Staff Member Name
Dr. Mohammed Shqair

Email: mshqair@zu.edu.jo

Personal Information

Name	:	**Mohamed Abdurrahman Hasan Shqair**
Place and Date of Birth	:	**12/3/1976 Zarqa- Jordan**
Nationality	:	**Jordanian**
Marital Status	:	**Married**
Address	:	**Zarqa- Jordan 0795719840**

Postal Address	:	**mshqair@zu.edu.jo**

Academic Rank: Associate Professor
Qualifications:

1	Degree of Doctor in Theoretical Nuclear Physics	
	The Specialization	**Theoretical Nuclear Physics**
	Date of Obtaining Degree	2013
	Source of the Degree	**The University of Jordan**
	The Rating	**V. Good**
2	Degree of Master in Physics	
	The Specialization	**Physics**
	Date of Obtaining Degree	2004
	Source of the Degree	**The University of Jordan**
	The Rating	**V. Good**
3	Degree of the Bachelor of Science (Physics)	

The Specialization	Physics
Date of Obtaining Degree	1998
Source of the Degree	Mutah
The Rating	Good

Teaching Experience:

1	Associate Professor	Service courses unit, College of Science, Zarqa University	Starting from 2022 up to now
2	Associate Professor	Department of Physics, College of Science and Humanitarian Studies in Alkharj, Prince Sattam Bin Abdul Aziz University, Kingdom of Saudi Arabia.	Starting from 2021 to 2022
3	Assistant Professor	Department of Physics, College of Science and Humanitarian Studies in Alkharj, Prince Sattam Bin Abdul Aziz University, Kingdom of Saudi Arabia.	Starting from 2013 to 2021
4	Lecturer	High Institute for Comprehensive Work (2004-2008) Al- Bayda -Libya	Starting from 2004 to 2008
5	Teacher	Ministry of education	Starting from1998 to 2004 Starting from 2008 to 2013

Publications:

#	Title	Publisher	Year/ Issue (Vol/No)
1	A new approach for the evaluation of the effective electrode spacing in spherical ion chambers	Nuclear Instruments and Methods in Physics Research	2016/9/21
2	Stabilization of heavy oil fly ash (HFO) for construction and environmental purposes	International Journal of Applied Engineering Research	2017/11/12
3	Production of Heavy Fuel Oil Fly Ash (HFO)-based Geopolymers for Passive	International Journal of Applied	2018/11/1

		Cooling Systems	Engineering Research	
4		Solution of different geometries reflected reactors neutron diffusion equation using the homotopy perturbation method	Results in Physics	2019/3/12
5		Developing a new approaching technique of homotopy perturbation method to solve two-group reflected cylindrical reactor	Results in Physics	2019/3/12
6		Analytical Solution for Multi-Energy Groups of Neutron Diffusion Equations by a Residual Power Series Method	Mathematics	2019/7/17
7		Addendum: Analytical Solution for Multi-Energy Groups of Neutron Diffusion Equations by a Residual Power Series Method	Mathematics	2019/11/5
8		Cylindrically Symmetric Fractional Helmholtz Equation	Applied Mathematics E – Notes	2018/8/18
9		Adaptation of Conformable Residual Power Series Scheme in Solving Nonlinear Fractional Quantum Mechanics Problems	Applied science	2020/1/29
10		Abundant Exact Travelling Wave Solutions for a Fractional Massive Thirring Model Using Extended Jacobi Elliptic Function Method	Fractal Fract	2022/5/5
11		Solving Multi-Group Reflected Spherical Reactor System of Equations Using the Homotopy Perturbation Method	Mathematics	2022/5/23
12		Using Laplace Residual Power Series Method in Solving Coupled Fractional Neutron Diffusion Equations with Delayed Neutrons System	Fractal and Fractional	2023/2/27
13		Traveling Wave Solutions for Complex Space-Time Fractional Kundu-Eckhaus Equation	Mathematics	2023/1/12
14		A solution of the neutron diffusion equation in the spherical and hemispherical reactors using the residual power series	Frontiers in Physics	2023/9/11
15		Analytical solutions to the coupled fractional neutron diffusion equations with delayed neutrons system using Laplace	AIMS Mathematics	2023/6/7

#		Organizing Institution	Conference

			transform method		
16	Analysis and analytical simulation for a biophysical fractional diffusive cancer model with virotherapy with the Caputo operator	AIMS Biophysics	2023/9/1
17	MHD effects on Casson fluid flow squeezing between parallel plates	AIMS Mathematics	2023
18	Studying the Coherence of Successive Radioactive Decay and COVID19 Diffusion Mathematically using Laplace Transform Method	The 8th International Arab Conference on Mathematics and Computations	2023
19	Numerical Solutions for Fractional Multi-Group Neutron Diffusion System of Equations	International Journal of Neutrosophic Science	2024
20	Two Energy groups Neutron Diffusion Model in Spherical Reactors	Results in Nonlinear Analysis	2024
21	Solving a Novel System of Time-Dependent Nuclear Reactor Equations of Fractional Order	Symmetry	2024
22	A Study on Two-Energy Group Neutron Diffusion Model in Slab Reactors	International Journal of Robotics and Control Systems (accepted)	2024
23	Numerical Study for Two–Energy Groups Neutron Diffusion Model in Cylindrical Reactors	Journal of Robotics and Control (accepted)	2024

Conferences:

#	Paper Title	Organizing Institution	Conference
.1			
.2	Use of Heavy Oil Fly Ash (HFO) for Geopolymer Cement Production. Applied Mathematics and Materials	MATERIALS '15	International Conference on Materials Science
.3	Cylindrically Isotropic Fractional Helmholtz Equation, the International Conference on Fractional Differentiation and its Applications	The International Conference on Fractional Differentiation and its Applications	the International Conference on Fractional Differentiation and its Applications

.4	Analytical solution of neutron diffusion equation in reflected reactors using modified differential transform method	IACMC	The 6th International Arab Conference on mathematics and computations
.5	Studying the Coherence of Successive Radioactive Decay and COVID19 Diffusion Mathematically using Laplace Transform Method	Zarqa University	The 8th International Arab Conference on Mathematics and Computations
.6	The Evidence of the Early Muslim Scholars on the Sphericity of the Earth in the Holy Qur'an - in the Light of Contemporary Applied Research	Sharjah university	The fourteenth areb conference of the arab union for astronomy and space science