Curriculum Vitae

Personal Data

Title: Prof. Dr.

Name: Ali Abdulateef Kareem Alzubadi

Nationality

Place and birth (city and country): Baghdad, IRAQ

Nationality: Arabic

Place and date of Birth, Year-Month- Day: Baghdad, 1969 Sep. 19



Contact Data

Passport no.: A9541346

Date of issue: 1/4/2015 Date of Expiry: 30/3/2023

Mobile: In Iraq +964 (0) 7901296856 E-mail: dr.ali.a.alzubaidi@gmail.com

ali.abdullatif@sc.uobaghdad.edu.iq

Office Address: Physics department, College of Science, University of

Baghdad, Baghdad IRAQ.

Education (higher degree)

University or equivalent	Years attended		<u>Degrees</u>	Major fields of study
Name and place	from	to		
Physics department,	10/1987	06/1991	B.S. degree in physics	General physics
college of science,				
Almostansiryah				
university, Baghdad,				
IRAQ				
Applied science	10/1996	04/1999	MSc. degree in physics	Nuclear physics
department, university				
of technology,				
Baghdad, IRAQ				
Applied science	10/2001	09/2005	PhD degree in physics	Nuclear physics
department, university				
of technology,				
Baghdad, IRAQ				
Physics department,	01/2008	12/2008	Post. Doc. (Training	Nuclear and
Enrico Fermi, Pisa			and research In Italian	Radiation Physics
University, Italy			Laboratory)	

Scientific Employment and Academic Responsibility

		of duty	Academic responsibilities	
University	from	to	Month	
Applied science department, university of technology	1996	1999	MSc student.	
Physics department, college of science, Baghdad university.	1999	2001	Lecturer in nuclear physics laboratory.	
Applied science department, university of technology.	2001	2005	PhD student,	
Physics department, college of science, Baghdad university.	2006	2008	 Teaching the nuclear physics subject for the 4th stage students in astronomy department. Laboratory supervisor for the nuclear physics laboratory for the 4th stage, physics department. Member in the advance nuclear research laboratory. 	
Physics department, Enrico Fermi, Pisa University, Pisa, Italy.	2008	2009	Guest researcher	
Physics department, college of science, Baghdad university.	2009	2014	 Teaching the quantum mechanics subject for the 3th stage students in physics department. Teaching the mathematical physics subject for MSc student. Teaching the nuclear physics subject for MSc student. 	
Physics department, college of science, Baghdad university.	2014	2018	 Teaching the quantum mechanics subject for the 4th stage students in physics department. Teaching advance quantum mechanics subject for PhD student. Teaching the nuclear physics subject for MSc student. Teaching the classical electrodynamics subject for PhD students. 	
Physics department, college of science, Baghdad university	2018	Till now	 Head of the department of Physics Teaching the quantum mechanics subject for the 4th stage students in physics department. Teaching the nuclear physics subject for MSc student. Teaching the classical electrodynamics subject for PhD students. 	

Participation in Seminars, Summer schools and workshops

- Joint ICTP-IAEA School on "Nuclear Data Measurements for Science and Applications" Abdus Salam international center for theoretical physics (ICTP), Trieste - Italy, 19 - 30
 October 2015.
- Joint ICTP-IAEA Workshop on Nuclear Structure Decay Data: Theory and Evaluation, Abdus Salam international center for theoretical physics (ICTP), Trieste - Italy, 06 -17 August 2012.
- 3. School of nuclear energy managements, IAEA and ICTP, Italy, 8-26 November 2010.
- Joint ICTP-IAEA Workshop on Nuclear Structure Decay Data: Theory and Evaluation, Abdus Salam international center for theoretical physics (ICTP), Trieste - Italy, 28- April 2008 - 9 May 2008.
- **5.** Joint IAEA Activity on Imaging in Advanced Radiotherapy Techniques, Pisa, Italy, 20-24 October 2008.
- **6.** Summer School on Particle Physics, Abdus Salam international center for theoretical physics (ICTP), **Trieste Italy**, **11 22 June 2007**.

Conferences

- 1. 8th International Symposium on Radiation Physics, **Prague (Czech Republic) June 5-9, 2000.**
- 2. Fourth Symposium on Use of Nuclear Techniques in Environmental Studies, **Irbid**, **Jordan**, 13-15 **September 2004**.
- 3. 5th Conference on Nuclear and Particle Physics (NUPPAC'5) Cairo-Egypt 19-23 November 2005.
- 4. Sixth Symposium on the use of Nuclear Techniques in Environmental Studies, Yarmouk University-Irbid, **Jordan, 4-6 September 2006.**
- 7th Conference on Nuclear and Particle Physics (NUPPAC'7) Luxor-Egypt 17-21 November 2007.

My current research interests

Studying the nuclear structure nuclei using a self-consistent mean-field Theory.

<u>Participation in International Societies</u>

Member in International Radiation Physics Society (IRPS) http://www.canberra.edu.au/irps/home

Selected papers

- 1. Bremsstrahlung Yields of ⁹⁰Sr / ⁹⁰Y Beta Particles in Thick Targets and Z Dependence, (contributed paper in " Fourth Symposium on Use of Nuclear Techniques in Environmental Studies, Irbid, Jordan,2004").
- 2. Photon and Energy Yield of EB Generated by The Complete Absorption of Beta Particles From ⁹⁰Sr /⁹⁰Y Using Magnetic Deflection Technique, (contributed paper in " Fifth Conference on Nuclear and Particle Physics NUPAC'05, Cairo, Egypt,2005).
- 3. Determination of Radial Electron-Electron Distribution Function for Li Iselectronic Sequence in Excited State 1S² 3P (contributed paper in The Fourth Conference on "Scientific Research Outlook & Technology Development in the Arab World" 2006).
- 4. Investigation of Beta and Gamma Rays Total Interaction Cross Section and Effective Atomic Number for CR-39 Nuclear Track Detector, Iraqi J Phys. Vol.8, No.11 (2010) 77-83.
- 5. Calculation of theoretical isotropic Compton profile for many particle systems, Modern Physics Letters B, Vol. **24**, No. 14 (2010) 1601–1614.
- 6. Estimating the intensity of polyenergetic gamma ray spectrum produced by beta particles interaction with human bone, ATTI DELLA "FONDAZIONE GIORGIO RONCHI" Vol. LXV, No. 1 (2010) 43-50.
- 7. Theoretical Calculation of Internal Conversion Coefficients for Multipole Transitions in ⁸⁸Sr nucleus, Iraqi J Phys. Vol.**10**, No.19 (2012) 47-53.
- 8. The effects of core-polarization on inelastic form factor of ¹⁰B, Iraqi J Phys. Vol.**10**, No.19 (2012) 90-97.
- 9. Theoretical calculation of energy absorption buildup factor for human skin and eye lens tissues, International Review of Physics, Vol. 5, No. 6 (2012) 398-403.
- 10. Longitudinal and Transverse Electron Scattering Form Factors for ¹³C Nucleus with Core-Polarization Effects, Iraqi J Science, Vol.**54**, No.4 (2013) 888-894.
- 11. Microscopic Study of Nuclear Structure for Some Zr-isotopes Using Skyrme-Hartree-Fock-Method, Journal of Nuclear and Particle Physics, Vol. 4 No. 6 (2014) 155-163.

- 12. **Shell model and Hartree–Fock calculations for some exotic nuclei**, International Journal of Modern Physics E, Vol. 24, No. 12 (2015) 1550099-113 **World Scientific Publishing Co.**
- 13. Investigation of nuclear structure of ^{30–44}S isotopes using spherical and deformed Skyrme–Hartree–Fock method, Indian Journal of Phys, Vol. 89 No. 6 (2015) 619–627 (Springer).
- 14. Shell model calculations of inelastic electron scattering for positive and negative parity states in ¹⁹F, Nuclear Physics A, Vol. 947 (2016) 12–25 (ELSEVIER).
- 15. Shell model and Hartree-Fock calculations of electron scattering form factors for ²⁵Mg nucleus, Iraqi J Phys. Vol.14, No.31 (2016) 28-36.
- 16. Nuclear deformation study using the framework of self-consistence Hartree-Fock-Bogoliubov, Karbala International Journal of Modern Science 1 (2015) 110-121 (ELSEVIER).
- 17. Studying the Nuclear Structure of Some Target Nuclei Used for Radiotherapy Nuclei Production by Using Skyrme-Hartree-Fock Method, World Journal of Nuclear Science and Technology, Vol.7 No.2, April 2017.
- 18. Calculations of the Quadrupole Moments for Some Nitrogen Isotopes in p and psd Shell Model Spaces Using Different Effective Charges, Iraqi Journal of Science, 58 (2017) 878-883.
- Shell model and Hartree-Fock calculations of longitudinal and transverse electroexcitation of positive and negative parity states in ¹⁷O, PHYSICAL REVIEW C 97 (2018) 024316-1 - 024316-12, American Physical Society.
- 20. Transverse Magnetic Electron Scattering Form Factors for Some Odd-A Nuclei Using Shell Model and Hartree–Fock Calculations, Iran J Sci Technol Trans Sci, 42 (2018) Issue 4, 2387–2396 (Springer).
- 21. Magnetic dipole moments, electric quadrupole moments, and electron scattering form factors of neutron-rich sd-pf cross-shell nuclei, PHYSICAL REVIEW C, 97, (2018) 064312, American Physical Society.
- 22. Study of the nuclear deformation of some even-even isotopes using Hartree-Fock-Bogoliubov method (effect of the collective motion), Indian Journal of Phys, Vol. 93 No.1 (2019) 75–92 (Springer).
- 23. Study of giant dipole resonances for neodymium isotopes with an exciton model, International Journal of Modern Physics E, Vol. 29, No. 10 (2020) 2050084, World Scientific Publishing Co.

- 24. Study of the nuclear structure of some exotic nuclei using nonrelativistic and relativistic mean-field methods, International Journal of Modern Physics E, Vol. 29, No. 12 (2020) 2050090, World Scientific Publishing Co.
- 25. Investigation of the existence of new nuclear magic number in even-even O isotopes using shell model and Hartree–Fock Bogoliubov method, Materials Science and Engineering, 757 (2020) 012016.
- 26. Calculation magnetic dipole moments, electric quadrupole moments and form factors for some Ti isotopes, Physica Scripta, 95 (2020) 105306.
- 27. Investigation of the Reaction Cross-Section for Production the Radioactive Isotopes Used in Fabricating the Nuclear Batteries, Materials Science and Engineering, 757 (2020) 012017.
- 28. Study of static and dynamic properties of even-even ^{14–24}O and ^{38–54}Ca in the frame of Random Phase Approximation (RPA) method with different Skyrme parameterizations, Physica Scripta, 96 (2021) 055304.
- 29. Investigation of the magicity in some even–even Ca isotopes by using shell model and Hartree–Fock–Bogoliubov method, Indian Journal of Phys, https://doi.org/10.1007/s12648-021-02052-x
- 30. Study of the Nuclear Structure for Some Target Nuclei Used in the Production of Beta-Emitting Radioactive Isotopes for the Fabrication of Nuclear Batteries, *Iraqi* Journal of Science, 2021, Vol. 62, No. 1, pp: 116-129

<u>Supervision</u>

10 MSc students and 11 PhD students

Computer Skills

MathCAD Professional
Corel Draw Professional
Shell Model code Professional

(NushellX@MSU) XCOM

Professional

Language Skills

 LANGUAGE	SPEAKING	READING	WRITING	
ENGLISH	Very good	Very good	Very good	
ITALY	Middle	Middle	Middle	