

DR. ALJOHANI, Mohammed

Professor, Nuclear Engineering Dept. King Abdulaziz University

Education

<i>Degree</i>	<i>Field</i>	<i>Institution</i>	<i>Year</i>
PhD	Nuclear Engineering and Radiation measurements	Georgia Institute of Technology, Atlanta, Georgia, USA	1996
MS	Nuclear Engineering	Faculty of Engineering, King Saud University, Riyadh	
BS	Civil Engineering	Faculty of Engineering, King Abdulaziz University	1983

Academic Experience

<i>From</i>	<i>To</i>	<i>Institution</i>	<i>Rank</i>	<i>Title (Chair, Coordinator, etc.)</i>	<i>Full or Part Time</i>
2017	Date	King Abdulaziz University	Professor	Head of the Nuclear Eng. Dept.	Full-Time
2005	2017	King Abdulaziz University	Associate Professor	Head of the Nuclear Eng. Dept.	Full-Time
1996	2005	King Abdulaziz University	Assistant Professor		Full-Time

Non Academic Industrial Experience (including Consultations)

<i>From</i>	<i>To</i>	<i>Company/Entity</i>	<i>Title</i>	<i>Position Description (Brief)</i>	<i>Full or Part Time</i>
2013	Date	King Abdulaziz University	Acting Chairman	Acting Chairman, Nuclear Engineering Department	Part-Time
2013	Date	King Abdulaziz University	Acting Director	Acting Director, Radiation protection and Training center	Part-Time
2009	Date	King Abdulaziz University	Chairman	Chairman of the University Radiation Protection Standing Committee	Part-Time
2016	Date	King Abdulaziz University	Chairman	Chairman of the Saudi Aramco Non Destructive Testing Chair	Part-Time

Current Membership in Professional Societies and Organizations

	<i>Society/organization</i>	<i>Rank</i>	<i>Member Since</i>
1.	Nuclear Engineering Society	Member	1995
2.	Saudi Council of Engineers	Member	2005

Honors and Awards

- Investigation of the Effects of Design Parameters and Operating Conditions on Phase Distribution in High Pressure Multiphase Chemical Reactors via Gamma Computed Tomography, funded by KACST (\$ 533,333), 2010-2013
- Energy Efficiency and Cost Effectiveness, an Innovative Brackish Water Desalination in Saudi Arabia, funded by KAU, (\$ 800,000) 2010-2012

3. Aramco Non Destructive Testing Chair, Funded by Aramco company for three years (\$ 1,600,000), 2011-2014
4. Peaceful Applications of Nuclear Technology, Funded by KAU for two years (\$ 120,000) from Nov, 2009-2010

Services Activities (*within and outside the institution*)

1. Led the Department to successful EC-2000 ABET Accreditation in 2009
2. Established the Non-destructive Testing Center with a budget of more than \$ 3 million.

Principal Publications/Presentations from the Past Five Years

1. Mohammed S. Aljohani. Pilot-scale study of the radiation-induced silica removal from underground brackish water in Saudi Arabia. *Radiochimica Acta*. Volume 105: Issue 5. 2016.
2. F. Djouider, M. Aljohani. Simulated Industrial Wastewater Treatment Using Continuous High-Energy Electron Beam Irradiation: Removal of Chromium (VI) Toxic Metal. 1st International Conference on Radiations and Applications (ICRA) Location: Algiers, ALGERIA Date: NOV 20-23, 2017
3. F. Djouider, M. Aljohani. Radiation induced environmental remediation of Cr(VI) heavy metal in aerated neutral solution under simulated industrial effluent (2017). *Radioch. Acta*, 105, 493-504 .
4. Mohammed S. Aljohani. Synergistic efficiency of the desilication of brackish underground water in Saudi Arabia by coupling γ -radiation and Fenton process: Membrane scaling prevention in reverse osmosis process. *Radiation Physics and Chemistry*. Volume 141, December 2017, Pages 245-250.
5. F. Djouider, M. Aljohani. Laboratory-scale study of the advanced Fenton process for silica removal from brackish underground water in arid areas in Saudi Arabia. *Desalination and Water Treatment* Volume: 65 Pages: 60-66 Published: FEB 2017.
6. Khurram Mehboob M.S. Aljohani, 2019. Derivation of Radiological Source term of Chashma-1 Nuclear Power Plant during LOCA, *KERNTECHNIK*, 84 (2), 99-109.
7. Khurram Mehboob and Aljohani, M.S. 2018. Estimation of Radioactive Released from CHASNUPP - 1 Nuclear Power Plant During Loss of Coolant Accident (LOCA). *international journal of nuclear energy science and technology*, Vol. 12, No. 2, 111-126.
8. Khurram Mehboob and Aljohani, M.S. 2018. Derivation of Radiological Source term for System instigated Modular Reactor (SMART). *Annals of Nuclear energy*, 119, 148-161,
9. Khurram Mehboob and Aljohani, M.S. 2016. Modeling and Simulation of Radio-Iodine Released inside the Containment as Result of an Accident. *Progress in Nuclear Energy* 88, 75-87.
10. Tariq Osman, M.S. Mohammed, M. Aljohani, Optimizing radiographic sensitivity in the in-service testing, *Russian Journal of Non-Destructive Testing*, DOI: 10.1134/S106183092001009X, 2020.
11. M.S. Mohammed and M.S. Aljohani, Designing Non-Destructive Testing and Evaluation Courses for Undergraduate Engineering Programs, *Journal of Materials Education*, Vol.41, No,1-2, 2019.

Recent Professional Development Activities (*Workshops, training, etc.*)

1. NDT Workshops organized by the ARAMCO Company, 2018, Dammam, Saudi Arabia
2. Blackboard Webinar, on “Delivering Virtual Classes”, with the collaboration of KAU Deanship of e-Learning and Distance Education, March 2020.