

Alaa baqer kadhim mohammed



Work Experience

Atomic Energy Organization

1980-05-12 - 2003-03-20

scientific researcher

Ministry of Science and Technology

2003-04-01 - 2007-10-24

physicist

University of Baghdad / College of of Science / Department of Space and Astronomy

2007-10-25 - 2015-09-27

Lecturer Doctor - Assistant Professor Doctor - Professor Doctor

University of Baghdad / College of of Science / Department of Space and Astronomy

2014-10-01 - 2015-08-06

Head of the Department of Space and Astronomy / Professor Doctor

University of Baghdad / College of of Science

2013-01-01 - 2014-12-31

Member of the Editorial Board of the Iraqi Journal of Science

College of Al-Sam University / Department of Radiology and Sonography

2018-11-10 - 2022-12-31

professor Doctor lecturer

Heritage University / college of Health and Medical Technologies / Department of Optometry Technologies

2022-12-01

Head of the Department of Optical Technologies / Head of the Examination, Auditing and Research Committee

Personal Information

Date of Birth: 1950-09-27

Nationality: Iraqi

Gender: Male

Marital Status: Married

Contact Information

Address: Iraq, Baghdad, Al-Atifiyah

Phone/WhatsApp: [07905592691](tel:07905592691)

Email:

alaa.baqer@uoturath.edu.iq

alaasada68@gmail.com

Languages

 Arabic



Excellent

 English



Very

Good

 French



Fair

General Experience

- 1- The Second Arab Conference on Physics and Mathematics / 1981 / Amman / Researcher.
- 2- The International Symposium on Neutron-Induced Interactions / 1985 / Researcher.
- 3- The National Graduate School of Nuclear Physics / 1987 / England / Researcher.
- 4- Proceedings of the Fifth Mini-Conference on Non-Nuclear Degrees of Freedom in the Scattering of Intermediate-Energy Electrons / Amsterdam / 1987 / Researcher.
- 5- Nuclear Structure Conference / Manchester / 1988 / Researcher.
- 6- Nuclear and Particle Physics Conference / 1989 / Oxford / Researcher.
- 7- The First Scientific Conference on Physical Research / 1999 / Iraq / Researcher.
- 8- The Second Scientific Conference of the College of Science / 2000 / Iraq / Researcher.
- 9- The Third Scientific Conference / Al-Rasheed College / 2000 / Iraq / Researcher.
- 10- The Eleventh Scientific Conference of the Iraqi Society for Physics and Mathematics, Baghdad / 2000 / Iraq / Researcher.
- 11- The First National Conference on Lasers and Their Applications in Medicine / 2001 / Iraq / Researcher.
- 12- The Third Scientific Conference / College of Science / Al-Nahrain University / 2001 / Iraq / Researcher.
- 13- The First National Conference on Physics and its Applications / College of Science / University of Baghdad / 2001 / Iraq / Researcher.
- 14- The Fifth Scientific Conference / College of Education / Al-Mustansiriya University / 2002 / Iraq / Researcher.
- 15- The Third Scientific Conference of the College of Science / University of Baghdad / 2009 / Iraq / Researcher.
- 16- Iraqi National Scientific Conference on Physics / Department of Physics / College of Science / University of Baghdad / 2010 / Iraq / Researcher.
- 17- First Kufa Physics Conference / 2010 / Iraq / Researcher.
- 18- Scientific Symposium (The Visible Universe) / 2012 / Iraq / Participant.
- 19- First International Conference on Remote Sensing and Digital Image Processing Technologies / 2012 / Iraq / Participant.
- 20- Scientific Workshop on Dialogues and Lifestyle / 2012 / Iraq / Participant.
- 21- Scientific Symposium on Radiation Protection / 2012 / Iraq / Participant.
- 22- Scientific Symposium on Geomagnetic Storms and Their Impact on the Earth's Environment / 2013 / Iraq / Participant.
- 23- International Conference on Physics and Engineering / 2013 / Iraq / Participant.
- 24- Scientific Symposium on Earthquakes: Their Causes and Effects / 2013 / Iraq / Participant.
- 25- Scientific Dialogue Symposium on Global Warming and its Environmental and Future Impacts / 2014 / Iraq / Participant.
- 26- First International Conference on Physics in Sustainable Development / 2014 / Iraq / Researcher.

Education

Bachelor's

1971-09-01 - 1976-06-28

Master

1976-11-01 - 1979-01-14

PhD

1986-10-01 - 1991-11-23

Skills

Design and write programs in Fortran language for nuclear technologies.

Research Fields

- Use numerical and statistical methods, including the Monte Carlo method, to address the efficiency and volume calculations of a number of nuclear detectors.
- Use non-destructive methods to determine the diameters of pipes and steel rods within concrete and the distances between them.
- Use nuclear techniques to determine the quantity or amount of chemical elements in some applications.
- Use the mass stopping power to determine the amount of energy lost by a fully charged body when passing through materials.

Publications

- 1- On Neutron Induced Reactions, Smolenice, Czechoslovakia, I.V. International Symposium On Neutron Induced Reactions, 1985.
- 2- Inelastic Scattering Cross Sections of $^{172,174}\text{Yb}$ Using TOF Technique, Radiation Effects, 1986
- 3- Neutron Inelastic Scattering Measurements on ^{159}Tb , J. Phys. G Nucl. Phys., 1987.
- 4- Kinematically Complete Study of the $^7\text{Li}(\text{p},\text{Y})^8\text{Be}^* \rightarrow 2\alpha$ reaction at $E_p = 25\text{ MeV}$, Physical Review C., 1991.
- 5- A High-Resolution Study of the $^{27}\text{Al}(\text{y}, \text{p})^{26}\text{Mg}$ Reaction Using 46-65 MeV, Tagged Nucl. Physics, 1993.
- 6- The Integral Non - Linearity Measurement For Y-ray Spectroscopy Used in the Analysis of Biological Sample, J. of Coll. of Education Mustansiriyah University, 2000.
- 7- The Efficiency Treatment of Semiconductor Detectors for HPGe and Ge (Li) Using Monte Carlo Method, Scientific Journal of the Iraqi Atomic Energy Commission, 2000.
- 8- Multiple Scattering Correction for Inelastic Scattering from Cylindrical

Targets, J. of Coll. of Education/ Mustansiriya University, 2000.

9- The Use of Monte Carlo Method for the Calculation of Solid Angle of Square Source by Circular Detector, Ibn Al - Haitham J. for Pure Appl. Sci., 2002.

10- Mass Stopping Power of the Protons in Biological Samples, Ibn Al-Haitham J. For Pure & Appl., 2004.

11- Monte Carlo Simulation of Electronic Kinetics in Gas Discharge, Iraqi J. of Phys., 2005.

12- A Study of the density effect in J. of Coll of Education/ the Stopping power of fast electrons traversing various biological material Mustansiriya University, 2008.

13- The Treatment of Efficiency of NaI(Tl) Detector by Using Monte Carlo Simulation, Eng. & Tech. Journal, 2010.

14- Measurement and Identification of Journal of Kufa Physics Natural and Artificial Ratio Active Pollutants for Water and Sediments of Tigris River in Baghdad City Using Gamma Ray Spectroscopy, 2010.

15- Study of Proton Momentum Distribution The $^{51}\text{V}(\gamma, p)^{50}\text{Ti}$ Reaction at Energy of 59.2 MeV, Eng. & Tech. Journal, 2011.

16- Monte Carlo Observations of Atomic Number Dependence of Saturation Thickness For Multiple Back-Scattering Photons From Thick Samples, Al-Mustansiriya University J.Sci., 2013.

17- Monte Carlo Simulation of the Backscattering Gamma Ray System, Iraqi Journal of Science, 2013.

18- Study the Variation of Gamma-Ray Backscattered Count Rate for Halley's Nucleus Iraqi Journal of Science, 2013.

19- Virtual Experiment System to Quantitative Characterization of Corroded Samples Using Monte Carlo Simulation, Conference 2014 ICPSD, 2014.

20- Detection the Corrosion in Pipes by Compton Back Scattering Technique, Eng. & Tech. Journal, 2014.

21- Determination of the Shape and Dimensions of the Sensitive Volume for solid State Detectors Using Monte Carlo Computer Technique, Iraqi Journal of Science, 2014.

22- Monte Carlo Simulation of the Effective Solid Angle and the HPGe Response to Different Mono-Energetic Protons from Extended Source, Iraqi Journal of Science, 2014.

23- Examine the multi scattering effect on the detected backscattering photons cometary molecule, Iraqi Journal of Science, 2015.

24- Calculation of Full Energy Peak Efficiency for HPGe Detector Using Monte Carlo Method, Iraqi Journal of Science, 2015.

25- Use of Compton Back Scattering Technique for Detection of Corrosion in Pipes, International letters of chemistry, Physics and Astronomy, 2015.

26- Determination the density of cometary nucleus material using gamma ray attenuation, Iraqi Journal of Science, 2016.

27- Virtual Experimental System to Quantitative Characterization of Corroded Samples Using Monte Carlo Simulation, Journal of Physical Science and Application, 2016.

28- Nondestructive Compton backscattering Imaging Technique to detect the corrosion in Pipes, Jordan Journal Of Applied Science "Natural Sciences Series", 2016.

Academic Links

No academic links added