

+CURRICULUM VITAE

Adie. D. Salman



Name: Adie Dawood Salman AL-Nagim

Nationality: Iraqi

Material Status: Married

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Language: Arabic and English

Place and Date of Birth: Basrah- Iraq (27-7-1961)

Qualification: PhD (2006) Nuclear Physics, Basrah University, Iraq.

Title of PhD Thesis: THEORETICAL STUDY OF THE NUCLEAR FORM FACTOR OF LIGHT NUCLEI by ELECTRON SCATTERING INCLUDING CORE-POLARIZATION EFFECTS up to SECOND ORDER.

General Discipline: Physics

Specific Discipline: Theoretical Nuclear Physics

Supervision: 3 Ph.D. students

5 M.Sc. Student.

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EMPLOYMENT

1. Assistant Lecturer (17- 9- 1991), Physics Department, College of Education, University of Basrah Iraq.
2. Lecturer (11- 6- 1997), Physics Department, College of Education, University of Basrah, Iraq.
3. Assistant Professor (17-1 2- 2007), Physics Department, College of Science , University of Kerbala, Iraq.
- 4- Professor (20- 5- 2013), Physics Department, College of Science, University of Kerbala , Iraq

QUALIFICATION

1. **B.Sc.** (Science Physics), Basrah University, Basrah, IRAQ (1983).
2. **M.Sc.** (Laser Physics), Basrah University, Basrah, IRAQ (1990).
3. **Ph.D.** (Nuclear Physics), Basrah University, Basrah, IRAQ (2006).

POSITION HELD

1. Director of Postgraduate Studies in the Department of Physics / Collage of Science/ University of Kerbala (from 1- 10- 2012 to - - 2014).
2. Dean Assistant in the College of Sciences/ University of Karbala (from 15- 7- 2007 to 13- 2- 2010).
3. The dean of the Agency in the College of Sciences, University of Karbala (from 23-8-2008 to 24-9 -2008 , from 20-12-2009 to 23-12-2009).
- 4- Head of the Department of Medical Physics / College of Science / Al-Zahrawi University

TEACHING EXPERIENCE

1. **Electromagnetic Theory**, Fourth Physics Class for 9 years.
2. **Analog Electronics**, second Physics Class for 7 year.
3. **Nuclear Physics**, Fourth Physics Class for 3 years.
4. **Optics**, Third Physics Class for 1 year.

- 5-Sound & wave motion, Second Physics Class for 4 years.
- 6.Electromagnetic theory , MSc Students for 2 years.
7. Mechanics & Mater Properties, First Physics Class for 4 years.
8. Shell model theory, MSc Students for 1 years.
- 9.Electricity and Magnetism Lab, First Physics Class for 3 years.
- 10.Modern Physics Lab, First Physics Class for 3 years.
11. Mechanics Lab, First Physics Class for 1 years.
12. Optics Lab, Second Physics Class for 8 years.
13. Analog Electronics Lab, Second Physics Class for 7 years.
- 14-Nuclear model, MSc Students for 2 year
- 15-Advance Classical Mechanic, MSc 4 years
- 16-Electrodynmaic, PhD 2 year
- 17-Mathmactical Physics, PhD 2 year
- 18- Nuclear and particle physics, MSc 1years

PUBLISHED PAPERS

- 1- Power limits of chaos in NH₃ using CW-CO₂ laser beam, *Journal of Basrah Researches*, Vol. 3,part 1, (1997) 25-34.
- 2- Possibility of chaos in rubidium vapor, *Basrah Journal of science, section A*, Vol.14,No 1,(1996) 25-28.
- 3- Causes of instabilities in a bistable ring cavity, *Journal of Basrah Researches*, Vol. 22,part 4, (1999)77-83 .
- 4- Contribution for study the relation between high simultaneous and low continuous radiation dose effect on response, Dose and loss in response , *Journal of Basrah Researches*, Vol. 22,part 4, (1999) 31-36 .
- 5- Longitudinal C2 form factors in sd-shell nuclei including core-polarization effect up to second order, *Journal of the University of Kerbala*, Vol.5 No 4(2007)134-140.
- 6- Longitudinal C2 form factors of the first excited state of ²⁰Ne, ²⁴Mg, ²⁸Si, ³²S, *Journal of the University of Kerbala*, 6th Sci of K. U. (2010).
- 7-Diffractive structure of Electromagnetic form factors in ⁷Li, *Journal of Basrah searches (Sciences)*, Vol. 38,No 3A, (2012)1-7.
- 8- Longitudinal electron scattering form factors in ^{50,52,54}Cr, *Journal of Advanced Physics*, Vol. 2, (2013)1-5.
- 9- Core polarization effects on the inelastic longitudinal C2 and C4 form factors of ^{46,48,50}Ti nuclei, *Journal of Nuclear and Particle Physics*, Vo. 13 No 1 (2013) 20-24 .
- 10- Inelastic Form Factors Include Core-Polarization Effects up to the Second Order From ²⁹Si Nucleus. *International Journal of Modern Physics E*, Vol. 23, No. 09, (2014) 1450046
- 11- Longitudinal electron scattering form factors for ^{54,56}Fe. *International Journal of Modern Physics E*, Vol. 23, No. 10, (2014) 1450054
- 12-“Yrast states and B(E2) values of even 100-102Ru Isotopes using Interacting Boson Model (IBM-1)”. *Chiang Mai Journal of Science*, Vol. 41 (2014)
- 13- "Inelastic Longitudinal Electron-Nucleus Scattering Form Factors for ^{58,60,62}Ni nuclei" *Transactions on Engineering and Sciences*, Volume 4, Issue 1, January-March 2016
- 14-" Core-polarization effect on ⁶⁵Cu nucleus studied by electron scattering" *Iraqi journal of physics* 2016, Vol.14, No.31, PP.13-27
- 15-"Calculation of form factors for ⁷Li Nucleus with nħω Excitation " *Journal University of Kerbala* 2017, Vol. 15, No.2 Scientific ,pp.79-86
- 16-"Inelastic electron-nucleus scattering form factors for ^{64,66,68}Zn isotopes " *AIP Conf. Proc.* 2144, 030029-1-030029-15..
- 17-" Core polarization effects up to 12 ω in ⁷Li and ¹⁰B nuclei" *International Journal of Modern Physics E*, Vol. 28, No. 11 (2019) 1950102
- 18- "Estimation of Inelastic Longitudinal Electron Scattering Form Factors in ^{58,60}Ni Nuclei Using OXBASH Code", *Journal of Nuclear Sciences*, Vol. 7, No. 1, July 2020, 1-8.
- 19- "Study the Nuclear Structure of ⁶Li Nuclei with the Calculation of a Large-basis Shell Model" " *AIP Conference Proceedings* 2386, 080009 (2022).
- 20- "Large-basis calculation of ⁶Li nucleus with Skyrme potential", *Indian Journal of Physics* 2022.
- 21-" Uranium concentration in blood samples of leukemia children", *AIP Conf. Proc.* 2830, 020014-1-020014-6.
- 22- "Elastic and Inelastic Form Factor of the ¹⁷o Nuclei With the Large-Basis Shell Model, *AIP Conf. Proc.* 2830, 070040-1-070040-13.
- 23- "ELASTIC AND INELASTIC FORM FACTORS OF THE ¹⁰B NUCLEI WITH THE LARGE-BASIS SHELL MODEL", *NUCLEAR PHYSICS AND ATOMIC ENERGY* 2022 Vol. 23 No. 2.
- 24- "Blood of cancerous patients as biomarkers of alpha emitters", *Iranian Journal of Medical Phys* Volume 20, Issue 4, July and August 2023, Pages 194-251,doi,10.22038 /ijmp.2022.64749.2111
- 25"-Nuclear Structure Study for ⁹Be Nuclei with Large-Basis Shell Model Calculation " , *Physics of Atomic Nuclei*, 2023, v. 86, n. 6, p. 980, doi. 10.1134/S1063778824010459
- 26- "Assessment of Trace Element Concentrations in the Blood of Pediatric Leukemia Patients", *Journal of Pediatric Hematology/Oncology* 48(2):p 63-68, March 2026. | DOI: 10.1097/MPH.00000000000003157

Supervision

- 1- Mohanad Hussein Oleiwi, **PhD thesis**, Form factors calculations for some low mass fp-shell nuclei with core polarization, Department of Physics, Collage of Science, University of Baghdad, Baghdad, Iraq.2013
- 2- Doaa Raheem Kadhem, **MSc thesis**, Longitudinal electron scattering form factors for $^{54,56}\text{Fe}$ & $^{58,60}\text{Ni}$ nuclei with core polarization effect, Department of Physics, Collage of Science, University of Kerbala, Karbala, Iraq. 2014
- 3- Samah O. Al-Rammahi, **PhD thesis**, Inelastic electron-nucleus scattering form factors of some fp-shell nuclei, Department of Physics, Collage of Science, University of Baghdad, Baghdad, Iraq.2016
- 4- Noor Thaeer Talab, **MSc thesis**, Calculation of Form Factors for some p-Shell nuclei with $n\hbar\omega$ Excitation, Department of Physics, Collage of Science, University of Kerbala, Karbala, Iraq.2017
- 5- Sabaa Majeed Hameed, **MSc thesis**, Nuclear Structure Study for Light ^6Li , ^9Be Nuclei, Department of Physics, Collage of Science, University of Kerbala, Karbala, Iraq. 2021
- 6- Haura Mohammed Abas, **PhD thesis**, Detection of cancer pathogens in different biological samples using some physical techniques, Department of Physics, Collage of Science, University of Kerbala, Karbala, Iraq. 2022
- 7- Bashair Hassan Jawad, **MSc thesis**, Study of the nuclear properties of some light nuclei using different potentiels, Department of Physics, Collage of Science, University of Kerbala, Karbala, Iraq.2022
- 8- Zainab Ali Rasheed, **MSc thesis**, Determination of natural radionuclides and some metal concretions in biological samples in the Karbala province, Iraq, Department of Physics, Collage of Science, University of Kerbala, Karbala, Iraq.2022

The PhD Examination Committee

- 1- Arkan Rifat Ridha, Nuclear structure of sum halo nuclei, **Baghdad University**, IRAQ, 2012.
- 2- Wasan Zuheir Majeed, Matter Density Distribution and Electron Scattering Form Factors of Exotic Nuclei, **Baghdad University**, IRAQ, 2013.
- 3- Mohanad Hussein Oleiwi, Longitudinal Form Factors Calculations for Some Low Mass fp-shell Nuclei with Core-Polarization Effects, **Baghdad University**, IRAQ, 2013.
- 4- Rasha Jawad Kadhum, The Equilibrium and Pre-Equilibrium ^2_1D Emission Spectra of some Nuclei for $(n, \alpha^2_1\text{D})$ up to 50 MeV, **Baghdad University**, IRAQ, 2014.
- 5- EHSAN MASHAAN RAHEEM, THE Calculation of The Charge Density Distribution of The 2s-1d Shell Nuclei by Using The Occupation Numbers of The States, **Baghdad University**, IRAQ, 2015.
- 6- Ali Mahdi Abdul-Hassan, Study The Mixing-Symmetry State in some A=110 Isobars, $^{132-138}\text{Ce}$ nuclei and $^{184-188}\text{W}$ nuclei, **Basrah University**, IRAQ, 2015.
- 7- Abdullah Swadi Mdakhal, Jastrow short range correlation effect on the charge density and electron scattering form factor of some nuclei, **Baghdad University**, IRAQ, 2016.
- 8- Samah A. Al-Ramahy, Inelastic longitudinal electron-nucleus scattering form factors of some fp-shell nuclei, **Baghdad University**, IRAQ, 2016.
- 9- Sadeq Sultan Mashaan, Effect of using Different Interaction on Nuclear Energy Levels in some Nuclei, **Baghdad University**, IRAQ, 2019.
- 10- Amer Yassir Kadhim Hussein, Radiological Impact Assessment of Radionuclide in Soil and Grain (Rice and Wheat) Samples Collected From AL-Shamiyah, Qadisiyah, **Babylon University**, Iraq. 2021
- 11- Haura Mohammed Abas, Detection of cancer pathogens in different biological samples using some physical techniques, Department of Physics, **University of Kerbala**, Iraq. 2022
- 12- Furqan A. Tawil, Radiological and Toxicological Investigation of Biological Samples in Lung Cancer Patients, Department of Physics, **University of Kerbala**, Iraq. 2022
- 13- Esraa Salim Obayes Qataa, Estimation of Selected Radiological and Toxic Elements in Geological and Biological Samples of Cancer Patients in Babylon Governorate, **University of Babylon**, Iraq. 2022

The MSc Examination Committee

- 1- Rana Jasim Mohammed, **Calculation of the magnetic dipole transitions form factors in ^{32}S nucleus by using Tamm- Dancoff**, Basrah University, IRAQ, 2008.
- 2- Hawraa A. Mezban, **Theoretical Study of the Nuclear Properties for Heavy and Super heavy Nuclei** , Basrah University, IRAQ, 2009.
- 3- Ashawq F. Ja'afar AL-Ali, **Triaxial interactions effect in the nuclear structure of nuclei Dysprosium ($^{152-166}\text{Dy}$) & Osmium ($^{174-180}\text{Os}$)**, Basrah University, IRAQ, 2010.
- 4- Amir Yasser Kazem, **A study of Nuclear Properties of 148-154Sm Even- Even Isotopes By the Interacting Boson Model-1[IBM-1]**, Babylon University, IRAQ, 2010.
- 5- Shymaa Abdul- Kareem, **Study of the Nuclear Structure of the Nickel and Zinc Nuclei by Using the Interacting Boson Model 1 and 3**, Basrah University, IRAQ, 2010.
- 6- Abather Jabbar Bashar, **Admixture of Higher Multi- p- Shell in Calculation of Longitudinal and Transverse Magnetic Electron Scattering Form Factors of Some p- Shell Nuclei**, Basrah University, IRAQ, 2010.
- 7- Musa Mohammad Mahdy, **Isospin and symmetry excitation in light nuclei $^{22-26}\text{mg}$ & $^{28-32}\text{Si}$ isotope**, Basrah University, IRAQ, 2011.
- 8- Ahmad M. shaeab, **study the energy level of some nuclei mass number ($A=98,100,102$) by using boson interaction model** ,Babylon University , IRAQ, 2012.
- 9- Hussein Jumaah Hamad, **Measurement of the Concentration of Radon Gas In the Soil of the Holy Positions and Shrines at Governorate of Al-Najaf Al-Ashraf For Different Depth** , Kufa University, IRAQ, 2013.
- 10- Akram Abbaas Mohamed, **study of the structure of odd $^{123-133}\text{Sb}$ nuclei in the framework of Particle-Vibration Coupling Model(PVCM) including Core- Polarization Effect**, Basrah University, IRAQ, 2013.
- 11- Noori Sabah Manie, **Quadrupole moments of some exotic nuclei**, Baghdad University, IRAQ, 2013.
- 12- Noor Hadi Abbas, **The Effect of Coupled-Channels in Collisions Between Heavy Ions Near The Coulomb Barrier**, Babylon University, IRAQ, 2014.
- 13- Qeasar Abdul-Hussein Abbaas, **Study the Deformation Effects on the Heavy Nucleus Energy Level** , Kufa University, IRAQ, 2014.
- 14- Doaa Raheem Kadhim, **Longitudinal electron scattering form factors for $^{54,56}\text{Fe}$ & $^{58,60}\text{Ni}$ nuclei with core polarization effect**, Kerbala University, IRAQ, 2014.
- 15- Yousif Habeeb Kadhim, **Study the Effect of the Angle between the Radioactive Source and Detector existence of the target material on the Energy spectrum**, Babylon University , IRAQ, 2014.
- 16- Redhab Abbas Allawe, **Inelastic transverse magnetic dipole electron scattering form factors in ^{48}Ca** , Baghdad University, IRAQ, 2016.
- 17- Noor Thaer Talab, **Calculation of form factors for some p-shell nuclei with $n\hbar\omega$ excitation**, Kerbala University, IRAQ, 2017.
- 18- Alyaa Hefdhil Abass Aziz, **Measurement and study of radioactive radon gas in water to schools for Hilla city**, Babylon University, IRAQ, 2017.
- 19- Sara Salih Naif, **Measurement of Radon concentration in the air of some School in the city of Karbala using CN-85 and LR—115 Detector** , Kerbala University, IRAQ, 2019.
- 20- Hadel H. Abd-Ashoor, **Calculation of the energy levels and the transition potential of the reduced electric quadrupole for some nuclei using the nuclear shell model**, Kufa University, IRAQ, 2019
- 21- Abbas Miri Hameedi, **Study of Configuration Mixing Effect on The Nuclear Energy Spectra of ^{70}Zn , ^{70}Cu , ^{70}Ni Nuclei by Applying Nuclear Shell Model**, University of Kufa, IRAQ, 2019.
- 22- Ali Hayder Ali Al-Musawi, **Shape Transition of Even-Even $^{142-152}\text{Ce}$ Nuclei in the Microscopic interacting Boson Model**, Kerbala University, IRAQ, 2020
- 23- Tuqa Hiader Abd Al-Mahssen , **Determination of uranium and radon concentrations in selected water samples of Al-Muthanna governorate**, Al-Qadisiyah University, IRAQ, 2021.
- 24- Falah Hassan Abed Hammza, **Core Polarization Effect on Electron Scattering Form Factors for Some P-Shell Nuclei**, Babylon University, IRAQ, 2021.
- 25- Sajida Hussein Noor Al-Yasir, **Uranium and Radon Concentrations in Groundwater of Al-Diwaniyah Governorate**, Al-Qadisiyah University, IRAQ, 2022.
- 26- Bashair Hassan Jawad, **Study of the nuclear properties of some light nuclei using different potentials**, University of Kerbala, Iraq, 2022.
- 27- Zainab Ali Rasheed, **MSc thesis, Determination of natural radionuclides and some metal concretions in biological samples in the Karbala province**, University of Kerbala, Iraq, 2022
- 28- Alaa Saad Obaid, **Evaluation of the Radiological Risks of Radionuclides in Different Samples of Seasoning in Iraqi Markets**, University of Kerbala, IRAQ, 2022.

CONFERENCES

- 1- The First University of Karbala conference, 2-3May2009, Karbala, [Iraq](#).
- 2- The Second University of Karbala conference, 2-4May2010, Karbala, [Iraq](#).
- 3- International Environmental pollution Conference(Karbala), 22-23April2011 Karbala, [Iraq](#).
- 4- First Scientific Conference of College Science of Kerbala University, 13-14 March 2013, Karbala, [Iraq](#).
- 5- National Conference of Physics, 7-8-Novmber-2012, halla, [Iraq](#).
- 6- Second Scientific Conference of College Science of Kerbala University, 22-23 February 2014, Karbala, [Iraq](#).
- 7- Third Scientific Conference of College Science of Kerbala University, 26-27 February 2015, Karbala, [Iraq](#).
- 8- Forth Scientific Conference of College Science of Kerbala University, 22-23 February 2016, Karbala, [Iraq](#).
- 9- Scientific Conference of College Science of Baghdad University, 2016, Baghdad, [Iraq](#)
- 10- Fifth Scientific Conference of College Science of Kerbala University, 25-26 February 2017, Karbala, [Iraq](#).
- 11- Six Scientific Conference of College Science of Kerbala University, 21-22 February 2018, Karbala, [Iraq](#).
- 12- Seven Scientific Conference of College Science of Kerbala University, 27 – 28 March 2019, Karbala, [Iraq](#).
- 13- Eight Scientific Conference of College Science of Kerbala University, 27 – 28 March 2020, Karbala, [Iraq](#).
- 14- 4th international students science congress, IZMIR KATIP CELEBI UNIVERSITY,18-19 September 2020.Turkya