

Adel ALMOUKHALALATI



Personal information

- Date of birth: Homs 14/9/1983
- Marital status: married
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- Tel.: 00963 997543935
- Current Academic Status: Assistant Professor at the College of Dentistry, Al-Ayen University (Iraq)

Education

Note: Al-Baath University has been officially renamed to **Homs University** since December 2024.

2016 **Ph.D. in Physics, with specialization in Theoretical Physics**, *Paul Sabatier University (Université Toulouse III)*, France, Ph.D. dissertation title, *Applications of Variational Perturbation Theory in Relativistic Quantum Mechanics*

2012 **M.Sc. in Physics, with specialization in Materials Physics**, *Paul Sabatier University (Université Toulouse III)*, France, M.Sc. thesis title, *The Electronic Problem of Relativistic Molecular Quantum Mechanics: What is the Best Solution?*

2002 – 2006 **Bachelor's Degree in General Physics**, *Homs University (formerly Al-Baath University)*, Syria

Fields of Academic Research

- Relativistic Molecular Quantum Mechanics.
- Variational Perturbation Theory.

Academic Work Experience

2024 – Present **Assistant Professor, Faculty of Dentistry**, *Al-Ayen University, Iraq*

2023 – 2024 **Assistant Professor, Department of Physics**, *Faculty of Science, Homs University, Syria*

2016 – 2023 **Lecturer, Department of Physics**, *Faculty of Science, Homs University, Syria*

2010 – 2016 **Delegated to France as a Teaching Assistant to pursue a Ph.D.**, *Paul Sabatier University (Université Toulouse III)*, France

2008 – 2010 **Teaching Assistant, Department of Physics**, *Faculty of Science, Homs University, Syria*

Languages

Arabic Mother tongue

English Very good

TOEIC (B2), 2016

French Intermediate

TCF (B1), 2009

Academic and Administrative Posts

2024 – Present **Head of the Quality Assurance and Academic Performance Division**, *Faculty of Dentistry, Al-Ayen University, Iraq*

2021 – 2024 **Head of the Higher Education Office, Teachers' Syndicate Branch**, *Homs University*

2021 – 2024 **Head of Internal Audit for Quality and Reliability**, *Homs University*

2018 – 2024	Head of the Academic Research Unit for Theoretical Physics, Faculty of Science, Homs University
2018 – 2020	Vice-Dean for Administrative and Student Affairs, Faculty of Dentistry, Homs University
2017 – 2021	Head of the Second Division Office, Teachers' Syndicate, Homs University
2008 – 2010	Member of the Syndicate Unit Office, Faculty of Science, Homs University

Membership in Academic Councils, Committees and Authorities

2024–Present	Member of the Program Accreditation Council, Al-Ayen University, Iraq
2022 – 2024	Member of the Physics Department Council, Faculty of Science, Homs University
2021 – 2024	Member of the Council of Wadi International University, Homs, Wadi Al-Nasara
2021 – 2024	Member of the Board of Al-Baath University Hospital, Homs
2021 – 2024	Member of the Academic Affairs Council, Homs University
2021 – 2024	Member of the Certificate Equivalency Committee, Homs University
2021 – 2024	Member of the Academic Missions Committee, Homs University
2018 – 2020	Member of the Student Affairs Council, Homs University
2018 – 2020	Member of the Discipline Committee, Homs University
2018 – 2020	Member of the Faculty of Dentistry Council, Faculty of Dentistry, Homs University
2017 – 2018	Member of the Physics Department Council, Faculty of Science, Homs University
2017 – 2024	Member of the Committee for Postgraduate Seminars in Theoretical Physics, Faculty of Science, Homs University
2007 – 2010	Representative of Postgraduate Studies in the National Union of Syrian Students, Faculty of Science, Homs University

Membership in Syrian and International Bodies and Boards

2021–Present	Member of the Advisory Board for the Foundation <i>Innovators for Our Country</i>
2021–Present	Member of the Syrian Scientific Society for Informatics
2008–Present	Member of the University Graduate Association
2007–Present	Member of the Japan–Syria Friendship Association

Taught Courses

- **Medical Physics (Taught in English)**, Al-Ayen University, Iraq, College of Dentistry, First-Year Students
- **Medical Physics (Laboratory – Taught in English)**, Al-Ayen University, Iraq, College of Dentistry, First-Year Students
- **Advanced Quantum Mechanics**, Homs University, Faculty of Science, Department of Physics – First-Year Master's Students
- **Quantum Mechanics I**, Homs University, Faculty of Science, Department of Physics – Third-Year Students
- **Quantum Mechanics II**, Homs University, Faculty of Science, Department of Physics – Third-Year Students
- **Atomic and Molecular Spectroscopy**, Tartous University, Faculty of Science, Department of Chemistry – Third-Year Students
- **Medical Physics (Laboratory)**, Homs University, Preparatory Program, Medical Colleges – Pre-Medical Students
- **Computational Physics (Laboratory)**, Homs University, Faculty of Science, Department of Physics – Third-Year Students
- **General Physics I**, Homs University, Faculty of Science, Department of Chemistry – First-Year Students

- **Atomic Physics and Spectroscopy (Laboratory)**, *Homs University*, Faculty of Science, Department of Physics – Fourth-Year Students
- **General Physics I (Laboratory)**, *Homs University*, Faculty of Science, Department of Chemistry – First-Year Students
- **General Physics II (Laboratory)**, *Homs University*, Faculty of Science, Department of Chemistry – First-Year Students
- **Physics I**, *Homs University*, Faculty of Science, Department of Geology – First-Year Students
- **Physics I (Laboratory)**, *Homs University*, Faculty of Science, Department of Geology – First-Year Students
- **General Physics I**, *Tartous University*, Faculty of Science, Department of Chemistry – First-Year Students
- **General Physics I (Laboratory)**, *Tartous University*, Faculty of Science, Department of Chemistry – First-Year Students
- **General Physics II (Laboratory)**, *Tartous University*, Faculty of Science, Department of Chemistry – First-Year Students
- **Physical Optics (Laboratory)**, *Homs University*, Faculty of Science, Department of Physics – Third-Year Students
- **Geometrical Optics and General Physics (Laboratory)**, *Homs University*, Faculty of Science, Department of Physics – First-Year Students

Participation in Conferences and Workshops

- **Workshop on “New Horizons in Scientific Research, Integrity, Technology and Future Directions”**, *Al-Ayen University, Iraq*, 17–31 January 2025
- **Workshop on Manuscript Writing**, *Al-Ayen University, Iraq*, 27 October – 20 December 2024
- **The 4th Scientific Conference for Dentistry – Futuristic Horizons in Dentistry**, *Homs University, Syria*, 24–25 April 2019
- **Workshop on Course and Program Description Based on Academic Reference Standards**, *Homs University, Syria*, 10–11 February 2019
- **International Summer School in Electronic Structure Theory: Electron Correlation in Physics and Chemistry (ISTPC)**, *Aussois, France*, 14–27 June 2015
- **DIRAC Developers’ Meeting 2015**, *University of Southern Denmark, Odense, Denmark*, 7–11 May 2015
- **11th International Conference on Relativistic Effects in Heavy-Element Chemistry and Physics (REHE-2014)**, *Bratislava, Slovakia*, 20–24 September 2014
- **European Summer School in Quantum Chemistry (ESQC)**, *Palermo, Italy*, 8–21 September 2013
- **DIRAC Developers’ Meeting 2013**, *University of Southern Denmark, Odense, Denmark*, 1–5 July 2013
- **Workshop on Access to International Patents Database (WEBO)**, *Aleppo University, Syria*, 2005

Training Courses

- **Training Program on Manuscript Writing: From Idea to Publication**, *Al-Ayen University, Iraq*, 16–30 January 2025
- **Training Program on Basics of Scientific Research**, *Al-Ayen University, Iraq*, 23 October – 11 December 2024
- **Training Program on Energy Management Systems (ISO 50001:2018)**, *Homs University, Syria*, 22–25 March 2021

- **Training Program on Qualifying Certified Internal Auditors for Implementing ISO 9001:2015 Quality Management System**, *Homs University, Syria*, 3–11 November 2020
- **10th International Training Program on Laboratory Competence and Management Systems**, *Noida, India*, 4–22 November 2019
- **Training Program on Quality Management System (ISO 9001:2015)**, *Homs University, Syria*, 20–24 October 2019
- **Training Program on Modern Teaching Methods and Advanced Teaching Skills**, *Homs University, Syria*, 19–23 February 2017
- **Training Program on Parallel Processing on Multiple CPUs and Optimization Using FORTRAN Programming**, *Toulouse, France*, 6–17 April 2015
- **Training Program on Using Social Networks for Academic Communication**, *Toulouse, France*, 3 March 2015
- **Training Program on Reference Management Using ZOTERO and MENDELEY**, *Toulouse, France*, 10 April 2013
- **Training Program on the International Computer Driving License (ICDL)**, *Homs, Syria*, 1–20 July 2009

Publications in National and International Journals

- **Study of Relativistic Effects on the Ground-State Spectroscopic Constants of the ThO Molecule**, *Journal of Homs University, Syria*, 2023
- **Using of Four-Component Relativistic Density Functional Theory to Determine the Ground-State Spectroscopic Constants of the AuH Molecule**, *Journal of Homs University, Syria*, 2023
- **Ground-State Spectroscopic Constants of Silver Chloride Using the Dirac–Coulomb Hamiltonian**, *Journal of Homs University, Syria*, 2022
- **A Relativistic Quantum Study to Determine the Spectroscopic Constants of Silver Bromide and Silver Fluoride Using Density Functional Theory**, *Journal of Homs University, Syria*, 2022
- **Relativistic Pure Rotational Energy of Diatomic Molecules**, *Authorea*, [doi:dx.doi.org/10.22541/au.164303639.99910088/v1](https://doi.dx.doi.org/10.22541/au.164303639.99910088/v1), 2022
- **Electron Correlation within the Relativistic No-Pair Approximation (Editors' Choice Article)**, *The Journal of Chemical Physics*, American Institute of Physics (AIP), USA, 2016
- **Nuclear Size Effects in Vibrational Spectra**, *Physical Chemistry Chemical Physics (PCCP)*, Royal Society of Chemistry, UK, 2016

Awards and Certificates of Appreciation

- **Certificate of Appreciation**, *Al-Ayen University, Iraq*, 2025
- **Certificate of Appreciation**, *Teachers' Syndicate, Homs University*, 2021
- **Certificate of Outstanding Graduation – Martyr Basel Al-Assad Award (First Place)**, *Homs University*, 2007
- **Certificate of Academic Excellence – Martyr Basel Al-Assad Award (First Place)**, *Homs University*, 2006
- **Certificate of Academic Excellence – Martyr Basel Al-Assad Award (First Place)**, *Homs University*, 2005
- **Certificate of Academic Excellence – Martyr Basel Al-Assad Award (First Place)**, *Homs University*, 2004