

DR. BANOQITAH, Essam

Assistant Professor, Nuclear Engineering Dept., King Abdulaziz University

Education

<i>Degree</i>	<i>Field</i>	<i>Institution</i>	<i>Year</i>
PhD	Medical Physics and Bioengineering	University College London, UK	2014
MS	Medical and Radiation Physics	University of Birmingham, UK	2009
BS	Biomedical Engineering	King Abdulaziz University, SA	2006

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>
2006	2007	King Abdulaziz University	Assistant Teacher		Full Time
2014	Present	King Abdulaziz University	Assistant Professor		Full Time

Non Academic 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>
2004	2005	Al-Jeel Company trading in Medical Instrumentation, SA	Biomedical Engineer	Maintenance and QA of medical devices	Part Time
2016	2017	Princess Noorah Cancer Centre National Guard Hospital, Nuclear Medicine and Radiation therapy. SA	Associated clinical researcher	Medical Physics clinical research	Part Time

Certifications and Professional Registrations

SCFHS Registration No. 15-J-A-0010524, Senior Specialist in Medical Physics

Current Membership in Professional Societies and Organizations

	<i>Society/organization</i>	<i>Rank</i>	<i>Member Since</i>
1.	IPEM (Institute of Physics and Engineering in Medicine)	Member	2009
2.	IEEE (Institute of Electrical and Electronics Engineers)	Member	2011
3.	SSSBE (Saudi Scientific Society for Biomedical Engineering)	Member	2011
4.	SMPS (Saudi Medical Physics Society)	Member	2014

Institutional and Professional Services (administration, committees, units, etc.)

1. Engineering College General Courses Unit general supervisor since 2018 – Present
2. The university needs of academic staff and future strategical planning 2017-2018

Principal Publications/Presentations from the Past Five Years

1. Taha, Eslam, M. S. Mohammed, and Essam Banoqitah. "Radiographic Nondestructive Testing Simulations Using Gate Software Toolkit." *Journal of Nuclear Engineering and Radiation Science* 6.1 (2020).
2. Shabana, El-Said Ibrahim, et al. "Evaluation of Radiation Hazards Due to mining Activities in Al Jalamid Mining Area, North Province, Saudi Arabia." *Arabian Journal for Science and Engineering* 44.10 (2019): 8799-8804.
3. Taha E, Djouider F, Banoqitah E. Monte Carlo simulation of dose enhancement due to silver nanoparticles implantation in brain tumor brachytherapy using a digital phantom. *Radiation Physics and Chemistry*. 2019 Mar 1;156:15-21.
4. Alaraj MM, Kayal HW, Banoqitah E. An Analysis Into University Students'bad Lifestyle Habits And Their Effect On Academic Achievement. *Journal of Advances in Social Science and Humanities*. 2018 Dec 15;4(12):430-41.
5. Banoqitah, Essam, et al. "A Monte Carlo study of arms effect in myocardial perfusion of normal and abnormal cases utilizing STL heart shape." *Results in Physics* 10 (2018): 323-331.
6. Taha, Eslam, Fathi Djouider, and Essam Banoqitah. "Monte Carlo simulations for dose enhancement in cancer treatment using bismuth oxide nanoparticles implanted in brain soft tissue." *Australasian Physical & Engineering Sciences in Medicine* (2018): 1-8.
7. 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, IAEA, Vienna, 2017.
8. Banoqitah E, Djouider F. Dose Distribution and Dose Enhancement by Using Gadolinium Nanoparticles Implant in Brain Tumor in Stereotactic Brachytherapy. *Radiat Phys Chem* 2016;127:68–71. doi:10.1016/j.radphyschem.2016.06.002.
9. Elmoujarkach, Ezzat A., and Essam M. Banoqitah. "GAMOS based simulation using gamma back-scattered photons count method for mine detection." *Recent Advances in Robotics and Sensor Technology for Humanitarian Demining and Counter-IEDs (RST)*, International Workshop on. IEEE, 2016.
10. Kinsara A, El-Gizawy AS, Banoqitah E, Ma X. Review of Leakage from a Linear Accelerator and Its Side Effects on Cancer Patients. *J Nucl Med Radiat Ther* 2016;7:3–8. doi:10.4172/2155-9619.1000288.
11. Essam Banoqitah, Fathi Djouider, Dose distribution and dose enhancement by using gadolinium nanoparticles implant in brain tumor in stereotactic brachytherapy (Abstract#0062), 4th International Medicine on Radiation Medicine (ICRM), Riyadh, Saudi Arabia, Feb 21-25 2016.

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

1. Diploma in University Professional Development for University Instructor, King Abdulaziz University, Jeddah, 2017
1. ScienceDirect Database workshop KAU Library, Nov 2015
2. Blackboard Webinar, on "Delivering Virtual Classes", with the collaboration of KAU Deanship of e-Learning and Distance Education, March 2020.