



FACULTY FULL NAME: Ali Abdulkreem Attyah Alghamdi

POSITION: Chairman of Radiological Sciences Department.

Personal Data

Nationality | Saudi
 Date of Birth | 04-08-1974
 Department | Radiological sciences department
 Official UoD Email | Med.alghamdi@gmail.com
 Office Phone No. | 3331274

Language Proficiency

Language	Read	Write	Speak
Arabic	fluent	fluent	fluent
English	fluent	fluent	fluent
Others			

Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
March- 2006	Doctoral	UK	University of Surrey
Sept- 2001	Master	UK	University of Surrey
June-1997	Bachelor	KSA	King Saud University

PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

PhD	Radiological Sciences
Master	Medical Physics
Fellowship	



Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work		Date	
Associate Professor	Department Radiological Sciences	Immam Abdulrhman Bin Faisal University - KSA	2017	-
Assistant Professor	Department Radiological Sciences	Immam Abdulrhman Bin Faisal University - KSA	2007	2017
Visiting Senior Research Fellow	Physics Department	University of Surrey- UK	2011	2013
Visiting Researcher and associate staff.	Physics Department	University of Surrey- UK	2008	2009
Part I Clinical Scientist (Medical Physics)	Medical Physics	St George's Hospital- UK	2006	2007
CT/MRI Technologist	Radiology	Armed Forces Hospital-KSA	1998	2000

Administrative Positions Held: (Beginning with the most recent)

Administrative Position	Office	Date
Chairman of Radiological Sciences Department.		2007-2013

Scientific Achievements

Published Refereed Scientific Researches



(In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication

Refereed Scientific Research Papers Accepted for Publication

#	Name of Investigator(s)	Research Title	Journal	Acceptance Date
1	Ma, Andy; Hussein, Mohammed; Altaher, Khalid; Farid, Khalid; Amer, Mamun; Aldhafery, Bander; <u>Alghamdi, A</u>	"Fluence-to-effective dose conversion coefficients from a Saudi population based phantom for monoenergetic photon beams from 10 keV to 20 MeV" Journal of Radiological Protection	2015 Mar;35(1):75-86	2015
2	Abdulrahman Alfuraih , Khalid Alzimami , Andy K Ma, <u>Ali Alghamdi</u> , Ibrahim AlJammaz	Effective dose to immuno-PET patients due to metastable impurities in cyclotron produced zirconium-89.	Radiation Physics and Chemistry 104(2014)145–149	2014
3	Ma A, Altaher K, Hussein MA, Amer M, Farid KY and <u>Alghamdi AA</u>	Photon fluence-to-effective dose conversion coefficients calculated from a Saudi population-based phantom.	Radiation Physics and Chemistry 95 128-130	2013
4	Alfuraih A, Alzimami K, Ma A, <u>Alghamdi A</u>	Optimization of Zr-89 production using Monte Carlo simulations.	Journal of Radioanalytical and Nuclear Chemistry 296 1025–1029	2013



5	<u>Ali A Alghamdi</u>	"Monte Carlo Simulation of Neutron Tomography for Palm Weevil Detection"	Journal of Radioanalytical and Nuclear Chemistry (February 2012), 291 (2), pg. 359-364	2012
6	Andy K. W. Ma, <u>Ali A. Alghamdi</u> , Kassem Tofailli and Nicholas N	Spyrou" X-ray CT in the detection of palm weevils"	Journal of Radioanalytical and Nuclear Chemistry (2012) 291 :353–357	2012
7	Beasley D G, <u>Alghamdi AA</u> , Freitas M C and Révay Z	Simulating the introduction of a sapphire crystal into an epithermal neutron beamline	Journal of <u>Radioanalytical and Nuclear Chemistry</u> 2009;281:307	2009
8	Ma A, Awotwi-Pratt JB, <u>Alghamdi AA</u> , Alfuraih A and Spyrou NM	Monte Carlo study of photoneutron production in the Varian Clinac 2100C linac.	Journal of Radioanalytical and Nuclear Chemistry2008;276:119.	2008
9	<u>A A Alghamdi</u> , A Ma , M Marouli , Y Albarakati , A Kacpererek and N M Spyrou.	A high-resolution anthropomorphic voxel-based tomographic phantom for proton therapy of the eye.	Phys Med Biol. 2007 Jan 21;52(2):N51-9	2007
10	<u>Alghamdi AA</u> , Ma A, Spyrou NM	Calculation of the photonuclear yield using an anthropomorphic phantom. "	Journal of Radioanalytical and Nuclear Chemistry 2007;271:639	2007



11	Alghamdi AA , Al-Mokhlef J, Alhaj A and Spyrou N M.	Feasibility study of using PET to determine Nitrogen concentration after high energy photon irradiation.	Journal of Radioanalytical and Nuclear Chemistry 2007;271:783	2007
12		Referee J of Physics in Medicine and Biology		(2007-2009)
13	inventor(s) Ali Alghamdi and Andy Ma.	United Sate Patent (IP No. <u>9192302 B2</u>) Title " Radiological Simulation " Nov 2015. Field : simulation in medical radiation education		2015
14	inventor(s) Ali Alghamdi and Andy Ma	United Kingdom Patent (IP No. <u>1019533.7 UK.</u>) Title "system and method" . Nov 2010 Field : simulation in medical radiation education		2010

Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date
1	Andy Ma, and Ali A Alghamdi	" A New Interactive Simulation System for Radiology Education – Merging Physical and Virtual Realities "	IASTED proceeding July -2011
2	Andy Ma, and Ali A Alghamdi	"Development of a Realistic Computational Breast Phantom for Dosimetric Simulation "	Progress in NUCLEAR SCIENCE and TECHNOLOGY, Vol. 2, pp.147-152 (2011)



3	Andy Ma, Djelloul Mahboub and Ali A Alghamdi	Alghamdi "Simulation of Beehive Shape Segmentation of Gamma Camera".	Transaction of the American Nuclear Society 2010, vol. 103, pp. 1103-1104
4	Chin PW, Alghamdi AA and Spyrou NM.	Anthropomorphic voxel phantoms: beyond organ shapes and sizes.	Transactions American Nuclear Society 2008; vol. 99 99:65

Completed Research Projects

#	Name of Investigator(s) (Supported by)	Research Title	Report Date
1	Ali Alghamdi (University of Dammam), Prof. NM Spyrou (University of Surrey)	Cone beam CT for applied environmental Studies	2009- 2012.
2	Ali Alghamdi, Andy Ma(University of Dammam), and Prof.NM Spyrou (University of Surrey)	Breast cancer investigation of causes and the increases incidence in the kingdom of Saudi Arabia	2009- Present.
3	Ali Alghamdi (University of Dammam), Prof. NM Spyrou (University of Surrey), Andy Ma (RCSI-Bahrain)	" simulation of Nanoparticle for therapy"	2015-Present
4		"Development of computational anthropomorphic phantom based on the characteristic of Saudi Arabia population".	2011-2012, 2012-2014 Funded by university of Dammam
5		" Estimation of radiation doses to members of the public in Eastern Province of Saudi Arabia from intakes of radionuclides in Bottled Drinking Water"	2011-2012, 2012-2014 Funded

Current Researches

#	Research Title	Name of Investigator(s)
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Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution

Membership of Scientific and Professional Societies and Organizations

- Institute of Physics and Engineering in Medicine (IPEM). 2006
- Saudi Medical Physics Society. 2007

Teaching Activities

Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Medical Radiation Sciences I	RADL 212 (2 hr-luct) (2009-2012)	Department of Radiological Sciences, College of Applied Medical Sciences , University of Dammam
2	Medical Radiation Sciences II	RADL (2hr-luct) (2009-2012)	Department of Radiological Sciences ,College of Applied Medical Sciences, University of Dammam
3	Graduation Project	RADL 422 (2012-presnt) (4hr)	Department of Radiological Sciences ,College of Applied Medical Sciences, University of Dammam
4	Research methodology	RADL 413 (2014-present) (2h-luct)) Department of Radiological Sciences ,College of Applied Medical Sciences, University of Dammam

Brief Description of Undergraduate Courses Taught: (Course Title – Code: Description)

Postgraduate

#	Course/Rotation Title	No./Code	Extent of Contribution
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			(no. of lectures/Tutorials. Or labs, Clinics)
1	Fundamental Physics of Radiology for Radiology Residents	(1hr-luct) (2007 – 2008)	at King Fahad Teaching Hospital. Radiology Department , University of Dammam
2			

Brief Description of Postgraduate Courses Taught: (Course Title – Code: Description)

1	
2	

Course Coordination

#	Course Title and Code	Coordinati on	Co-coordination	Undergr ad.	Postgrad .	From	To

Guest/Invited Lectures for Undergraduate Students

#	Activity/Course Title and Code	Subject	College and University or Program	Date

Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To

Supervision of Master and/or PhD Thesis

#	Degree Type	Title	Institution	Date
1	MSc	: Neutron doses of the target and surrounding vital organs estimated by	Physics Department ,University of Surrey.	2013



		MCNPX in prostate proton therapy.		
2	MSc	Nano-particle and cell modelling using Monte Carlo codes.	Physics Department ,University of Surrey. Supervisor Ali Alghamdi.	2013
3	MSc	"Why use nanoparticles in therapy: advantages and disadvantages.	Physics Department ,University of Surrey.	2012
4	MSc	Development of a High-resolution Anthropomorphic Phantom for proton Therapy of the Eye by Simulation using the MCNPX code.		2005
5	MSc	High resolution realistic anthropomorphic phantom for Neutron dosimetry using MCNP4C2 Monte Carlo code .		2003

Ongoing Research Supervision

#	Degree Type	Title	Institution	Date

Administrative Responsibilities, Committee and Community Service (Beginning with the most recent)

Administrative Responsibilities

#	From	To	Position	Organization
1	May 2012	-		Ali Alghamdi and M Amer "Basic Radiation Safety" King Abdul Aziz Port for security member
2	30-March-2011	-		Ali Alghamdi "Monte Carlo simulation and Applied Radiation Physics in Oil Industry" lecture. EXPEC Advanced Research Center, Dhahran, Saudi Arabia



3	22-May-2011			Ali Alghamdi, A Alfuraih and M Amer "latest issues on radiation protection" lecture and workshop, dedicated to fire department in Dammam.
4	Oct 28-31, 2013.	-		MCNPX Monte Carlo simulation of Gold Nano-Particles activated by X-ray photon sources. SETCOR International Conference on Nanotechnology Dubai 2013, Dubai, UAE Selected for oral presentation.
5	June 13-15, 2013	-		System for improving simulation in radiological sciences pre-clinical teaching and training. 19 th Annual Meeting of the society in Europe for simulation applied to Medicine. Paris, France. . Selected for best abstract session for oral presentation.
6	Oct. 17-21, 2010	-		The Joint International Conference of the 7th Supercomputing in Nuclear Application and the 3rd Monte Carlo (SNA + MC2010) Tokyo, JAPAN Presentation and Paper
7	March 13-18, 2011	-		The 13 th international conference of Modern Trends in Activation Analysis(MTAA13) at Texas A&M University USA. Presentation
8	July 11-13, 2011	-		The 14 th IASTED International Conference on Computers and Advance Technology in Education (CATE2011) In Cambridge, UK. Presentation and paper
9	(August 2009)	-		Scientific communication. Department of Physics , University of Surrey

Committee Membership

#	From	To	Position	Organization
1	2011	-		University representative to Higher education committee of Radiological Accidents.



2	2007	2012		College of Applied Medical Sciences Council Committee
3	2007	2009		College of Applied Medical Sciences Curriculum Committee
4	2008	2009		College of Applied Medical Sciences Scientific Committee
5	2010	-		Eastern Province National Committee for Radiation Emergency and Radiation Accidents
6	2011	-		Head of radiological sciences bridging curriculum committee
7	2012	2013		Sabbatical year , Department of Physics , University of Surrey

Scientific Consultations

#	From	To	Institute	Full-time or Part-time

Volunteer Work

#	From	To	Type of Volunteer	Organization

Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

1	
2	



Last Update

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