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Sura T. Al-Harashseh, Professor in Water and Environment

<p>PERSONAL DATA</p>	<p>Department of Earth Sciences and Applied Environment.</p> <p>Institute of Earth, and Environmental Sciences, Al-al Bayt University, Mafraq, Jordan</p> <p>Cell. Phone: 00962772227703 + 962-2-6297000, Ext.3130 Or 3142.</p> <p>Married and I have 3 children</p> <p>Proactive, self-motivated, and goal oriented. I am a loyal, talented, and caring professor who loves making a difference in the lives of students. I am open-minded, patient, and supportive towards other people.</p>
<p>EDUCATION</p>	<ul style="list-style-type: none"> • University of Jordan, Department of Geology, Amman, Jordan, Ph.D. 2007. <p>Dissertation Title: Eutrophication Processes along King Abdullah Canal, Chemistry, Organisms, and Resulting Compounds.</p> <ul style="list-style-type: none"> • Al-al Bayt University, Institute of Earth, and Environmental Sciences, Mafraq, Jordan, M.A. 2002 Thesis title: Wastewater Treatment Using Industrial and Agricultural by Product • Yarmouk University, Chemistry and Environment, Department of Chemistry, Irbid, Jordan, B.A. 1992

<p style="text-align: center;">ACADEMIC EXPERIENCE</p>	<ul style="list-style-type: none"> • professor, Institute of Earth and Environmental Sciences, Al-al Bayt University, Mafraq, Jordan, 23/6/2021 Acting Dean, Institute of Earth, and Environmental Sciences, Al-al Bayt,9/9/2017- 1/9/2020 • Director of research center of water, environmental and arid regions, Al-al Bayt University, Mafraq, Jordan, 22 Sept 2016 – 22 Sept 2017 • Acting Dean, Institute of Earth and Environmental Sciences, Al-al Bayt University, Mafraq, Jordan, 1 Sept 2015 – 5/11/2015 • Deputy Dean, Institute of Earth and Environmental Sciences, Al-al Bayt University, Mafraq, Jordan, 1 Sept 2014 – 13/9/2016 • Associate professor, Institute of Earth and Environmental Sciences, Al-al Bayt University, Mafraq, Jordan, 9 /5/2016 – Present • Chairperson of the Department of Applied Geology and Environmental Sciences, Al-al Bayt University, Mafraq, Jordan, 1 March 2015 – 13 September 2015 • Assistant Professor, Institute of Earth and Environmental Sciences, Al-al Bayt University, Mafraq, Jordan, 24 October 2011 – 8/5/2016. • Full time lecturer, Institute of Earth and Environmental Sciences, Al-al Bayt University, Mafraq, Jordan, 14 September 2009 – 24 October 2011 • School Director, Mafraq, Ministry of Education 2002-2009. • School Teacher, United Arab Emirates, Ministry of Education, Abu Dhabi 1995-1999. • School Teacher, Mafraq, Ministry of Education 1992-1995.
<p style="text-align: center;">ACADEMIC AND ADMINISTRATIVE POSITIONS</p>	<ul style="list-style-type: none"> • Acting Dean, Institute of Earth, and Environmental Sciences, Al-al Bayt,9/9/2017- 1/9/2020 • Director of research center water, environmental and arid regions, Al-al Bayt University, Mafraq, Jordan, 22 Sept 2016 – 22 Sept 2017 • Acting Dean, Institute of Earth and Environmental Sciences, Al-al Bayt University, Mafraq, Jordan, 1 Sept 2015 – 5/11/2015

	<ul style="list-style-type: none"> • Deputy Dean, Institute of Earth and Environmental Sciences, Al-al Bayt University, Mafrq, Jordan, 1 Sept 2014 – 13/9/2016 • Chairperson of the Department of Applied Geology and Environmental Sciences, Al-al Bayt University, Mafrq, Jordan, 1 March 2015 – 13 September 2015
<p style="text-align: center;">RESEARCH INTEREST</p>	<ul style="list-style-type: none"> • Water Quality, Water Pollution, Air pollution, Soil pollution Eutrophication process, Wastewater Treatment and Reuse, Solid Waste Management, Climate Change and Environmental Impact Assessment
<p style="text-align: center;">COURSES TAUGHT</p>	<p>Courses Taught:</p> <ul style="list-style-type: none"> • Al al-Bayt University, Mafrq, Jordan. • (Undergraduate Students) <ul style="list-style-type: none"> ○ Environment and environmental pollution ○ Wastewater treatment ○ Basics of hydrology ○ Solid waste management ○ Environmental impact assessment ○ Hydrochemistry. ○ Geochemistry. ○ Hydrogeology. ○ Selective reading in geology and environment ○ Arid and semiarid land management ○ General geology ○ Weather forecast ● Graduate <ul style="list-style-type: none"> ○ Ecosystem and Environmental Impact Assessment ○ Especial Topics in water and environment ○ Advance Hydrochemistry ○ Interaction Environmental Elements ○ Water Desalination ○ Wastewater Treatment

GRADUATE
SUPERVISION/
PROJECTS

Supervision of Graduate Studies:

- Wastewater Quality of Al-albyt Wastewater Treatment Plant and Its Impact on Soil and Plants, 2012.
- Environmental Impact Assessment of the Zaatari Camp on the Zarqa Amman Basin, 2014.
- Water Quality of Rainfall and Street Runoff in Zarqa City, Jordan, 2014.
- Spatial and Seasonal Variations of the Gaseous and Particulate Matters at Selected Sites in State of Kuwait Air within the Period 2010 – 2014, 2015.
- Investigation of Retorted Water Produced by Direct and Indirect Methods of Oil Shale Pyrolysis, 2015.
- Surface Water Quality Monitoring Using GIS Case Study: King Talal Dam, 2016.
- Environmental Impact Assessment of Pharmaceutical Industries (A Case Study of Retaj Pharmaceutical Industries in the Development Area of Mafraq Governorate), 2018.
- Study of the Efficiency of Irrigation Techniques Used in Al-Sarhan District Area in Mafraq Governorate, 2019.
- Impact of Water Quantity and Quality on Water Security in Kuwait, 2019.
- Study of the Effect of Constructed Wetlands on Industrial Wastewater Treatment: Jordan Petroleum Refinery, 2019.
- Evaluation of Water from Selected Springs and Groundwater in Jerash Governorate/ 2019.
- The Impact of Treated Wastewater on Groundwater Quality and Soil Properties: A Case Study of TEBA for Food Industries and Dar Al Dawa , Pharmaceutical Industries, 2020.
- Pesticides Residue in Vegetables and Fruits in Jordan, 2020.

	<ul style="list-style-type: none"> ○ Investigating the Impact of Cesspools on Ground Water Quality within the Northeastern Badia/ Jordan Using GIS Techniques, 2020. ○ Impact of the Zarqa River Rehabilitation on the Ecosystem, 2020. ○ The Effect of the Improvement of Treatment Process in the Mafraq Wastewater Plant on Groundwater Quality and Irrigated Soils, 2021. ○ The chemical and microbiological quality of the water sources used to watering livestock in the northern Badia region and their effects on public health, 2021. ○ Spatial and Temporal Variations of Air Quality at Selected Sites in Jordan within the period 2016-2020, 2021. ○ Assessing Water Security Under Climate Change and Political Conditions in Jordan During the Period (1995-2020) : Al Mafraq Case Study, 2021. <p>Thesis Discussion:</p> <ul style="list-style-type: none"> ● Committee Member of Discussion for Several M.A. Thesis in Jordanian Universities.
<p>DEPARTMENT ACADEMIC SERVICES</p>	<ul style="list-style-type: none"> ● Member of Graduate Students Committee, Department of Earth Sciences and Applied Environment and Department of Water Resources and Environment (2016-2020) ● Member of the Committee of Preparing Standards and Conditions for Maintenance and Rehabilitation of Artesian wells, 2017. ● Chairwoman of the Committee of Scientific Research and Graduate Studies, 2017-2020. ● Chairwoman of the Committee of Academic Curriculum, 2017-2020 ● Rapporteur of the Commission for Setting the Instructions of the Center for Women Studies, 2019 ● Chairwoman of the Scientific Committee for the first Scientific Day (Natural Resources and their Sustainability) in Institute of Earth, and Environmental Sciences, Al-al Bayt University, 2017 ● Member of the Preparatory Committee at the first Conference of the College of Engineering (Climate Change), Al-al Bayt University, 2018

	<ul style="list-style-type: none"> • Head of the Scientific Committee for the Second Scientific Day of the Institute of Earth and Environmental Sciences (the environmental and water reality considering climate change), 2018 • Chairwoman of the Preparatory Committee in the first environmental exhibition: Recycling, Institute of Earth, and Environmental Sciences Al-al Bayt University, 2017. • Chairwoman of the scientific and preparatory committee for the workshop on the reality of waste and recycling in Jordan, 2019. • Member of Scientific Committee of the Second Scientific Research Conference: Connecting Scientific Result to Scientific Reality, Yarmouk University, 2019 • Chairwoman of committee to study water rationalization methods at the Al-albyt University in cooperation with the Ministry of Water and Irrigation. • Chairwoman of the Scientific and Preparatory Committee for the Conference on Water Resources and Environment, Al- al Bayt University and the Euro-Arab Organization, Antalya, Turkey, 2019.
<p>EDITORSHIP AND REFEREEING ACTIVITIES</p>	<ul style="list-style-type: none"> • Reviewing Research and Scientific Studies for Several Academic Journals and Research Studies' Centers.
<p>MEMBERSHIP OF SCIENTIFIC AND PROFESSIONAL SOCIETIES:</p>	<p>Professional Affiliations:</p> <ul style="list-style-type: none"> • Member of the Local Environmental Council of Jarash Governorate, 2018. • Member of Jordanian Geologists. • Member of Natural Resources Association
<p>PUBLICATIONS</p>	<ul style="list-style-type: none"> • Mohammed Bani Salameh, Marwan Al-Raggad and Sura Al-Harahsheh, The Water Crisis and the Conflict in the Middle East Sustainable Water Resources Management, Springer, vol. 7,69,2021. • Omar Salim Ai-Ayed, Mohammed Waleed Amer, Sura Al-Harahsheh, Birgit Maaten and Muhmmad Sajjad Ahmed, Calculations of Activation Energy and Frequency factors for Corn leafs pyrolysis using excel solver, International Journal of Chemical Reactor Engineering, De Gruyter, 8/4/2021. • Sura T. Al-Harahshah, Marwan M. Al-Raggad, Ahmad AlShdaifat, Mohammad Al-Wreikat: Hydrochemical Evaluation Of

The Azraq Unconfined Aquifer, Jordan, Union Of Iraqi Geologists, Iraq Geological Journal. IGJ, Vol.53, No.2A, 1-18, 2020.

- **Sura Al-Harshseh**, Ahmed A. Al-Taani , Hani Al-Amoush, Akram Shdeifat, Atef Al-Mashagbah, Marwan Al-Raggad, Raya Al-Omoush, Hassan Al-Kazalah, Maher Hraishat, Refaat Bani-Khalaf, Khaled Almasaeid: Assessing the Impact of Zaatari Syrian Refugee Camp on the Groundwater Quality, Central North Jordan,. JJEES (2020) 11 (4): 98-102 ISSN 1995-6681
- Eman Ahmed Kalander and **Sura Al-Harshseh**: Spatial and Seasonal Variations of the Particulate Matters (PM10) at Selected Sites in the State of Kuwait Air within the Period 2010–2014, Pollution Research, EM International, Accepted, 7 May 2020.
- **Sura Al-Harshseh**: Swimming Pool Water in Mafraq City in Northern Jordan: Quality Evaluation, scientific journal Nature Environment and Pollution Technology [ISSN 0972-6268 (Print), ISSN 2395-3454 (Online)]. Published by Technoscience Publications and Technoscience Knowledge Communications, Accepted at 24/4/2020.
- Mohammad A. Aliedeh, Salah H. Aljbour, Adnan M. Al-Harshseh, Kamel Al-Zboon, **Sura T. Al-Harshseh**: Implementing 24-1 Factorial Design for Filling the Gaps in OVAT Sorption Studies of Nitrate Ions onto Jordanian Zeolitic Tuff, Journal of chemical Technology and Metallurgy, Yniversity of Chemical Technology and Metallurgy, Accepted at 17/10/2019
- **Sura Al-Harshseh**, Mohanad Masad, Majed Ibrahim1, Samer Al-Awaideh, Ali Alnawaiseh, Study of Municipal Landfill Site For Dioxin/Furan And Chlorinated Pesticides For Al-Husainiyat Landfill In Al-Mafraq Jordan, Fresenius Environmental Bulletin, PSP, Volume 29 – No. 07A/2020.
- **Sura Al-Harshseh**, and Mohummad Al-Dalabeeh, Measurement of Radon Levels in the Groundwater of Al-Rusaifah City in Zarqa Governorate Using Liquid Scintillation Counter, Jordan Journal of Earth, and Environmental Sciences, JJEES (2020) 11 (2): 98-102 ISSN 1995-6681
- Taleb Odeh, Alsharifa Hind Mohammad , **Sura Al-Harshseh** , Faten Alslaty: Analytical Hydrological Modeling for wadi: Al-Hasa catchment Area- Jordan, 3rd International Symposium on flash floods in wadi systems, 5-7 December, 2017, Muscat, Omman.

- **Sura Al-Harshsheh**, Omar Al-Ayed, M. Amer, M. Moutq: Analysis of retorted water produced from partial combustion of sultani oil shale, Journal of Environmental protection, 2017, Scientific Research Publishing. 8(9) 1018-1025.
- Salah H Aljbour, Adnan M Al-Harshsheh and Mohammad A Aliedeh, Kamel Al-Zboon and **Sura Al-Harshsheh**: Phosphate removal from aqueous solutions by using natural Jordanian zeolitic tuff, Adsorption Science & Technology 2017, SAGE, publication, Vol. 35(3–4) .
- Habes Mohammad Al-Mashakbeh and **Sura Taha Al-harshsheh**: The Effect of Utilizing Microbiological Parameters on Water Quality Index Values Implemented at Wadi Al-Arab Dam Reservoir, North-Jordan. Journal of Natural Sciences Research, vol.5, No. 24, 2015, 138-152. International Institute for Sciences, Technology and Education
- Mohammad Al-Smairan, **Sura Al-Harshsheh** and Hassan Al-Khazaleh: Biomass Energy Utilization in Northeast Badia of Jordan, Research Journal of Applied Sciences, Engineering and Technology, Maxwell Scientific Organization, 2015 10(11): 1322-1329, 2015
- Reyad Al Dwairi, Waid Omar and **Sura Al-Harshsheh**: Kinetic modeling for heavy metal adsorption using Jordanian low cost natural zeolite (fixed bed column study, Water reuse and desalination IWA Publishing 2015.

- **Sura T. Al-Harshsheh**: Heavy Metal Contamination of Roadside Topsoil in Northeast Jordan, Journal of Natural Sciences Research, Vol.5, No.2, 2015, International Institute for Sciences, Technology and Education

- **Sura Al-Harshsheh**, Rida Al-Adamat and Seraj Abdullah: The Impact of Za'atari Refugee Camp on the Water Quality in Amman-Zarqa Basin, Journal of Environmental Protection, Scientific Research Publishing. 6, 2015.

- Rida Al-Adamat and **Sura Al-Harshsheh**: The use of DRASTIC Index and Simple Matrix Techniques to Assess the Environmental Impact of Akaidir Dumpsite Area/Jordan, Research Journal of Environmental and Earth Sciences, Maxwell Scientific Organization, 2014 6(11).

- Bety Saqarat, **Sura Al-Harshsheh** and Anwar Jiries: Inorganic Chemical Composition of Swimming Pools in Amman-Jordan, Research Journal of Environmental and Earth Sciences, Maxwell Scientific Organization, 2012, 4(10).

- Nezar Hammouri, Hani Al-Amoush, Marwan Alrggad and **Sura Al-Harshseh**: Groundwater recharge zones mapping using GIS: a case study in southern part of Jordan valley, Jordan, 2013, Arabian of Journal of Geosciences, Springer
- **Sura Al-Harshseh** and Hani Al-Amoush: Eutrophication Processes in Mujib Dam, 2011, JJEES, Jordan, vol. 3, p121
- Chapters in books
 - 1-Elias Salameh and **Sura Al-Harshseh**: Eutrophication Processes in Arid Climates in Eutrophication Causes, Consequences, and Control, 2010, Part 1, Springer
 - 2- Elias Salameh, **Sura Al-Harshseh** and Arwa Tarawneh: Ultraviolet Radiation and Bromide as limiting factors in Eutrophication Processes in semiarid Climates zones in Eutrophication Causes, Consequences, and Control, Part 2, 2013, Springer

Under publication:

- Marwan Al-Raggad, **Sura Al-Harshseh**, Majed Ibrahim, Ahmad Al-Shdaifat and Mohammad Al-Wreikat, An Integrated Hydrogeological and Remote Sensing Modeling Approach to Evaluate the Climate Change and Over-Irrigation Impact on Groundwater Depletion in North Jordan, Iraq Geological Journal.

Under Review:

- The Association between Accumulation of Organochlorinated Pesticides and Breast Cancer: Applying data mining techniques

Conferences:

- 15th International Conference on Water Resources, Al-Bayt University and the Euro-Arab Organization of Environment, Water and Desert Research, Antalya, Turkey, 24-28-10-2019, Paper presented: Swimming Pool Water in Mafraq City in Northern Jordan: Quality Evaluation
- International Symposium on Human and Social Sciences, Turkey, Antalya, April 7, 2018. Paper Presented: Environmental and health Effects of Syrian Refugees on Jordan, Case Study: Mafraq

- The Eight Jordan International Chemical Engineering Conference, November 7_9, 2017, Paper Presented: Investigation of Retorted Water Produced by Direct and Indirect Methods of Oil Shale Pyrolysis
- German-Arab Forum Conference, Amman Chamber of Commerce, 2013.
- Jordanian Geologists Conference, University of Jordan, 2008, Paper Presented: The Use of Agricultural Waste in Wastewater Treatment.

Workshops

- Discussion of the Draft of Nature Protection System. Amman, Jordan, 2018.
- Preparation of a study on food security, nutrition and sustainable agriculture, Amman, Jordan, 2018.
- ERASMUS PLUS Program -EGREN Project No. 573927-EPP01-JO-EPPKA2-CBHE-JP at Universidad Catholic Portuguesa-Faculty of Biotechnology in 17 – 22 of September 2018
 - E-Learning Concepts
 - Climate change, Renewable Energy, Water Resources
- Wastewater Treatment in Supreme Council for Science and Technology, 24-11-2017.
- Information security and E-university applications and the scope of powers granted to the targeted groups, Al-al Bayt university, Jordan, 2017.
- Assessment of Environmental Impact of biogas in Zaatri refugee camp, 13-12-2016.
- Assessment of Environmental Impact Al-Azraq- Roweished road, Al-Azraq, Jordan,2016.
- Assessment of Environmental Impact for the fuel alternative of Arafeh factory in Mafraq city, Amman 11/6/2014
- Ion chromatography by thermo legacy DIONX, 2013
- German- Arab environmental forum, Amman, 2013
- Geopolymers syntheses from local Jordanian ores, university of Jordan, 2012
- Assessment of Environmental Impact for the electron waste fragmentation factory in Mafraq City, 2011

	<ul style="list-style-type: none"> • Assessment of Environmental Impact for the Expansion of Sewage Systems in Zarqa City, 2010. <p>Training Courses:</p> <ul style="list-style-type: none"> ● Scopes Database Advanced Properties Course, Al-Bayt University, 2019 ● Endnote Software Documentation Course, Al-Bayt University, 2019 ● Training Course in Using Computer, INTEL, ICDL, Al-Albayt University, Mafraq, Jordan, 2006. ● Training Course in Civil Defense, Civil Defense Directorate, Amman, Jordan, 2003. ● Training Course in Wastewater Treatment and Management of Solids, John Morise University, London, U.K., 2000. ● Training Course in using laboratory instruments and how to deal with Chemicals. Ministry of Education, Amman, 1999. ● Training Course in Curriculum Development, Amman, Ministry of Education, 1993. ● Computer Course (Windows- Word-Excel-Access) Institute of Modern Vision of Technology / UAE, 1999.
GRANTS	<ul style="list-style-type: none"> ● Determination of Persistence Organic Pollutants (POPs) for Cultivated areas in El-Hashemiyeh region, Higher Education Fund for Scientific Research and Innovation, Ministry of Higher Education, Jordan, 48000 JD, 2020 ● The Revive the Salt Industry in the Azraq Basin, Inter-Islamic Network on Water Resources Development and Management (INWRDAM) and US Agency for International Development, 2019. ● Study the Efficiency of Drinking Water Desalination Plants in Mafraq Governorate, Scientific Research Fund, Al al-Bayt University, 37000JD, 2018. ● Study the Quality of Groundwater within the Zarqa Amman Basin and the Effect of the Presence of Zaatari Camp, Scientific Research Fund, Al al-Bayt University, 38000 JD
EXTRACURRICULAR ACTIVITIES	<ul style="list-style-type: none"> • University Representative in Anti-Deseret committee in Ministry of Environment.2013 _until now

<p>COMMUNITY ACTIVITIES</p>	<p>Membership in trade unions and civil society institutions: 1- Jordanian Women's Union. 2- Natural Resources Association/Mafraq.</p> <p>Public seminars and lectures Many seminars and lectures were given to the Youth Association of All Jordan, schools, municipalities, and cooperative associations. Entitled Recycling and Wastewater Treatment and Assessing the Environmental Impact in the Province</p>
<p>LANGUAGES</p>	<p>Fluent reading, speaking, and writing in Arabic and English.</p>
<p>SKILLS & ABILITIES</p>	<ul style="list-style-type: none"> • Strong communication skills and the ability to work effectively with team • A strong and ongoing research and scholarly record. • Ability and willingness to collaborate with colleagues in an interdisciplinary environment. • Ability and willingness to advise students in the major and supervise graduate students in MA. • Well skilled in Computer and information systems tools • Management skills • Communication skills • Problem-solving skills • Design skills
<p>TECHNICAL/ COMPUTER SKILLS</p>	<ul style="list-style-type: none"> • Well skilled in Computer and information systems tools: <ul style="list-style-type: none"> ○ Microsoft office ○ Smart and mobile applications
<p>REFERENCES</p>	<p>Academic References:</p> <ul style="list-style-type: none"> • Prof. Dr. Elias Salameh, University of Jordan, Faculty of Science, e-mail: salameli@ju.edu.jo • Prof. Dr. Hani Khouri, University of Jordan, Faculty of Science, e-mail: khouryhn@yahoo.com • Prof. Dr. Omer Aremawi, University of Jordan, Faculty of Science, e-mail: rimawiom@bau.edu.jo • Dr. Anwir Jiries, Motah University, Faculty of Science, e-mail: jiries57@hotmail

