish more than **44 scientific papers** in high impact Journals
- Publish more than **30 international conference papers** and reports
- US Patent 8,359,918**, Rain gauge with particulate separator.
- More than 1300 Citation with h-index of 17 and i-10 Index of 23 (Google scholar)**
- Attend more than **60 International Conferences**
- Participate and securing research funds for **several local and international projects**:
- Reviewer for more than **20 International SCI and ISI Journals**
- Reviewers for research proposals for several research institutions and Universities (Saudi Arabia, UAE, Oman, South Africa)

### Administration & Advisory posts:

- Director, International Relations Office**, Jordan University of Science and Technology (October 2015 – September 2016).
- Dean of Graduate Studies and Dean of Scientific Research**, German Jordanian University (09/2013 – 09/2015)
- Chair, Department of Biosystems Engineering**, Jordan University of Science & Technology (JUST), 09/2008-09/2009.
- Assistant Dean of Student affairs**, JUST, 09/2002-09/2003
- Assistant Dean of Engineering**, JUST, 09/1999-09/2000
- Elected president of JUST Faculty Society, Jordan** 08/2007 – 11/2009
- Elected vice president of JUST Faculty Society, Jordan** 11/2009 – 11/2011
- Member of Board of Trustees, Irbid National University, Jordan** 1/2016 – 1/10/2018

### **International Experience: visiting professor at several International universities (4 years)**

- a. Visiting professor, Tottori University, Japan, 5 years contract (10/2017 – to date)
- b. Visiting professor, 9/2016 & 8/2017, University of Minho, Portugal (2 month)
- c. Visiting professor, 9/2015, Technical University of Berlin, Germany (1 month)
- d. Visiting professor. 08/2014, Humboldt University of Berlin, Germany (1 month)
- e. Visiting professor, 06/2010, University of Hamburg-Harburg, Germany (3 months)
- f. 2nd Sabbatical year, 09/2009, University of Tottori, University of Tsukuba, Japan (1 year)
- g. First Sabbatical year, 02/2004, University of Tsukuba, Japan (1 year).
- h. Visiting professor, 06/2003, University of Tsukuba, Japan (4 months, Matsumae Foundation Support).
- i. Visiting professor, 06/2000, University of Stuttgart, Germany (3 months)
- j. Visiting researcher, 05/1995, University of Minsk, Russia (1 month, U of Guelph Support)
- k. Research associate, summer months of 1995, 1996, 1997, 1998, 2001, University of Guelph, Canada (~15 months).

### **Scholarships and Honor:**

- a. PEACEII program visiting faculty fellowship, University of Minho, Portugal, 2016 & 2017.
- b. AVEMPACE III Visiting faculty fellowship, program, Technical University of Berlin, 2015.
- c. TRAIN THE TRAINER Award, Humboldt University of Berlin, 2014.
- d. THE DISTINGUISHED ARAB SCHOLAR AWARD, Arab Fund for Economic & Social Development, Kuwait, 2009.
- e. The DFG summer Fellowship, University of Hamburg, Germany, June 2010
- f. The JSPS Postdoctoral Fellowship, University of Tsukuba, Japan, 2004
- g. The MATSUMAE Fellowship, University of Tsukuba, Japan, 2003.
- h. DAAD research scholarship. University of Stuttgart, Germany, 2000
- i. CECIL-FRANKLIN Scholarship, Soil and Water Conservation Stewardship, University of
- j. Guelph, Canada, 1993
- k. W.C. Wood Scholarship. University of Guelph, Canada, 1993
- l. Travel Scholarship, University of Guelph, Canada, 1994, 1995
- m. PhD Study Scholarship, Jordan University of Science and Technology, 1991-1995
- n. Ministry of Education Scholarship, Yarmouk University, Jordan, 1981-1985.

### **Professional Committees and Memberships**

- a. Society of Arid Land Studies, Japan
- b. Soil and Water Conservation Society, U.S.A
- c. Jordanian Engineers Association
- d. Jordanian Environmental Society
- e. Editorial board/Jordan Journal of Civil Engineering
- f. Member in the SRF water and environmental committee.
- g. Member in the National committee for Nanotechnology center (HCST)
- h. Head of the National Committee to evaluate water-harvesting projects, Ministry of Agriculture, Jordan, 2003.
- i. Member in the national committee for EIA, Ministry of Environment.
- j. Member of the National Committee for Development of Environmental Management and Monitoring System. Reviewing Soil, Water and Air quality criteria HCST.
- k. Member of the editorial and technical committee for the “Miraa’t Attechnologia” magazine, Published by Jordan University of Science and Technology.

**MAJED M. ABU-ZREIG, PhD**  
**Professor of Soil & Water Engineering**

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**COORDINATES**

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Jordan University of Science and Technology  
Irbid, Jordan

**Google Scholar Citation profile:**

<https://scholar.google.com/citations?user=YIYmLksAAAAJ&hl=en>

**CURRENT POSITION**

- Especially appointed Professor, International Platform for Dryland Research and Education, Tottori University, Japan
- Professor of Water Resources and Environmental Engineering, Jordan University of Science & Technology
- Associate Editor for the Jordan Journal of Civil Engineering (JJCE), Jordan

**EDUCATION**

**Ph.D.** (Water Resources Engineering) University of Guelph, CANADA-1995 (GPA: A)

**M.Sc.** (Water Resources & Environmental Engineering) Jordan University of Science and Technology (JUST), JORDAN – 1990 (GPA 86.7)

**B.Sc.** (Civil Engineering) Yarmouk University, JORDAN – 1985 (GPA: 80.8)

**WORK EXPERIENCE**

- **International Platform for Dryland Research and Education, Tottori U.:** Specially appointed professor, 10/2017 – 9/2020
- **Jordan University of Science and Technology (JUST) (24 years):** Professor, Civil Engineering Department, 01/1996 ~ to date; Teaching Assistant, Civil Engineering Department, 1988-1990
- **German Jordanian University (GJU):** Professor and Dean of Graduate Studies and Scientific Research: 9/2013- 09/2015
- **University of Tsukuba/ Japan (2.5 years):** Visiting professor: 6/2003 – 2/2005 & 9/2009 – 9/2010
- **Tottori U. (Arid Land Research Center) (9 months):** Visiting professor: 7/2009 – 4/2010
- **Technical University of Berlin, University of Hamburg-Harburg, University of Stuttgart, Germany (6 months):** Visiting professor (ERASMUS+, DAAD, DFG Support): Summer of 2010 & 2000
- **University of Minho, Portugal (2 months):** Visiting professor 9/2016 & 8/2017.
- **University of Guelph, Canada (8 years):** Research Associate: School of Engineering, (3 summer months in years, 1995- 2001); Teaching Assistant: School of Engineering, University of Guelph 1992-1995
- **Site and Construction Engineer (2 years):** Construction of sewage and water network, Department of Airport Engineering, Royal Jordanian Air Force, 1985-1987.
- **Urban Planning Engineer (6 months):** Ministry of Municipalities and Environment, Al-Ramtha Municipality, Jordan (1985)

## ADMINISTRATION POSTS

- Director of the International Relations Office (JUST), 11/2015 – 09/2016
- Dean of Graduate Studies and Scientific Research (GJU), 9/2013 – 09/2015
- President, JUST faculty Society, Jordan. 08/2007~11/2009.
- Vic President, JUST faculty Society, Jordan. 11/2009~ 1/2011.
- Chair of the Department of Biosystems Engineering (JUST), 09/2008- 09/2009.
- Assistant Dean of Student Affairs (JUST) (09/2002 – 09/2003).
- Assistant Dean of Faculty of Engineering (JUST) (09/1999 – 09/2000).

## LANGUAGES

- **Arabic:** mother tongue
- **English:** excellent in reading writing and speaking
- **Russian:** fair in listening and speaking
- **Japanese:** a little bet.

## GEOGRAPHIC EXPERIENCE

- **Jordan:** Professor at Jordan University of Science and Technology and German Jordanian University (22 years).
- **Canada:** Research assistant, Research associate/University of Guelph (8 years)
- **Japan:** Visiting Professor (3 years)
- **Germany:** Visiting Professor (6 months)
- **Portugal:** Visiting Professor (2 month)
- **Russia:** Visiting research scientist (2 months)
- **Czech Republic:** Visiting research scientist (1 month)

## COURSES TAUGHT

- Wastewater Treatment, Environmental Engineering, Soil and Water Conservation Engineering, Soil Physics, Soil Mechanics, Soil Mechanics Laboratory
- Fluid Mechanics, Applied hydraulics, Water Conveyance, Hydrology, Groundwater Hydrology, Drainage Engineering, Advanced Subsurface Hydrology, Water and Irrigation Management, irrigation scheduling.
- Design of Concrete Structures, Analysis and Design of Concrete Structures, Structural Analysis, Engineering Mechanics/Statics
- Engineering Economy, Engineering Drawings, Surveying

## CURRENT & PAST FUNDED RESEARCH ACTIVITIES

- Wastewater reuse to improve productivity of desert land.
- Vermicomposting project funded by University of Tsukuba Japan (1 million Yen)
- Conservation and sustainability use of dry land agro-biodiversity in Jordan: The use of small scale water harvesting structures. project with total fund of 1.5 million, managed by NCARE
- Biogas project, EU funding with 850,000 Euro managed by GJU team,
- Rainfed agricultural project, submitted for H2020 EU program, 3 million Euro if awarded.
- Rainwater harvesting and rainfed agriculture project. ENPI funded submitted, 200,000 Euro, if awarded.
- The use of micro and macro water harvesting systems to increase water supply and agricultural production in the Jordanian arid zone.

- Optimum design and modeling of water harvesting systems for arid regions.
- Community based water harvesting and rehabilitation in Mafraq area.
- Investigating the performance of vegetated filter strips to control non-point source pollution and soil erosion, modeling.
- Land application of organic wastes (olive oil waste); its effect on soil hydro-physical properties and soil erosion.
- Management of soil moisture in rain-fed agriculture.
- Soil erosion control with land application of organic polymers.
- Land reclamation of salt affected soil with evaporation drainage method using absorbent fabric columns.
- Design of urban drainage systems, water supply pipe networks and wastewater sewer systems
- The use of pitcher irrigation in Jordan.
- Effect of Land Application of Manure on the Transport of Atrazine through Soil.
- Management of soil erosion in the Zarqa river basin using hydrological modeling and GIS.

### **CONSULTATION**

- The environmental degradation of olive mills waste in Jordan, UNDP
- Treatment technology of olive mills wastewater
- Design and implementation of low cost small wastewater treatment plant
- Study the feasibility of importing treated wastewater from Al-Ramtha treatment plant to the JUST campus (1998).
- Brackish water reuse in the Jordan valley, Eco Consult, JVA
- The socio-economic impact of olive pressing industry in Jordan, UNDP  
Design and evaluation of water harvesting systems in Jordan. Ministry of Agriculture
- Development of Environmental Management and Monitoring System. Reviewing Soil, Water and Air quality criteria, Higher Counsel for Science and Technology.
- Water harvesting practices in the east of Jordan, NCARRT
- Plantation with various water harvesting techniques, NCARRT

### **PROFESSIONAL COURSES & WORKSHOPS DELIVERED**

- Short courses on 1. Water pollution control 2. Natural wastewater treatment systems. Ministry of Irrigation and Drainage, Jordan.
- Short courses on irrigation scheduling; water harvesting. Ministry of Agriculture, Jordan
- The use of Guelph Permeameter to measure field saturated hydraulic conductivity. Jordan University of Science and Technology.
- Water Conservation Issues in Jordan. Jordan University of Science and Technology.
- Wide range of courses related to water systems taught at the departments of Biosystems Engineering, Department of Natural Resources and Environment including, Water Conservation Engineering, Drainage Engineering, Irrigation Engineering, Water Management, Environmental Hydrology.

### **FELLOWSHIPS AND HONERS**

- Visiting faculty fellowship, PEACE II program, University of Minho, Portugal, 2016 & 2017.
- Visiting faculty fellowship, AVEMPACE program, Technical U of Berlin, 2015.
- Train the Trainer Award, Humboldt University of Berlin, 2014.
- The Distinguished Arab Scholar Award, Arab Fund for Economic & Social Development, Kuwait, 2009.

- The DFG summer Fellowship, University of Hamburg, Germany, June 2010
- The JSPS Postdoctoral Fellowship. Laboratory of Arid Land Engineering, University of Tsukuba, Japan, 2004
- The Matsumae Fellowship. Laboratory of Arid Land Engineering, University of Tsukuba, Japan, 2003.
- DAAD research scholarship. University of Stuttgart, Germany, 2000
- Cecil-Franklin Scholarship, Soil and Water Conservation Stewardship, University of Guelph, Canada, 1993
- W.C. Wood Scholarship. University of Guelph, Canada, 1993
- Travel Scholarship, University of Guelph, Canada, 1994, 1995
- Graduate Study Scholarship, Jordan University of Science and Technology, 1991-1995
- Ministry of Education Scholarship, Jordan, 1981-1985.

### **PROFFISIONAL COMMITTEES AND MEMBERSHIPS**

- Society of Arid Land Studies, Japan
- Soil and Water Conservation Society, U.S.A
- Head of the National Committee to evaluate water-harvesting projects, Ministry of Agriculture, Jordan, 2003.
- Jordanian Engineers Association
- Jordanian Environmental Society.
- Member in the national committee for EIA, Ministry of Environment.
- Member of the National Committee for Development of Environmental Management and Monitoring System. Reviewing Soil, Water and Air quality criteria (Higher Counsel for Science and Technology.
- Member of the Jordanian National Committee for Irrigation and Drainage, Ministry of Water and Irrigation.
- Member of the organizational and technical committee for the Regional Conference in Irrigation and Saline Conditions. Jordan University of Science and Technology. Irbid, Jordan. June 21-24, 1999
- Member of the organizational and technical committee for the 5th (1999) and 6th (1999) scientific day for the college of engineering at Jordan University of Science and Technology
- Member of the editorial and technical committee for the “Miraa’t Attechnologia” magazine, Published by Jordan University of Science and Technology.
- Member of the organizational and technical committee for the International Conference on The Information Technology and its Role in the Technical and Industrial Development. 3-5/8/1998. Jordan University of Science and Technology.
- Member of the technical committee to study the feasibility of importing treated wastewater from Al-Ramtha treatment plant to the University campus (1998).
- Member of the committee to submit a proposal; to the World Bank for establishing Excellence Center of Materials Science & Technology.

### **REVIEWING ACTIVITIES**

Reviewer for the following journals, conferences and research councils

- Ecological Engineering/ Elsevier
- Jordan Civil Engineering Journal/Editorial Board member
- Journal of Environmental Management/ Elsevier
- Journal of Irrigation and Drainage/American Society of Civil Engineers
- Journal of Hydrology/Elsevier

- Advances in Environmental Research/ Elsevier
- Environmental Reviews. National Research Council (NRC) of Canada Research Press
- CATENA/ Elsevier
- Journal of Soil Ecology/Elsevier
- Applied Engineering in Agriculture, American Society of Agric. & Biosys. Eng.
- Biosystems Engineering J./ Elsevier
- Journal of Pure and Applied Sciences/University of Sharjah, UAE.
- Irrigation Science/Springer
- Plant and Soil Journal/Springer
- Iranian Journal of Science and Technology
- Journal of Arid land Studies, Arid land Society, Japan.
- Council of Abdul Hameed Shoman for Research Funding
- Deanship of Scientific Research of Sultan Qaboos University, Oman.
- Irrigation Salinity Conference, 1999. Jordan University of Science and Technology.
- Scientific Research fund Program SRF; Ministry of Higher Education, Jordan
- Jordan Badia Research and Development Centre.
- The 8th and, 10th International Conference on Desert Technology. 2005, 2011, Japan.

#### CONFERENCES ATTENDED (selected)

1. 11th Annual International Symposium on Agricultural Research, 16-19 July 2018, Athens, **Greece.**
2. The 13<sup>th</sup> International conference on Desert Technology, 12-16 March 2017, Chennai, **India.**
3. ***Conference Chair*, First International Conference on. "Water Management in Arid and Semi-Arid Lands, 2017, WMAL2017". 7-10 October 2017 JUST, Irbid, Jordan.**
4. 14th IWA/IAHR International Conference on Urban Drainage (ICUD), Prague, **Czech Republic**, 15-19 September, 2017
5. Fourth Arab Water Week 2017. "Managing Water Systems within Fragile Environments in the Arab Region". Date: 19 - 23 March 2017. Venue: Kempinski Hotel Ishtar Dead Sea, **Jordan.**
6. WWAC2016 - 4th IWA International Symposium on Water and Wastewater Technologies in Ancient Civilizations, 17-19 September, 2016 Coimbra, **Portugal.**
7. ***Chair*, UI green Metric National Workshop, Jordan University of Science and Technology, Irbid, Jordan, 5 October 2016.**
8. UI green Metric International Workshop, 20-22 May **2016**, University of Jakarta, **Indonesia,**
9. ***Chair*, Engineering, Energy Science and Technology Congress, German Jordanian University, Amman, Jordan, 19-21 May 2015.**
10. The Scientific Research in the Arab World: Challenges and Solution The Open Arab University, Dead Sea 18-19 March **2014.**
11. Water in the Arab World Conference, Status, Challenges and Opportunities. Amman, Jordan, 25-27 February **2014.**
12. The 12th International Conference on groundwater-Soil- Systems and water Resources Management (AquaConSoil 2013) Barcelona, **Spain**, 16-19 April **2013.**
13. First national Workshop on Regional Coordination on Improved water Resources Management and Capacity Building. Kempinski, Amman, Jordan 12-13/11/**2012.**
14. ASABE 2012 Annual International Meeting. Dallas, Texas, **USA** 28 July- 1 August **2012**
15. 1st International Conference on Arid Land (Desert Technology X). Tokyo, **Japan**, 24-28 May **2011**

16. First Russian Jordanian Conference on "Water resources Conservation and Water saving Techniques for Agriculture" Jordan University of Science and Technology, Irbid, Jordan, October 4-6, **2010**.

## **PUBLICATIONS AND PRESENTATIONS**

### ***Patents***

Elnesr MNB, M Elfarrah, AA Alazba, **M Abu-Zreig** (2013) Rain gauge with particulate separator, **US Patent 8,359,918**

### ***Book Chapter***

Mousa F. Attom, Majed M. Abu-Zreig, and Mohammed Taleb Obaidat. Effect of remolding techniques on soil swelling and shear strength properties. Chapter 10 in: Expansive Soils, Recent Advances in Characterization and Treatment (Edited by Amer Ali Al-Rawas and Zeynal F. A. Goosen). Taylor & Francis, pp. 127-138. (2006).

### ***Refereed Journals***

1. **Abu-Zreig Majed**; R.P. Rudra; W.T. Dickinson and L. Evans (1999) Effect of surfactants on sorption of atrazine by soils. Journal of Contaminant Hydrology. 36: 249-263
2. **Abu-Zreig Majed**; R.P. Rudra and W.T. Dickinson (2000) Influence of surfactants on leaching of atrazine through soil columns. Toxicological and Environmental Chemistry. 75(1-2):1-16
3. **Abu-Zreig Majed** and R.P. Rudra (1999) The Influence of manure on movement of atrazine through soil. Toxicological and Environmental Chemistry. Vol. 73;153-162
4. **Abu-Zreig Majed**; Mousa Attom and Nissreen H (2000) Rainfall harvesting using sand ditches in Jordan. Agricultural Water Management 46:183-192.
5. **Abu-Zreig Majed**; R.P. Rudra and H. Whiteley (2001) Validation of a vegetated filter strip model (VFSSMOD). Hydrological Processes. Vol. 15 (5): 729-742.
6. **Abu-Zreig, Majed** (2001) Factors affecting sediment trapping in vegetative filter strips: Simulation study using VFSSMOD. Hydrological Processes, Vol. 15 (8): 1477-1488
7. Atoum, M; **Abu-Zreig Majed** and M. Obaidat (2001) Changes in clay swelling and shear strength properties with different remoulding techniques. Geotechnical Testing Journal (ASTM). 24(2): 157-163.
8. Rudra, R.P.; **Abu-Zreig Majed**; Asare, S, N (2001) Macroporosity and manure influence on atrazine transport through soil. Journal of Environmental Science and Health-Part B36 (5): 597-608.
9. **Abu-Zreig Majed**; Nabil Al-Akhras; Mousa Attom (2001) Influence of heat treatment on clayey soil. Applied Clay Science. 20 (3): 129-135.
10. **Abu-Zreig Majed**, R.P. Rudra (2002) Modelling of atrazine transport in the presence of surfactants. Journal of Environmental Science and Health-Part B. B37 (1): 15-32.
11. **Abu-Zreig Majed**; Mohamad Al-Widyan (2002) Influence of olive mills solid waste on soil hydraulic properties. Communications in Soil Science and Plant Analysis 33(3+4):505517.
12. Al-Widyan, M; H. Al-Jalil; **M. Abu-Zreig**, and N Abu-Hamdeh (2002) Physical durability and stability of olive cake briquettes. Canadian Biosystems Engineering, 44: 3.41-3.44.
13. **Abu-Zreig Majed**; R.P. Rudra; W.T. Dickinson (2003) Effect of application of surfactants on hydraulic properties of soils. Journal of Biosystems Engineering. 84 (3): 363-372.



14. **Abu-Zreig Majed**; Ramesh P. Rudra; Hugh R. Whiteley; Manon N. Lalonde; and Narinder K. Kaushikd (2003) Phosphorus Removal in Vegetated Filter Strips. *Journal of Environmental Quality*. 32 (2): 613-619
15. **Abu-Zreig Majed**; Ramesh P. Rudra; Manon N. Lalonde; Hugh R. Whiteley; and Narinder K. Kaushikd (2003) Experimental investigation of runoff reduction and sediment removal in vegetated filter strips. *Hydrological Processes*, 18(11):2029-2037.
16. **Abu-Zreig Majed**; Jamal Abu-Ashour (2004) Chloride and atrazine transport through saturated soil columns. *Toxicological and Environmental Chemistry*, 86(1-4): 179-188.
17. **Abu-Zreig Majed** and Mousa Atoum (2004) Hydraulic characteristics of clay pitchers produced in Jordan. *Canadian Biosystems Engineering*, 15 (1):15-20.
18. Cui Yibin; Abe Yukuo; **Abu-Zreig Majed**, Isoda Hiroko and Yokota Seiji (2004) Characteristics of water evaporation and distribution in sandy soil with vertical drip irrigation under arid conditions. *Journal of Arid Land Studies*. 14(3):133-145
19. Zhu Guoyoun; Abe Yukuo; **Abu-Zreig Majed** (2005) Evaporation enhancement and salt removal by accelerators in evaporation drainage method. *Journal of Arid Land Studies*. 15(1):0-17.
20. Abu-Ashour, J; **Abu-Zreig, Majed** (2005) Effect of interstitial velocity on the adsorption of Bacteria onto soil. *Adsorption Science and Technology*, 23(7): 535-542.
21. **Abu-Zreig, Majed** (2006) Runoff and Erosion control of silt clay soil with land application of polyacrylamide. *Archive of Agronomy and Soil Science*, 52(3):289-298.
22. **Abu-Zreig, Majed** (2006) Control of rainfall-induced soil erosion with various types of polyacrylamide. *Journal of Soils and Sediments*, 6(3): 137-144.
23. **Abu-Zreig Majed**; Abe Yukuo; Isoda Hiroko (2006) Study of salt removal with evaporation drainage method. *Canadian Biosystems Engineering*, 48: 1.25-1.30.
24. **Abu-Zreig Majed**; Abe Yukuo; Isoda Hiroko (2006) The Auto-regulative capability of pitcher irrigation system. *Agricultural Water Management*, 48: 1.23-1.28.
25. **Abu-Zreig, Majed**, Abe, Y and Isoda H (2006) Pitcher irrigation: Simple technique and large water saving potential. *Journal of Arid Land Studies*, 15-4: 309-311. (Special issue, Proceedings of the Desert Technology- 8 Conference, 27 Nov – 2 Dec., 2005, Nasu, Japan).
26. **Abu-Zreig Majed**, Al-Sharif M, Amayreh, J (2007) Erosion control of arid land in Jordan with two anionic polyacrylamides, *Arid Land Research and Management*, 21(4): 315-321.
27. Khdair A, **Abu-Zreig M** (2008) The Department of Biosystems Engineering (BSE) at Jordan University of Science and Technology. *AMA-Agricultural Mechanization in Asia, Africa and Latin America*, 39(1):24-28.
28. **Abu-Zreig Majed**, Adnan Khdair and A. Alazba (2009) Factors affecting seepage rate of clay pitchers in arid land. *University of Sharjah Journal of Pure & Applied Sciences*, 6(1): 59-80.
29. Elnesr, M; **Abu-Zreig, M**; Alazba A. (2010) Temperature trends and distribution in the Arabian Peninsula. *American Journal of Environmental Science*, 6 (2): 191-203.
30. Elnesr, M; Alazba A; **Abu-Zreig M** (2010) Spatio-temporal variability of evapotranspiration over the Kingdom of Saudi Arabia. *Applied Engineering in Agriculture*, 26(5): 833-842.
31. Elnesr M; Alazba A, **Abu-Zreig M** (2010) Analysis of evapotranspiration variability and trends in the Arabian Peninsula. *American Journal of Environmental Science*, 6 (6): 535547.
32. **Abu-Zreig M**; Tamimi A; Alazba A (2011) Erosion control and moisture conservation of arid lands with rock fragments. *Arid Land Research and Management*, 25(3):294–307.
33. **Abu-Zreig M**; Tamimi A (2011) Field evaluation of sand-ditch water harvesting technique in Jordan. *Agricultural Water Management*, 98: 1291-1296.

34. **Abu-Zreig M**, Ayat Hazaymeh (2012) Rainfall harvesting to alleviate water shortages and combat desertification in the arid land of Jordan. *Journal of Arid Land Studies*. 22-1, 87-90.
35. **Abu-Zreig M**, Majed; Ayat Hazaymeh; Mohammad Shatanawi (2012) Evaluation of residential rainfall harvesting systems in Jordan. *Urban Water Journal* DOI:10.1080/1573062X.2012.709255.
36. Naji K. Al-Mefleh, **Majed Abu-Zreig** (2013) Field Evaluation of Arid Soils Wetting Pattern in Subsurface Drip Irrigation Scheme. *CLEAN soil Air Water*, 14(7): 651-656.
37. **Abu-Zreig M**, Abu-Izreiq A, Abdelbaset M (2018) Seepage rate of Ceramic pitchers under positive and negative hydraulic head. *Applied Engineering in Agriculture*, 34(4).
38. Al-Mefleh NK, M Tadros, **MM Abu-Zreig** (2019) The effect of supplemental irrigation from polyacrylamide-treated microcatchments on the growth of acacia saline in dryland, *Forest Science and Technology*, 1-6.
39. **Abu-Zreig M**, H Fujimaki, MA Baset (2019) Enhancing groundwater recharge with sand ditches. *Applied Engineering in Agriculture*. *Applied Engineering in Agriculture*. 35(4): 543-549. (doi: 10.13031/aea.13163) @2019.
40. **Abu-Zreig M**, F Ababneh, F Abdullah (2019) Assessment of rooftop rainwater harvesting in northern Jordan. *Physics and Chemistry of the Earth, Parts A/B/C*. <https://doi.org/10.1016/j.pce.2019.08.002> [Get rights and content](#).
41. F Abdulla, BA Dawleh, **M Abu-Zreig**, A Al-Omari (2019) Groundwater Numerical Modelling of Amman-Zarqa Basin-Jordan. *International Congress and Exhibition "Sustainable Civil Infrastructures"*, 1-18
42. **Abu-Zreig M**, F Ababneh, F Abdullah (2019) Assessment of rooftop rainwater harvesting in northern Jordan. *Physics and Chemistry of the Earth, Parts A/B/C* 114, 102794.
43. AMS Ahmed, **M Abu-Zreig**, MA Abdalla, N Yamanaka, EA Elhadi (2020) Integration of Composts with NPK Improved Soil Fertility, Growth and Yield of Sorghum in Sandy Desert Soils of Sudan. *International Journal of Agriculture and Biology* 23 (2), 373-380.
44. **Abu-Zreig, Majed**; Fujimaki, Haruyuki; Elbasit, Abd Ahmed, Mohamed (2020) Enhancing Water Infiltration through Heavy Soils with Sand-Ditch Technique. *Water*, 12(5): 1312-
45. Abd Elbasit, Mohamed AM; **Abu-Zreig, Majed**; Ojha, Chandra SP; Yasuda, Hiroshi; Gang, Liu (2020) Estimation of surface depression storage capacity from random roughness and slope. *Water SA*, 46(3): 404-409.

#### ***Refereed Conference Papers***

46. Abu-Zreig, M. 2000. Atrazine transport through soil in the presence of manure. *International Conference on Geo-environment 2000*. Muscat, 4-7 March, 298-307.
47. Zreig, M., R.P. Rudra and W.T. Dickinson. 1996. The impact of land application of wastewater on hydraulic conductivity of saline soils. *6<sup>th</sup> ICID Drainage Workshop: Drainage and the Environment*. Ljubljana, Slovenia. April 21-28, 89-96.
48. Abu-Zreig M., Abdullah Tammimi (2008) Control of soil erosion in arid soil with polyacrylamide. *12th International Conference on Integrated Diffuse Pollution Management (IWA DIPCON 2008)*. Research Center for Environmental and Hazardous Substance Management (EHSM) Khon Kaen University, Thailand ; 25-29 August 2008.

#### ***Conference Papers***

49. Majed Abu-Zreig, Water management at the Campus of Jordan University of Science and Technology. *UI green Metric International Workshop*, University of Jakarta, Indonesia, 20-12 May 2016

50. M. Abu-Zreig (2013) Urban-rainwater harvesting for domestic uses in Jordan. The 12th International Conference on groundwater-Soil- Systems and water Resources Management (AquaConSoil 2013) Barcelona, Spain, 16-19 April 2013
51. M Abu-Zreig, A Abo Izreik, M Abel Basit (2012) Water Seepage Rate from Clay Emitters. ASABE paper # 121340962, Dallas, Texas, July 29 - August 1, 2012.
52. Amjed Abo-Izreik, Majed Abu-Zreig (2012) Soil Reclamation and Drainage with Evaporation Drainage method. ASABE Paper # 121340963, Dallas, Texas, July 29 - August 1, 2012
53. M. Abu-Zreig; Ayat Hazaymeh (2010) Residential Rainfall Harvesting to Alleviate Water Shortages in Jordan. First Russian Jordanian Conference on "Water resources Conservation and Water saving Techniques for Agriculture". Jordan University of Science and Technology, Irbid, Jordan, October 4-6, 2010.
54. M. Abu-Zreig (2008) Irrigation management with pitchers in arid climate. 2nd MEDA Water Event 28-30 April 2008 Marrakech, Morocco.
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