CURRICULUM VITAE

Omar Alaa Numan Alnasra

PERSONAL DATA:

Email: o.alnasra@jpu.edu.jo

Phone number: 00962-799413977

Place and date of birth: Amman, Jordan on 13/08/1985.

Nationality: Jordanian Marital status: Married Address: Tla'a Al-Ali,

Amman, Jordan.



EDUCATION:

2017 – 2023: Ph.D. in Chemistry:

Department of Chemistry,

Faculty of Science,

The University of Jordan,

Amman, Jordan.

Thesis title: "Preparation, characterization, and Investigation of nanosilica-cysteine system loaded with arsenic trioxide (SiO₂-Cys/ATO) and applying computational biology tools and machine learning to assess the potential of drug combination for cancer

therapy".

Supervisor: Prof. Dr. Fawwaz Khalili.

2010 – 2014: M.Sc. in Chemistry:

Department of Chemistry,

Faculty of Science,

The University of Jordan,

Amman, Jordan.

Thesis title: "Method development, validation and pharmacokinetics for Hydrochlorothiazide and Ramipril in human plasma and bioequivalence study on Jordanian

volunteers".

Supervisor: Prof. Dr. Mahmoud Alawi.

2005 – 2009: B.Sc. in Chemistry:

Department of Chemistry, Faculty of Science, Al-Albayt University, Al-Mafraq, Jordan.

2002 – 2003: High school (Tawjihi):

Ahmad Toqan School, Amman, Jordan.

LANGUAGES:

Arabic: Mother tongue.

English: Excellent written, read and spoken.

WORK EXPERINCE:

March 2024 – present: Assistant Professor

Jerash University, Jerash, Jordan.

Oct 2023 – Jan 2024: Part time Lecturer:

Isra University, Amman, Jordan.

Feb 2018 – Jan 2024: Part time Teaching Assistant:

The University of Jordan,

Amman, Jordan.

Aug 2012 – June 2024: Chemistry Teacher:

Pioneers International Academy,

Amman, Jordan.

May 2012 - Nov 2012: **QA Officer:**

Jordan Centre for Pharmaceutical Research,

Amman, Jordan.

Mar 2009 – May 2012: Chemical Analyst:

Jordan Centre for Pharmaceutical Research,

Amman, Jordan.

PROFESSIONAL MEMBERSHIPS:

- American Chemical Society.
- International Society for Computational Biology.
- Jordanian Chemical Society.

- Jordanian Society for Scientific Research.
- Jordanian Astronomical Society.
- Royal society for the Conversation of Nature.

RESEARCH:

Research Interests:

- Development of Nano-sized Drug Delivery Systems.
- Analytical methods for determination of nanosilica composites.
- Silica Nanoparticles and Cysteine Composite Materials.
- Chemical, biochemical and environmental engineering.
- Computational Biology in Drug Discovery.

Research Skills:

- Synthesis of Nanosilica and organic compounds Composites.
- Characterization Techniques: ATR-FTIR, TGA, SEM, TEM, XRD, & UV.
- General analytical and organic chemistry analysis skills.
- Adsorption & Desorption Studies.
- Cell Culture and Cytotoxicity Assays.
- Computational Biology Tools and machine learning.
- Bioanalytical Method Validation.

PUBLICATIONS:

Published Works:

- 1. **Alnasra, O.**, Khalili F. & Khabas M., Exploring the adsorptive behavior of U(VI) ions on avocado seed-derived activated carbon: an in-depth kinetic and thermodynamic analysis. Journal of Radioanalytical and Nuclear Chemistry.
- 2. **Alnasra, O.,** Khalili F., Alhnafat F. (2024) Enhanced removal of Pb(II), Zn(II) and Cd(II) ions by insolubilized humic acid: Characterization and sorption behaviors. Desalination and Water Treatment. 320, 100604. https://doi.org/10.1016/j.dwt.2024.100604
- 3. **Alnasra, O.** & Khalili F. (2023). Synthesis and characterization of nanosilicacysteine composite for arsenic(III) ion removal. Acta Chimica Slovenica. 70, 674–689. https://doi.org/10.17344/acsi.2023.8160
- 4. **Alnasra, O.**, & Khalili, F. (2023). A Simple, Stable, and Highly Sensitive Spectrophotometric Method for the Determination of Arsenic(III) from Different Biological Media in the Presence of Nanosilica-Cysteine

- Composite. Journal of the Turkish Chemical Society Section A: Chemistry, 10(3), 773–786. https://doi.org/10.18596/jotcsa.1273473
- 5. Khalili F., Alnasra O., Al-Sotari S., Sweileh B. (2023). Synthesis and characterization of poly(pentamethelene-2,6-pyridinedicarboxylate) and the study of its ability to absorb Pb(II), Cd(II) and Zn(II) ions. Desalination and Water Treatment. 300, 248-248. https://doi.org/10.5004/dwt.2023.29773
- Alhaj, A., Alnasra, O., Alawi, M. & Arafat, T. (2015). Method development, validation and pharmacokinetics for ramipril and hydrochlorothiazide in human plasma and application in a bioequivalence study based on healthy Jordanian volunteers; Asian Journal of Biomedical and Pharmaceutical Science, 5(49), 21–27. https://doi.org/10.15272/ajbps.v5i49.745

Manuscripts, waiting for acceptance:

- 1. Alnasra, O., Khalili F. & Hebah Musa, Innovative Study on the Removal of Thorium(IV) and Uranium(VI) Ions from Aqueous Solutions via Oak-Derived Charcoal: Kinetic Analysis and Adsorptive Performance
- 2. **Alnasra, O.**, Khalili F. & Khabas M., Removal of Th(IV) ions using a natural biochar from avocado spent seeds.
- 3. **Alnasra, O.**, Khalili F. & Hamadneh L., Investigating drug combinations on the A549 lung cell line using a nanosilica-cysteine composite.
- 4. **Alnasra, O.**, Khalili F., Omar Almaani & Shrouq AlAzzeh, Utilization of Lemon-Derived Biochar for the Removal of Synthetic Dyes in Water Treatment: A Study on Its Application in Agricultural Waste Recycling.

ATTENDING CONFERENCES & INVITATIONS:

- 17-18 Dec 2024 8th International Conference on Environment, ICENV 2024, Universiti Sains Malaysia.
- 16-17 Oct 2024 Al-Zaytoonah 9th International Pharmaceutical Conference (ZIPC 2024).
- 25-26 Sep 2024 First International Conference of the Faculty of Pharmacy and the Second Conference of the Middle East Association of Pharmaceutical Medicine Professionals (MEAPP/UK).
- 23-24 Apr 2024 Biotechnology for food security, Jerash University, Jerash, Jordan.
 - 11 Nov 2023 The 11th Conference on Scientific Research in Jordan, Jordan Society for Scientific Research, Entrepreneurship, and Creativity (JSSREC), Al-salt, Jordan.

- 27 Oct 2023 1st IYCN Online Conference 2023, International Younger Chemists network (IYCN), Online Conference.
- 12 13 Sep 2023 18th Jordanian Chemistry Conference and Exhibition (JCC18-2023), Jordanian Chemical Society, Zarqa, Jordan.
- 12 14 Mar 2023 International Workshop on Modern Spectroscopic Techniques and Their Applications Research, University of Jordan and COMSTECH, Amman, Jordan.
- 18 19 Aug 2022: 30th International Conference on Science, Engineering and Technology (IICSET-22), International Academy of Advances in Engineering & Sciences, Istanbul, Turkey.
 - 27 Nov 2021: 10th Conference for Scientific Research in Jordan, Jordan Society for Scientific Research, Entrepreneurship, and Creativity (JSSREC), Al-Salt, Jordan.
 - 1 Dec 2020: 22nd International Scientific Conference, The Islamic World Academy of Sciences (IAS), Online.
 - 9 Nov 2019: 9th Conference for Scientific Research in Jordan, Jordan Society for Scientific Research, Entrepreneurship, and Creativity (JSSREC), Amman, Jordan.
 - 9 10 Sep 2019: International Conference on Medical, Biological and Pharmaceutical Sciences (ICMBPS), Institute for Technical and Academic Research, Istanbul, Turkey.
 - 1 2 May 2018: 11th International Conference on Agricultural, Chemical, Biological and Medical Sciences (ACBMS-18), Eminent Association of Pioneers, Istanbul, Turkey.
- 22 25 June 2017: International Scientific Conference Humboldt-Kolleg of Societas Humboldtiana Polonorum "Limits of Knowledge", Kraków, Poland.
 - 5 6 Apr 2017: International conference of chemistry & Biosciences (ICCB2017), The 15th Jordanian Chemical Conference, (Al-Mafraq, Amman), Jordan.

TRAINING COURSES:

- Oct Nov 2023: International workshop in Transcriptomics, Metagenomics, and Machine Learning in Drug Design; Gen'Omics Research Hub (GENOMAC HHUB).
- Sep 2018 Dec Training Diploma in Education; The Consultation and Training Center at 2021: The University of Jordan.
- Aug 2012 Nov Training and development courses and efficiency improvement; 2019: Pioneers International Academy, Jordan.

- June 2012: INLPTA Diploma in the Art and Science of Neuro Linguistic Programming; International NLP Trainers Assosiation.
- Mar June 2009: Chemical Analysis Methods and Chromatography; Jordan Centre for Pharmaceutical Research, Jordan.
 - Jan Feb 2009: Industrial Chemistry Training Program; Industrial Chemistry Centre, Royal Scientific Society, Jordan.
- June Aug 2008: Medical Laboratories Training Program; Gedeon Medical Laboratories, Jordan.

SKILLS AND ACTIVITIES:

- Excellent organization skills and planning.
- Excellent IT skills, including knowledge of MS Office, typing and internet.

REFERENCES:

- Prof. Dr. Fawwaz I. Khalili; (fkhalili@ju.edu.jo)
 Inorganic, Nuclear, and Environmental Chemistry,
 Chemistry Department, Faculty of Science, The University of Jordan.
- Prof. Dr. Deeb Taher Alansawi; (d.taher@ju.edu.jo)
 Inorganic Chemistry,
 Chemistry Department, Faculty of Science, The University of Jordan.
- Prof. Dr. Imad M. Hamadneh; (i.hamadneh@ju.edu.jo)
 Material Chemistry,
 Chemistry Department, Faculty of Science, The University of Jordan.
- Dr. Ahmad Makahleh; (a.makahleh@ju.edu.jo)
 Analytical chemistry,
 Chemistry Department, Faculty of Science, The University of Jordan.
- Prof. Dr. Lama A. Hamadneh; (lama.hamadneh@gmail.com)
 Molecular Medicine,
 Basic Sciences Department, Faculty of Medicine, Al-Balqa Applied University.