CURRICULUM VITAE

Mohammad Gasem Althiabat, Ph.D.

Pharmaceutical Chemistry
Ramtha - Irbid, Jordan
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H-index
(Mohammad G. Al-Thiabat)

Google Scholar **9**
Scopus **8**
RG **9**

OVERVIEW:

Mohammad G. Althiabat, Ph.D., is a graduate from the School of Pharmaceutical Sciences, University Sains Malaysia, with a Doctor of Philosophy degree in Pharmaceutical Chemistry (2024). Dr. Althiabat specializes in **Medicinal Chemistry**, **Pharmaceutical Organic Chemistry**, **Drug Design**, and **Bioinformatics**. His research focuses on constructing molecular models, elucidating molecular-level mechanisms of action, and studying interactions among drugs, peptides, conjugated nanoparticles, and proteins. His interests include identifying potential drug candidates and optimizing lead compounds for various therapeutic applications, particularly in cancer, central nervous system (CNS) diseases, and viral infections, including coronavirus. Dr. Althiabat earned a Master's degree in Pharmaceutical Chemistry from University Sains Malaysia (2021) and a Bachelor of Science in Pharmacy from Jordan University of Science & Technology (2010). In addition to his research, he has taught undergraduate courses in medicinal chemistry, pharmacology, research methodologies, and has co-supervised research projects for pharmacy students in Malaysia and Iraq.

EDUCATION:

2021-2024

Ph.D. in Pharmaceutical Chemistry: Specialization in Medicinal Chemistry, Pharmaceutical Organic Chemistry, Drug Design, and Bioinformatics.
School of Pharmaceutical Sciences, University Sains Malaysia (USM)-Malaysia.

Thesis Title: "**Derivatization and Conjugation of Folic Acid to Improve Its Affinity Towards Folate Receptor Alpha on Cancerous Membrane Bilayer: An *in Silico* Insight**". (Research Mode)

Advisor: Prof. Dr Habibah A. Wahab.

2019-2021

M.Sc. in Pharmaceutical Sciences: Specialization in Medicinal Chemistry, Pharmaceutical Organic Chemistry, Drug Design, and Bioinformatics.
School of Pharmaceutical Sciences, University Sains Malaysia (USM)-Malaysia.

Thesis Title: "**Rational Drug Design of New Folic Acid Analogues With High Binding Affinity and Anticancer Activity".** (Research Mode)

Advisor: Prof. Dr Habibah A. Wahab & Dr. Amirah Mohd Gazzali.

2005 - 2010

B.Sc., Pharmacy (Cumulative Average (**Good**)), Faculty of Pharmacy, Jordan University of Science and Technology (JUST), Irbid, Jordan.

ACADEMIC EXPERIENCE

05/10/2025 – Present	**Assistant professor,** Faculty of Pharmacy, Jerash University, Jerash, Jordan.
01/10/2024 – 30/09/2025	**Assistant professor,** Michael Sayegh Faculty of Pharmacy, Aqaba University of Technology, Aqaba, Jordan.
14/07/2024 – 03/09/2024	**Part time-Lecturer,** Faculty of Nursing- Department of Basic Medical Sciences, Irbid National University, Irbid, Jordan. (Summer semester)
01/09/2023 – 19/02/2024	**Co-Supervisor**, College of Pharmacy, Al-Kitab University, Iraq. Actively co-supervised seven final year pharmacy students, guiding their capstone projects and providing mentorship in pharmaceutical sciences. (Online)
15/07/2023 – 15/09/2023	**Part time-Lecturer**, Faculty of Pharmacy, Amman Arab University, Amman, Jordan. (Summer semester)
05/2021 – 05/2023	**Research Assistant**: Pharmaceutical Design and Simulation (PhDS) Laboratory, University Sains Malaysia, Penang, Malaysia.
11 – 14/10/2022	**Judge** for the First International Postgraduates Conference of Pharmaceutical and Health Sciences (IPCPHS) that was Organized by School of Pharmaceutical Sciences, University Sains Malaysia.
08/2022 – Present	**Reviewer** at IPCPHS Scientific Committee 2022, Malaysia. Active peer reviewer for Springer Nature journals.

TAUGHT COURSES:

- **Medicinal Chemistry 1 (Pharmacy student)**
- **Medicinal Chemistry 2 (Pharmacy student)**
- **Medicinal Chemistry 3 (Pharmacy student)**
- **Medicinal Chemistry Lab (Pharmacy student)**
- **Pharmaceutical Organic Chemistry (Pharmacy student)**
- **Contact Pharmaceutical Care Skills (Pharmacy student)**
- **Pharmacoinformatic (Pharmacy student)**
- **Pharmacy Legislation and Ethics (Pharmacy student)**
- **Pharmacology (Nursing student)**

RESEARCH SKILLS:

- Proficient in Computer-Aided Drug Design (CADD), including molecular docking, virtual screening, and post-docking analysis.
- Skilled in Homology Modeling for macromolecule structure (Protein, enzyme, DNA) prediction and validation.
- Experienced in Molecular Dynamics (MD) Simulations, including advanced methods such as Replica Exchange MD (REMD) and Umbrella Sampling (US).
- Skilled in Pharmacokinetic (ADME) and Pharmacodynamic analysis for drug evaluation.
- Adept at Binding Site Identification and Pocket Volume Analysis.
- Well-versed in studying interactions: Ligand, Peptide, and Nanoparticles with Proteins.
- Familiar with in silico toxicological assessments.
- Experienced in scientific writing, data visualization, and peer reviewing for international journals.

PUBLICATION

No.	**Publication Details** (Author(s), Year, Title, Journal, Volume, Pages)	**Indexing**
1-	Abdulsalam Abuelsamen, Maram B. Alhawarri, **Mohammad G. Al-Thiabat**, Ghaseb N. Makhadmeh, Tariq AlZoubi, Bilal Harieth Alrimawi & Mohammad A. Khaleel, **(2025)**. Theranostic Potential of Copper-64 ATSM Targeting MTHFD2: An In Silico Perspective on Hypoxia-Selective Imaging and Therapy. ***Cell Biochemistry and Biophysics**, 9, no. 4, 13-29.*	Scopus Q2 ISI Expanded
2-	Maram B. Alhawarri, **Mohammad G. Al-Thiabat**, Amit Dubey, Aisha Tufail, Katreen Banisalman, Ghazi A. Al Jabal, Eman Alkasasbeh, Esra'a Ibrahim Al-Trad, and Bilal Harieth Alrimawi, **(2025)**. Targeting necroptosis in MCF-7 breast cancer cells: *In Silico* insights into 8,12-dimethoxysanguinarine from *Eomecon Chionantha* through molecular docking, dynamics, DFT, and MEP studies. ***PLoS ONE**, 20(1): e0313094.*	Scopus Q1 ISI Expanded
3-	**Mohammad G. Al-Thiabat**, Mohit Agrawal, Kantrol Kumar Sahu, Maram B. Alhawarri, Katreen Banisalman, Ghazi A. Al Jabal, and Haya Saleh Elqaderi, **(2024)**. Potential MAO-B Inhibitors from Cissampelos capensis Lf: ADMET, Molecular Docking, Dynamics, and DFT Insights. ***Chemistry & Biodiversity**, p.e202402351.*	Scopus Q2 ISI Expanded
4-	Maram B. Alhawarri, **Mohammad G. Al-Thiabat**, Amit Dubey, Aisha Tufail, Dania Fouad, Bilal Harieth Alrimawi, and Mohamad Dayoob, **(2024)**. ADME profiling, molecular docking, DFT, and MEP analysis reveal cissamaline, cissamanine, and cissamdine from *Cissampelos capensis* Lf as potential anti-Alzheimer's agents. ***RSC advances**, 14, no. 14, 9878-9891.*	Scopus Q1 ISI Expanded
5-	Nurhanan Murni Youns, **Mohammad G. Al-Thiabat**, Nor Jannah Sallehudin, and Habibah A. Wahab, **(2024)**. Quassinoids from *Eurycoma longifolia* as Potential Dihydrofolate Reductase Inhibitors: A Computational Study. ***Current Pharmaceutical Biotechnology**, 11, p.21.*	Scopus Q2 ISI Expanded
6-	Nurhanan Murni Youns, Habibah A. Wahab, **Mohammad G. Al-Thiabat**, Nor Jannah Sallehudin, and Muhamad Haffiz Jauri, **(2023)**. *In Vitro* and *In Silico* Analysis of the Anti-cancer Effects Eurycomanone and Eurycomalactone from *Eurycoma longifolia*. ***Plants**, 23, p.1123.*	Scopus Q1 ISI Expanded
7-	Ludivine Larue, Bibigul Kenzhebayeva, **Mohammad G. Al-Thiabat,** Valérie Jouan–Hureaux, Amirah Mohd–Gazzali, Habibah A. Wahab, and Cédric Boura et al, **(2023)**. tLyp–1: A peptide suitable to target NRP–1 receptor. ***Bioorganic Chemistry**, 130, 106200.*	Scopus Q1 ISI Expanded
8-	Mira Syahfriena, **Mohammad G. Al-Thiabat,** Toshihiko Nogawa, Yushi Futamura, Akiko Okano, and Habibah A. Wahab, (**2022**). Naturally Occurring 8ß, 13ß-kaur-15-en-17-al and Anti-Malarial Activity from *Podocarpus polystachyus* Leaves. ***Pharmaceuticals**, 15, no. 7, 902.*	Scopus Q2 ISI Expanded
9-	**Mohammad G. Al-Thiabat,** Amirah Mohd Gazzali, Noratiqah Mohtar, Vikneswaran Murugaiyah, Ezatul Ezleen Kamarulzaman, Beow Keat Yap, Noorsaadah Abd Rahman, Rozana Othman, and Habibah A. Wahab **(2021)**. Conjugated β-cyclodextrin enhances the affinity of folic acid towards FRα: molecular dynamics study. ***Molecules**, 26, no. 17, 5304.*	Scopus Q1 ISI Expanded
10-	**Mohammad G. Al-Thiabat,** Fadi G. Saqallah, Amirah Mohd Gazzali, Noratiqah Mohtar, Beow Keat Yap, Yee Siew Choong, and Habibah A. Wahab, **(2021)**. Heterocyclic substitutions greatly improve affinity and stability of folic acid towards FRα. An *in silico* insight. ***Molecules**, 26, no. 4, 1079.*	Scopus Q1 ISI Expanded
11-	Mohammad Murwih, Melati Khairuddean, Nik Nur Syazni Nik Mohammad Kamal, Musthahimah Muhammad, Habibah A. Wahab, **Mohammad G. Althiabat**, and Maram B. Alhawarri **(2021)**. Synthesis, Characterization, Molecular Docking and Cytotoxicity Evaluation of New Thienyl Chalcone Derivatives against Breast Cancer Cells. ***Systematic Reviews in Pharmacy**, 13, no. 1.*	Scopus Q4
12-	Shalayel Mohammed, Ghassab M. Al-Mazaideh, Saleem H. Aladaileh, Farhan K. Al-Swailmi, and **Mohammad G. Al-Thiabat**, **(2020)**. Vitamin D is a potential inhibitor of COVID-19: *In silico* molecular docking to the binding site of SARS-CoV-2 endoribonuclease Nsp15. ***Pakistan Journal of Pharmaceutical Sciences**, 33, no. 5.*	Scopus Q3 ISI Expanded
13-	**Mohammad G. Al-Thiabat,** Maram B. Alhawarri, Fadi G. Saqallah, and Habibah A. Wahab **(2021)**. Potential protease inhibitors 'combinations for the treatment of covid-19 based on *in-silico* analysis of 3cl-protease binding sites. ***ITTPCOVID19** 1, no. 1, 1-1.*	

WORKSHOPS AND CONFERENCES

Dec 18/19-2021	The 2nd International Seminar and Call for Paper (ISCP) UTA '45 Jakarta 2021, Universitas 17 Agustus 1945 Jakarta on Pharmaceutical ' Promotive, Preventive, and Early Detection of Covid 19 ' - Jalan Sunter Permai Raya, Jakarta, Indonesia. "Oral Presentation".
Aug (6-8)-2021	International Teleconference on Technology and Policy for Supporting Implementation of COVID-19 Recovery Plan in Southeast Asia (ITTP-COVID19). "Oral Presentation".
July 29-2021	The 1st Bandung International Teleconferance in Pharmacy, University Padjadjaran, Indonesia. "Oral Presentation".
Oct (26-28)-2020	International Conference of Pharmacy and Health Sciences, 3rd Joint Conference UNAIR-USM, University Airlangga - Indonesia. "Oral Presentation".
Jan (3-8) 2022	Comprehensive Training on Computational Chemistry Using Gaussian (CCG), Center for Advance Computational Chemistry Studies, Delhi, India. "Training Course".
Dec (14-24) 2021	Comprehensive Training on Bioinformatics Summer Training School (Various Bioinformatics Techniques), BioInsight Solutions Center, Delhi, India. "Training Course".
Mar 2020	Role of Reported Anti-Cancer Heterocyclic Rings in Enhancing the Binding Mechanism of Folate Derived Compounds with Folate Alpha-Receptor via Molecular Docking, Molecular Dynamic, and MM-PBSA. ACS Spring 2020 National Meeting & Expo, USA. "Poster Presentation".
Nov 26 2019	USM - OSAKA University Joint Colloquium 2019, at sains@usm, Bukit Jambul, Penang- Malaysia. "Poster Presentation".
Aug 26-28 2019	Hands-On Workshop on Statistical Method for Research, at the school of Pharmaceutical Sciences, University Sains Malaysia Pulau Pinang - Malaysia. "Training Course".
Jan 17 2019	Cell Culture and Tumor Implantation organized by EMAN Biodiscoveries Sdn. Bhd, at Eureka Complex, University Sains Malaysia Pulau Pinang - Malaysia. "Workshop Training".

LANGUAGES:

- Arabic: Mother tongue
- Very good in English, spoken and written.

ADDITIONAL SKILLS:

- Experienced in using **MS Office** applications (Word, Excel, PowerPoint).
- Excellent knowledge of **scientific search engines** (PubMed, Scopus, Google Scholar).
- Well-versed in **research methodologies** and scientific writing.
- Proficient in **Python** (intermediate level) for data analysis and computational tasks.
- Competent in **Linux** command-line operations for research and computational workflows.

REFERENCES:

- *Dr. Osama Yousef Alshogran*, Associate Professor, Vice Dean Faculty of Pharmacy, Department of Clinical Pharmacy-Member, Jordan University of Science & Technology, Jordan.
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- *Prof. Habibah A. Wahab*, Professor, Dean of the Pharmaceutical Sciences School at University Sains Malaysia, Penang, Malaysia.
  E-mail: Habibahw@usm.my **Tel:** 006046533888 Ext. 2211