DR. HASSEN, Mohammed
Academic Rank, Nuclear Engineering Dept., King Abdulaziz University

Education

Degree	*Field*	*Institution*	*Year*
PhD	Mechanical Design Engineering (Non-Destructive Testing systems)	Chonnam National University, Republic of Korea	2013
MS	Radiation physics (Radioisotopes in industrial process measurements)	Sudan Academy of Sciences	2007
BS	Physics	Sudan University of Science and Technology	2002

Academic Experience

From	*To*	*Institution*	*Rank*	*Title (Chair, Coordinator, etc.)*	*Full or Part Time*
2015	Present	King Abdulaziz University	Assistant Professor		Full-time

Non Academic Experience *(including Consultations)*

From	*To*	*Company/Entity*	*Title*	*Position Description (Brief)*	*Full or Part Time*
2014	2015	Sudan Atomic Energy Commission	Assistant Research	Full-time	2014
2013	2014	Innovation Centre for Safety Diagnosis Technology, Chonnam National University, Korea	Postdoctoral researcher	Full-time	2013
2009	2010	Sudan Atomic Energy Commission	Researcher	Full-time	2009
2008	2009	De-Tect Unit Inspection, South Africa	NDT engineer	Full-time	2008
2007	2008	Sudan Atomic Energy Commission	Researcher	Full-time	2007
2003	2007	Sudan Atomic Energy Commission	Research Assistant	Full-time	2003

Certifications and Professional Registrations

Radiographic Testing level III, ISO 9712.
Liquid Penetrant Testing level III, ISO 9712.
Ultrasonic Testing level II, ISO 9712.
Magnetic Particle Testing level II, ISO 9712.

Current Membership in Professional Societies and Organizations

	Society/organization	*Rank*	*Member Since*
1.	ASTM International, Committee E07 on Nondestructive Testing	Member	2017
2.	Canadian Institute of Non-Destructive Evaluation	Member	2016
3.	International Society of Tracers and Radiation Applications (ISTRA)	Member	2015

Honors and Awards

Service Activities *(within and outside of the institution)*

1. Reviewer for the Journal of Testing and Evaluation, the International Journal of Adaptive Control and Signal Processing, and SN Applied Sciences
2. Project coordinator: Establishing Sudan Atomic Energy Commission as a regional examination center for qualifying NDT personnel, a triangular project [AFRA-International Atomic Energy Agency (IAEA), South Africa, and Sudan], 2014-2015.
3. Project coordinator: Strengthening regional training capabilities in Non-Destructive Testing, an AFRA-IAEA project, 2005-2006.
4. Project coordinator: Promoting self-reliance and sustainability of NDT facilities, an AFRA-IAEA project, 2006-2008.

Principal Publications/Presentations from the Past Five Years

1. E. Taha, M.S. Mohammed and E. Banoqitah, Radiographic Testing simulations for NDT research, education, and training, ASME Journal of Nuclear Engineering and Radiation Science, September, DOI: 10.1115/1.4044909, 2020.
2. 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.
3. 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.
4. T. Tesfaye, M.S. Mohammed and Kim Ki-Seong, Mapping of ultrasonic thickness measurements using laser grid projection and image processing, Insight-Nondestructive testing and condition monitoring, British Institute of Non-Destructive Testing, DOI: 10.1784/insi.2019.61.11.643, 2019.
5. M.S. Mohammed and Kim Ki-Seong, Chirplet transform in ultrasonic non-destructive testing and condition monitoring: a review, Engineering, Technology and Applied Science Research, Vol.9, No.1, WOSUID: WOS:000458831600018, 2019.
6. M.S. Mohammed and M.S. Aljohani, Qualification of Non-Destructive Testing Personnel for the inspection of nuclear power plants, IAEA 3rd International Conference on Human Resources Development for Nuclear Power Programmes: Meeting Challenges to Ensure the Future Nuclear Workforce Capability, Gyeongju, Republic of Korea, May 2018.
7. M.S. Mohammed and Kim Ki-Seong, Signal conditioning for the recursive least-squares filter in ultrasonic testing of materials, Insight-Nondestructive testing and condition monitoring, DOI: 10.1784/insi.2017.59.11.591, 2017.
8. M. S. Mohammed, E. Banoqitah, Simulation Studies on the Image Quality of Industrial Film Radiography, Book of abstracts, International Conference on Applications of Radiation Science and Technology, page 432, International Atomic Energy Agency, Vienna, 2017.
9. M.S. Mohammed and Kim Ki-Seong, An identical inputs-adaptive filter for the detection of signal's breakdown points, World Journal of Engineering and Technology, No. 5, pp. 232-240, 2017.

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

1. Blackboard collaborate, KAU, March 2020
2. Energy and Development, The University of Queensland, UQx, December 2018.
3. Climate Science and Policy, The University of Queensland, UQx, November 2018.