

Assist. Prof. Dr. Mohammed Yahya Hadi

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Curriculum Vitae

THEORETICAL NUCLEAR PHYSICIST | PHYSICS FACULTY MEMBER

Academic Profile

Theoretical nuclear physicist and university faculty member whose research focuses on nuclear structure and shell-model calculations, especially magnesium isotopes, electromagnetic observables, and shell evolution. Additional research experience includes gamma-ray interactions with matter and mass attenuation measurements. More than a decade of university teaching, research, and academic service at Al-Qasim Green University.

Research Interests

- Theoretical nuclear structure and shell-model calculations
- Exotic magnesium isotopes, shell evolution, and cross-shell configurations
- Electromagnetic transition probabilities and electron-scattering form factors
- Gamma-ray interactions with matter and radiation attenuation

Academic Appointments

Assistant Dean for Scientific Affairs and Postgraduate Studies | College of Biotechnology, Al-Qasim Green University, Babylon, Iraq | April 2026-present

Physics faculty member | College of Biotechnology, Al-Qasim Green University, Babylon, Iraq | 2015-present

Head of Registration Unit | College of Biotechnology, Al-Qasim Green University | 2015-2019; 2023-2026

Education

Ph.D. in Physics (Nuclear Physics) | University of Basrah, Iraq | 2023

Dissertation: Shell Model Application for Studying the Structure of Some Mg Isotopes

M.Sc. in Physics (Molecular Physics) | Aurangabad University, India | 2014

Thesis: Study Mass Attenuation Coefficient of Cadmium Telluride (CdTe) Nanopowder by using Gamma Ray

B.Sc. in General Physics | University of Babylon, Iraq | 2004

Teaching Experience

General Physics | First-year undergraduate students | Taught in English

Research Methodology | Master's and doctoral students | Taught in English

Undergraduate and graduate studies were conducted in English.

Selected Nuclear and Radiation Physics Publications

- Kadhim, H. W., Hameed, R. A., & Hadi, M. Y. (2024). "Probing the Nuclear Structure of Exotic ^{33}Mg Isotope." *MINAR International Journal of Applied Sciences and Technology*, 6(1), 308-320. DOI: 10.47832/2717-8234.18.22.
 - Shedhan, K. F., Kadhim, H. W., & Hadi, M. Y. (2024). "Study Magnetic Electron Scattering Form Factor of ^{24}Mg Isotope." *MINAR International Journal of Applied Sciences and Technology*, 6(1), 402-419. DOI: 10.47832/2717-8234.18.30.
 - Hadi, M. Y., & Al-Sa'ad, A. A. (2023). "Nuclear Structure of Proton-rich $^{20-23}\text{Mg}$ Isotopes." *Acta Physica Polonica B*, 54(1), 1-A3. DOI: 10.5506/APhysPolB.54.1-A3.
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- Hadi, M. Y., & Al-Sa'ad, A. A. (2023). "Calculations of the Shell Model for ^{27}Mg Isotope." *Journal of Kufa-Physics*, 15(1), 37-45. DOI: 10.31257/2018/JKP/2023/v15.i01.11214.
- Hadi, M. Y., Alnasraui, A. H. F., & Aldalawi, A. A. T. (2021). "Measurement Mass Attenuation Coefficient of Palmitic Acid by Using Sources of Gamma Ray." *NeuroQuantology*, 19(6), 107-114. DOI: 10.14704/nq.2021.19.6.NQ21075.

Academic Service and Recognition

- Scientific, examination, postgraduate, and academic-evaluation committee service at Al-Qasim Green University.
- Head of the Graduate GPA Calculation Committee (2016-present); service on central and departmental examination committees (2016-2025).
- Research-quality review, journal accreditation, plagiarism-screening, and academic-promotion activities.
- Reviewer for scientific journals; Certificate of Excellence in Peer-Reviewing (2026).
- Distinguished Lecturer Award (2024-2025).

Research Profiles and Languages

ORCID: <https://orcid.org/0000-0001-6549-0424>

Scopus Author ID: 56890723600

Arabic: Native | English: Professional academic working proficiency

Scopus profile snapshot (October 2026): 25 documents, 1,251 citations, h-index 13. Metrics are time-sensitive.