

Name Ruba Ibraheem Malkawi
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Email rubamalkawi12345@gmail.com
Languages Native Arabic and excellent communication skills in English

Employment history

Dean of Quality Affairs/Assistance Professor January 2022- Current

- Directors establish and maintain a quality system to ensure a company's facilities, equipment, personnel, methods, processes, and procedures conform to both internal guidelines and regulatory standards
- Apply for the American Accreditation Council for Pharmacy Education for Jadara University

Lecturer, Teesside University/ UK: March 2021- February 2022

- Teaching Associates typically are responsible for providing classroom and/or laboratory instruction, making assignments to students, preparing course materials, administering examinations, assessing student performance, tutoring students and determining course grades. Incumbents may assist faculty with field experience, supervision, simulation exercises and/or research projects.
- Researcher

Associate demonstrator at Lincoln University: February 2018 – March 2020, at medicinal chemistry, pharmacy, anatomy and physiology modules

- Demonstrate practical exercises and techniques/ undergraduate and postgraduate students
- Supervising in setting up practical equipment prior to the laboratory practical.
- Marking students work and progress during the practical and the final write-up
- Student support/ risk assessment trainee

Lecturer in Microbiology, biotechnology and pharmaceutical science courses at Jordan University of Science and Technology. Irbid-Jordan: Sep 2017 – Jan 2018

- Teaching assessment and module leader
- curriculum developing/ staff leading and module coordinator
- Setting practical and theoretical exams for undergraduate students
- Assessment of students projects and progress during the course and the final exams

Research assistant at Jordan University of Science and Technology. Irbid-Jordan: Apr 2017 – Aug 2017

- Researcher for the novel extraction and purification of a new plant extract for anticancer drug

Part-time lecturer for pharmaceutical technology, Microbiology and biotechnology courses at Jordan University of Science and Technology. Irbid-Jordan: Sep 2014 – Apr 2017

- Demonstrate practical exercises/techniques to undergraduate students.
- Work with other senior lecturer colleagues in supervising undergraduate and postgraduate students and setting up practical equipment prior to the laboratory practical.
- Marking students work and progress during the practical and the final exams.

Pharmacist in Jordan, Jun 2013 – Sep 2013

- Helping patients and the public, assessing their conditions, and making decisions about which medicines they should take.
- Dispensing medicines and offering your patients advice and practical help on keeping healthy

Memberships

- Member at science innovation Union
- Member at Jordan pharmaceutical association
- Science Council

Education and Qualification

***2018-2021 PhD Degree in Molecular biology/Life science, pharmacology
department University of Liverpool (06/09/2021)
Foundation Building, Brownlow Hill, Liverpool, L69 7ZX**

Thesis title:

Synthesis and structure activity relationship of teixobactin analogue.

Aim:

Design and development of potent synthetic antimicrobial peptides against multi-drug resistant pathogens.

Various analogs of teixobactin were synthesized for the development of a more potent analog of teixobactin through detailed investigation of structure-activity relationship (SAR) study. I worked on a medium-complexity peptide called teixobactin. This new antibiotic has been discovered in 2015 and it has potent activity against Gram-positive bacteria not against Gram-negative bacteria. I did synthesize more than 100 analogs to finally end up with the right analog that works effectively against the Gram-negative bacteria. Moreover, I did create a simpler, and less costly method to synthesize this antibiotic.

***2014_ 2017**

**Master's degree in pharmaceutical technology (19/06/2017_
Jordan University of Science and technology
Po.Box 1195, Irbid 22110, Jordan**

Cumulative/Yearly average in master`s degree is 91.9 %

Dissertation tile:

ORAL DELIVARY OF LIRAGLUTIDE USING CHITOSAN

Aim:

- Oral delivery of Liraglutide peptide is compromised due to its degradation in the gastrointestinal system.
- *Develop an oral delivery system for Liraglutide, to overcome the degradation of the peptide and enhance its bioavailability. The developed system is W/O microemulsion of Nanoparticles. Polyelectrolyte complex was prepared using low molecular weight chitosan and hydroxyl propel beta-cyclodextrin. Liraglutide LMWC and HP-βCD were prepared at different ratios. I had converted the method of delivery of the Liraglutide from SC injections to oral form. Liraglutide is a drug used for type two diabetes patients. The oral form of the drug was tested on rabbits and diabetic rats and found to be efficient and effective.*

***2009 – 2014**

**Bachelor Degree in Pharmacy (23/06/2014)
Jordan University of science and technology
Po.Box 1195, Irbid 22110, Jordan**

Cumulative/Yearly Average in Bachelor`s Degree is 85.6 %

***2003 – 2009**

**High school Degree
Malka school for Girls
Malka , Um el kheer street, Irbid, Jordan**

Volunteer positions

Volunteer at Liverpool University for Oxford trails on COVID-19 vaccine: Aug 2020-Sep 2020

- Helping in receiving the volunteers
- Helping in explaining the nature of the vaccine and the impact
- leading or managing the entrance of the volunteer to get vaccinated.

Volunteer in translator in Jordan, Dec 2016 – Jan 2017

- Translator from Arabic to English to help the Syrian refugees in Jordan in the NGOs

Awards and Publications

- Nominated and awarded a full training session from DAAD to attend the summer school (COSIMENA) that held in Cairo, Alexandria under the title “Training for innovation- how

science and technology can contribute to a better life for all”, at the premises in the Arab Academy for Science, Technology and Maritime Transport, from 16-29 September 2017.

- Nominated and awarded a full PhD scholarship from the Jordan government.
- Solubility Enhancement of Paclitaxel Using Nanotechnology: A Novel Approach To Improve Bioavailability and Anticancer Efficacy has been **accepted from the reviewers** for Journal of Nanotechnology on 17/03/2025 awaiting for the final decision.
- Excipients in Pharmaceuticals: Mechanisms of Hypersensitivity and the Role of Global Pharmacovigilance **Accepted on 09/03/2025** for the publication in Saudi Pharmaceutical Journal
- **Malkawi R**, Battah K, Alkhreisat M. Pharmaceutical Insights Into Ammi and Parsley: Evaluating Antioxidant Activity, Total Phenolic Content, and Kidney Stone Disintegration Properties. Adv Pharmacol Pharm Sci. 2025 Jan 20.
- **Malkawi.R**. Comprehensive Evaluation of Solubility Enhancement Techniques for Curcumin: A Comparative Study of 10 Methods. Research Journal of Pharmacy and Technology. July 2025, 18 (7): 1-9.
- **Malkawi.R**. Evaluating Artificial Intelligence Tools In The Pharmaceutical Industry: A Case Study on Paracetamol Dissolution and Calibration Curves. Research Journal of Pharmacy and Technology. May 2025, 18 (5): 1-12.
- **Malkawi R**, Jarwan B, Waleed R, Younis R. Pharmaceutical Prospects of Pomegranate Antioxidants in Combating Microbial Infection, International Journal of Food Properties, May 2024, 4(5):1-11.
- **Malkawi R**, Revolutionizing drug delivery innovation: leveraging ai-driven chatbots for enhanced efficiency, International Journal of Applied Pharmaceutics, International Journal of Applied Pharmaceutics, 6(2):52-56. Available from <https://journals.innovareacademics.in/index.php/ijap/article/view/50182/29727>
- Jarwan B, Tawalbeh J, **Malkawi R**. Assessment of Phenol and Antioxidant Content of Olive Varieties and Their Potential Health Benefits for Colon Health. S M B, editor. The Scientific World Journal. 2023 Oct 12 ;2023:1–8. Available from: <https://www.hindawi.com/journals/tswj/2023/9165902/>
- **Malkawi, R.**, Jarwan, B., & Tawalbeh, J. (2023). Assessing the Awareness, Attitude, and Knowledge of Senior Pharmacy Students in Jordanian Universities Regarding Antibiotic Use and Resistance: A Study of the Medical Curriculum. Journal of Pharmaceutical Research International, 35(5), 41–52. <https://doi.org/10.9734/JPRI/2023/v35i57328>

- **Malkawi, R.**, Malkawi, W. I., Al-Mahmoud, Y. & Tawalbeh, J. Current Trends on Solid Dispersions: Past, Present, and Future. Adv Pharmacol Pharm Sci 2022, 1–17.(2022)
- **Malkawi, R.** et al. Cysteines and Disulfide-Bridged Macrocyclic Mimics of Teixobactin Analogues and Their Antibacterial Activity Evaluation against Methicillin-Resistant Staphylococcus Aureus (MRSA). Pharmaceutics 10, 183 (2018) Impact factor, 6

Articles ready to publish from my PhD thesis:

- Understanding the role of the ring size and amidation of the macrocycle of Teixobactin, to be submitted soon in organic & biomolecular chemistry journal
- Synthesis and Antibacterial Evaluations of Teixobactin Analogues Containing Quaternary and Ternary Cationic Building Blocks, to be submitted soon
- Exploring the diversity of position 10 for teixobactin analogues with variable hydrocarbon alkyl chain lengths, to be submitted soon
- Design, synthesis and structure-activity relationship of teixobactin analogues containing non-proteogenic amino acids and their antimicrobial evaluations, to be submitted soon

Additional courses with certificates

- Digital media analytics: social media research plans, Purdue, USA
- Communication and interpersonal skills at work, university of Leeds, UK
- Making successful decisions through the strategy, law & ethics model, university of Michigan

Key skills

- Providing comprehensive knowledge on NMR, DSC, TGA, UV, Zetasizer size analysis, Enzyme-linked immunosorbent assay (ELISA) analysis, Dissolution and analysis
- Generic laboratory techniques such as density measurements, PH, Viscosity and particles characterisation IR, LCMS/MS, GC-MS, HPLC, thin-layer chromatography and flash chromatography.
- Good understanding of Solid-Phase Peptide synthesis.
- Proficient in various scientific software such Chemdraw Bio Office and Science finder.
- Seamless integration into any team or organisation with the ability to work autonomously.
- Safe compliance with all the necessary health and safety policies and industry best practices within a controlled environment.
- Strong communication skills both written and verbal to a wide range of business stakeholders.
- Experienced in transferring sophisticated topics to individuals in a more simplistic format.
- Multilingual; Fluent in Arabic and English.

Research Interests

*Oral delivery of peptides and proteins.

- *Technologies for tracking drug in-vivo.
- *Polymers and their behavioral characteristics in different technologies.
- *Peptide synthesis

Interested and Hobbies

- *Reading: I am interested in Philosophy and Arabic literature
- *Sport especially running.

References

To be provided upon requested