

Name: Eshraq Mohamed Ali Ababneh Position: Assistant Professor Department of Physics Faculty of Science, Al-Balqa Applied University Mobile number: 00962776767688 E-mail address: eshraq.ababneh@bau.edu.jo Scopus ID: 56196353900 ORCID ID: 0000-0002-4901-7191 National Researcher Number: 7703

Education	
2017	<ul> <li>Doctor of Philosophy, Nuclear and Radiation Physics, University of Jordan, Amman, Jordan</li> <li>Thesis title: Development of an applicable algorithm for brachytherapy dose calculation in heterogeneous media.</li> <li>Supervisor: Prof. Saed dababneh, Co-supervisor: Prof. Jamal Sharaf</li> <li>Academic honors or distinctions: 1<sup>st</sup>-placed student of the 2012 Ph.D.Physics Programme with GPA 3.67 out of 4</li> </ul>
2009	<ul> <li>Master of Science, Nuclear Physics, Al-Balqa Applied University, Salt, Jordan</li> <li>Thesis title and supervisors: Evaluation of scatter dose distribution for Ir-192 source in Brachytherapy using Monte Carlo simulation.</li> <li>Supervisor: Prof. Saed dababneh, Co-supervisor: Prof. Sharif Qatarneh</li> <li>Academic honors or distinctions: 1<sup>st</sup>-placed student of the 2006 M.Sc. Physics Programme with GPA 3.81 out of 4</li> </ul>
2006	<ul> <li>Bachelor of Science, Physics, Yarmouk University, Irbid, Jordan</li> <li>Academic honors or distinctions: GPA of 78.8 (Very good), the sixth rank upon all over the Jordanian Physics students in the physics certificate exam.</li> </ul>

# Teaching Experience

2010-2017	Lecturer (Master Degree), Al-Balqa Applied University, Salt, Jordan
2017-2020	Lecturer (PhD Degree), Al-Balqa Applied University, Salt, Jordan
2020	Assistant Professor, Al-Balqa Applied University, Salt, Jordan

### Awards and Special Achievements:

Certificate of excellence for young researchers: the third place at 14 <sup>th</sup> Arab Conference on the Peaceful Uses of Atomic Energy Sharm El-Sheikh, Arab Republic of Egypt, 16-20 December, 2018.



#### **Recent Publications**

1	E. Ababneh, S. Al-Amarat, S. Dababneh, S. Okoor, M. M.A. Imran.
	BALQARAD Geant4 Model: Enhancement in $\gamma$ -ray Spectroscopy and Validation, Submitted to The Jordan Journal of Physics (JJP) on Oct, 2020.
2	S. Al-Bashish, E. Ababneh, M.S. Mousa, S. Okoor, M. Hyasat, M. Nusir, A. Qbelat, S. Dababneh. Coincidence/Anti-Coincidence techniques by BALQARAD active shielded clover. Submitted to Radiation Detection Technology and Methods on Dec, 2020.
3	Sondos A K Okoor, Khalid M Abumurad, Eshraq M Ababneh, Manal Jamal Abdallah, Ala'a A Tawalbeh. (2019). "NATURAL RADIOACTIVITY CONCENTRATIONS AND DOSE ASSESSMENT IN SELECTED MEDICINAL PLANTS CONSUMED IN JORDAN", FRESEN. ENVIRON. BULL. 28, 5179-5187.
4	E. Ababneh, S. Dababneh, A. Younis, R. Reifarth, N. Patronis, M. Ginsz. (2018). "BALQARAD: Towards improved sensitivity in γ-ray spectroscopy", 14 <sup>th</sup> Arab Conference on the Peaceful Uses of Atomic Energy Sharm El-Sheikh, Arab Republic of Egypt, 16-20 December, 2018.
5	Eshraq Ababneh, Saed Dababneh, ShadaWadi-Ramahi and Jamal Sharaf. (2018). "Physics Element of an algorithm for brachytherapy dose calculation in homogeneous media for <sup>192</sup> Ir source", Radiat. Phys. Chem.149, 90–103.
6	Eshraq Ababneh, Saed Dababneh, Sharif Qatarneh and ShadaWadi-Ramahi. (2014). "Enhancement and validation of Geant4 Brachytherapy application on Clinical HDR Ir-192 source", Radiat. Phys. Chem.103, 57–66.

### Conferences/ Workshops/ Seminars:

2018	"BALQARAD: Towards improved sensitivity in γ-ray spectroscopy", 14 <sup>th</sup> Arab Conference on the Peaceful Uses of Atomic Energy Sharm El-Sheikh, Arab Republic of Egypt.
2018	Participating in the regional training course on initiation of postgraduate medical physics academic programs. Kuala Lumpur, Malaysia.
2017	Technical visiting Mirion Technologies Factory (Canberra) SAS, 1 Chemin de la Roseraie, 67382 Lingolsheim, France.
2009	"Using Geant4 toolkit in Brachytherapy application". The Second International Symposium on Nuclear Energy ISNE-09, Jordan-Amman.



## Supervised Doctoral & Master Theses:

Dec,2020	Master Mohammad Sulieman, Study of efficiency correction factors for the BALQARAD composite clover system, Jordan University
Dec, 2020	Nizar Mubayed, A COMPREHENSIVE SELF-INDUCED AND AMBIENT BACKGROUND STUDY OF THE BALQARAD PROJECT, Jordan University
March, 2020	Safaa Marei, Sensitivity enhancement of multidimensional gamma-ray spectrometry of neutron activated samples, Al Balqa Applied University
April, 2020	Ghadeer Elfawair, Coincidence detection efficiency of the BALQARAD system at Al-Balqa Applied University. Al Balqa Applied University.

Research G	rants
2014-2020	Improvement and Adaptation of Ultra-Sensitive Coincidence Gamma-Ray
	Detection Array for Environmental, Energy, Security, Water- and Food-Safety
	Applications, Scientific Research Support Fund, 550,000 JD