

Adel ALMOUKHALALATI



Personal information

- Date of birth: Homs 14/9/1983
- Marital status: married
- Email: adel.almoukhalalati@yahoo.fr
- 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

French Intermediate

TOEIC (B2), 2016

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 *Innovators for Our Country***
- 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, 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