



WASIT University
College of Science

Mohammed Jebur Resen

University City, Kut City, Wasit Governorate, Iraq

Mobile / 07811756743

University email: maldhuhaibat@uowasit.edu.iq



Accounts:

ORCID: 0000-0001-8053-2450

Web of Science ID: JVN-6366-2024

<https://www.scopus.com/authid/detail.uri?authorId=57216346093>

<https://www.webofscience.com/wos/author/record/JVN-6366-2024>

<https://scholar.google.com/citations?user=MUmU71QAAAAJ&hl=en>

Academic Qualifications

1998 – 2001

Master of Physics Science

Department of Physics
College of Education for Women
Baghdad University

Masters Thesis: "The Reliability Of The Geometrical Interpretation Of The Interacting Boson Model (IBM-1) and Its Consistence With The Interpretation Of Geometrical Models"

1991 – 1997

Bachelor of Science (First Class Honours)

Majors: Physics Science
College of Science
Baghdad University,
Baghdad, Iraq

Honors Thesis: "Nondestructive Testing Methods"

Scholarships and Awards

- He received a letter of thanks and appreciation from the Head of the Physics Department.
- He received (30) letters of thanks and appreciation from the Dean of the College of Science.
- Received (8) letters of thanks and appreciation from the President of Wasit University.
- Obtained (5) letters of thanks and appreciation from His Excellency the Minister of Higher Education and Scientific Research.
- He received a letter of thanks from His Excellency the Minister of Higher Education and Scientific Research.

Professional Profile

- Highly developed research qualitative and analytical skills with a strong capacity to conduct independent research

- Demonstrated ability to develop goals, objectives and implement strategies through lesson planning and teaching experience
- Working knowledge of Word, Excel, and PowerPoint.

Scientific titles and their history:

Assistant teacher	3/13/2006
Teacher	6/7/2011
Assistant Professor	1/9/2015
Professor	2/9/2022

Academic Employment – Teaching and Research

2006 – 2021

Tutor

Department of Physics, College of Science, Wasit University

Responsibilities

Taught a lot of theoretical and practical subjects:

- 1- General Physics
- 2- Radiation and nuclear physics
- 3- Radioactive contamination
- 4- Experimental nuclear physics
- 5- Experimental classic mechanics
- 6- Experimental thermodynamics
- 7- Radiological Experimental
- 8- Experimental electronics
- 9- Experimental computer

Achievements

- Contribute to the development and improvement of the work of the nuclear physics laboratory and the radiation & nuclear laboratory
- Design and manufacture of protective shields to preserve laboratory radioactive sources
- Designing and manufacturing protective shields for laboratory systems for radioactive sources for the safety of students and workers

Responsibilities

Developing and drafting a radiological emergency plan for nuclear and radiation physics laboratories

Employment History – General

2006 – 2021

Lecturer

Department of Physics, College of Science, Wasit University, Kut, Wasit, Iraq.

Publications

- 1- Study some of the nuclear characters of Samarium ^{148,150,152,154}Sm isotopes in the IBM-1 framework, *Journal of Wasit for Science and Medicine*, Vol. 5, No. 8, p.p. 14678-14687, 2010.
- 2- Multiple Mixing Ratios of Gamma Rays From ⁷⁰Ge (p,nγ) ⁷⁰As Reaction Using the Constant Statistical Tensor Methods (CST), *Journal of Wasit for Science and Medicine*, Vol. 4, Issue 2, p.p. 60-69, 2011.
- 3- Study of the shielding properties for some composite materials manufactured from polymer epoxy supported by cement, aluminum, iron and lead against gamma rays of the cobalt radioactive source (Co-60), *International Journal of Application or Innovation in Engineering & Management (IJAIEEM)*, Vol. 4, Issue 6, p.p. 90-98, 2015.
- 4- NUMERICAL BUILDUP FACTOR CALCULATION OF GAMMA RAYS FOR SINGLE, DUAL, AND MULTI-LAYERS SHIELDS USING LEAD AND ALUMINUM, *International Journal of Recent Scientific Research*, Vol. 6, Issue 7, p.p. 5184-5189, 2015.

- 5- A Study of some factors affecting the measurement of gamma rays buildup factor in aluminum and lead materials, *Journal of Wasit for science and medicine*, Vol. 8, Issue 3, p.p. 35-41, 2015.
- 6- Effect of Type and Multiplicity of the Reinforcement Material in Epoxy Composite Shields on the Gamma-Rays Attenuation of the Co-60 Radioactive Isotope, *Journal of Wasit for science and medicine*, Vol. 9, Issue 2, 2016.
- 7- Evaluation of Naturally Occurring Radionuclide in Some Types of Granites that Used in Iraq, *Journal of Wasit for science and medicine*, Vol. 9, Issue 2, 2016.
- 8- Buildup Factor Measurement of Gamma Photons of Co-60 Radioactive Source in Polyester Composite Shields Fortified by Different Concentrations of CaFe_2O_4 Powder Prepared at Different Thermal Degrees, *International Journal of Innovative Research in Science, Engineering and Technology*, Vol. 5, Issue 8, p.p. 14678-14687, 2016.
- 9- Characterization of Radiation Attenuation Properties of 0.662MeV Gamma Ray Energy for Epoxy Fe_3O_4 Composite Shields, *Indian Journal of Natural Sciences* Vol. 9, Issue 50, p.p. 14609- 14615, 2018.
- 10- Study of Thermal Conductivity and Thermal Analysis (DSC, TGA, and DTGA) of (EPOXY – ZrO_2) Nanocomposites, *Indian Journal of Natural Sciences* Vol. 9, Issue 50, p.p. 14738-14749, 2018.
- 11- Study the hardness, Young's modulus and impact strength of Epoxy/ Fe_2O_3 and Epoxy/ Al_2O_3 nanocomposites, *Wasit Journal For Science & Medicine*, Vol. 12 / Issue 1 / 2019.
- 12- Enhancement the Attenuation Parameters of 0.662MeV Gamma Rays Energy for hybrid nanocomposite Shields of Epoxy/ ZrO_2 / PbO , *Journal of Engineering and Applied Sciences*, Vpl:14(No.21) 2019.
- 13- Study Attenuation Ability of γ -Rays Energies in Spectrum of Ra-226 Radioactive Isotope for Shields Consisting of Al and Cu Layers, *Academic J. for Engineering and Science*, (0)2019.
- 14- Nuclear Armor Properties of two- and Three-Layer Metal Shields of Gama rays at a Range of Energies (0.295-1.747) MeV, *Academic J. for Engineering and Science*, (1)2020.
- 15- Study of the Irradiation Effect by α -Particles on Optical Properties of $\text{ZnO}:6\%\text{In}$ Thin Films, *Journal of Physics: Conference Series*, IOP Publishing, International Laser Technology and Optics Symposium 2019 (iLATOS2019).
- 16- Study of Cross Section Areas Ratios for Scattering Interactions of Gamma Photons in He, Fe, Fm, H_2O Materials, 1st International Conference in Physical Science and Advance Materials, IOP Conf. Series: Materials Science and Engineering 757 (2020) 012013.
- 17- Improving the attenuation Ability of gamma rays for silicate glass system composites (GS-PbO): a comparative theoretical study, 2nd International Scientific Conference of Al-Ayen University (ISCAU-2020), IOP Conf. Series: Materials Science and Engineering 928 (2020) 072077.
- 18- Study the Attenuation Ability of γ -Rays Emitted from Co-60 Radioactive Isotope in PES/ CaFe_2O_4 Composite Shields, *Journal of the college of Basic Education*, Volume 26 (Issue 108) June 2020.
- 19- Improved gamma radiation shielding traits of epoxy composites: Evaluation of mass attenuation coefficient, effective atomic and electron number, *Journal of Radiation Physics and Chemistry*, 179 (2021) 109183.
- 20- Coulomb form factors of ^{25}Mg nuclei using Bohr–Mottelson collective model with Skyrme interaction potential, *International Journal of Modern Physics E*, Vol. 29, No. 7 (2020).
- 21- Evaluation of the Absorption, Scattering and Overall Probability of Gamma Rays in Lead and Concrete Interactions, *Journal of SCIOl Biomedicine*, Volume 4(Issue 1) 2021.
- 22- Assessment of Radiation Levels and Geochemical Factors in Iraqi Soil, *Journal of NeuroQuantology* , Volume 19 (Issue 6) June 2021.
- 23- Assessment of radioactivity levels in some cement produced locally in Iraq, *Journal of Radiation Detection Technology and Methods*, 5, pages633–640 (2021). <https://doi.org/10.1007/s41605-021-00293-2>
- 24- COULOMB C2 AND C4 FORM FACTORS OF ^{18}O , $^{20,22}\text{Ne}$ NUCLEI USING BOHR–MOTTELSON COLLECTIVE MODEL, *Ukrainian Journal of Physics*, Vol. 67 No. 2 (2022)

- 25- Gamma radiation shielding traits of B₂O₃–Bi₂O₃–CdO–BaO–PbO glasses, *Journal of Radiation Physics and Chemistry*, 191 (2022) 109836, <https://doi.org/10.1016/j.radphyschem.2021.109836>
- 26- Radiation shielding traits of bismuth–cadmium–barium-borate glasses: Role of lead activation, *Journal of Physics and Chemistry of Solids*, 164 (2022) 110597. <https://doi.org/10.1016/j.jpcs.2022.110597>
- 27- Radiation attenuation capacity improvement of various oxides via high density polyethylene composite reinforcement, *Journal of Ceramics International*, 48 (2022) 25011–25019. <https://doi.org/10.1016/j.ceramint.2022.05.154>
- 28- Investigation of Mechanical and Radiative Attenuation traits of PMMA/ZnO/Bi₂O₃ Hybrid Nanocomposites, 4th. *International Conference in Physical Science and Advanced Materials*, Sep.24-27/2022 FRANCE, American Institute of Physics: AIP Conference Proceedings indexed by Scopus (Elsevier)and (Web of Science).
- 29- Radiation shielding investigation of PMMA/ZnO doped with nanoparticles of Bi₂O₃, *Journal of NeuroQuantology* , Volume (Issue) June 2022.
- 30- Gamma Photons Attenuation Features of PbO-Doped Borosilicate Glasses: A Comparative Evaluation, *Applied Physics A* (2022) 128:1058. <https://doi.org/10.1007/s00339-022-06216-2>
- 31- Shielding performance of metal oxide nanoparticles-doped polypropylene composites against gamma rays and neutrons exposure, *Journal of Radiation Physics and Chemistry*, 216(2024)111461. <https://doi.org/10.1016/j.radphyschem.2023.111461>.

Professional Memberships

2018 – date The advisory office at the University of Wasit

Interests

Drawing and scientific research

Referees

Muhammad Jabr Rasan

Job Title: Teaching / Department of Physics/ College of Science/ University of Wasit

Scientific title: Professor

Director of the Nuclear and Radiation Physics Laboratory

Head of the Nuclear Physics Laboratory

Phone: (0) 7811756743

Email: maldhuhaibat@uowasit.edu.iq
mohamedjresen@gmail.com

Update: March, 2024