SAMER Y. ALQARALEH

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Samer Y. Al-Qaraleh, Ph.D., is a researcher and lecturer specializing in Biological Sciences with a focus on Nanobiotechnology. He is currently serving as a Lecturer and Researcher at the Faculty of Medicine and Pharmacy at Mutah University, Jordan, and also holds the position of Dean Assistant of the faculty of Allied Medical Sciences for quality and e-learning affairs. He has been accepted for a Postdoctoral Research position in the development of novel biosensors for cancer detection markers in Thailand starting in 2024. Samer's research interests include green synthesis and characterization of nanoparticles for various bioactivities, such as anticancer, antioxidant, antimicrobial, and anti-inflammatory properties. He is also interested in the development of functional foods and biosensors for multiple applications. Samer has a strong publication record and has been involved in various training courses, conferences, and academic committees, demonstrating his commitment to academia and research.

# Education

* Jun 2022 Ph.D. in Biological Sciences (Nanobiotechnology/Microbiology), University of Jordan, Amman.
* Sep 2014 M.Sc. in Biological Sciences (Biotechnology/ Microbiology)

Mutah University, Jordan.

* Jun 1997 B.Sc. Nutrition &Food Technology, Mosul University, Iraq

**Academic positions**

* Oct 2022- Present. Part- time lecturer, Faculty of Allied Medical Sciences, Mutah University.
* Oct 2022- Feb 2024.  Part-time lecturer, Faculty of Medicine, Mutah University, Jordan.
* Oct 2022- Present. Part-time lecturer, Faculty of Pharmacy, Mutah University, Jordan.
* Mar 2004- Sep 2022 Teaching Assistant and Laboratory Supervisor, Faculty of Agriculture, Department of Nutrition, Mutah University, Jordan.

**Committees' memberships and administrative positions**

* Oct 2022- Present. Assistant Dean for Quality and E-Learning Affairs, Faculty Allied Medical Sciences, Mutah University.
* 2023- Present. Editorial Board member for the Nanomedicine & Nanotechnology Open Access (NNOA), <https://medwinpublishers.com/NNOA/editorial-board.php>.
* 2023- Present. Editorial Board member for the International Journal of Biochemistry & Physiology (IJBP), <https://medwinpublishers.com/IJBP/editorial-board.php>.
* 2024- Present. Leader of a student team for medical research from the Faculty of Medicine at Mutah University.
* 2024- Present. Biochemistry and Genetics Laboratory Supervisor of the Genetic Counseling Society, Faculty of Medicine, Mutah University.
* Oct 2022- Present. Member of the Academic Program Development Committee at the College of Allied Medical Sciences.
* 2020- 2021. A member of the Accreditation and Quality Assurance Committee, Faculty of Medicine, Mutah University, Jordan.
* Mar 2020- Aug 2021. A member of the Accreditation and Quality Assurance Committee, Faculty of Pharmacy, Mutah University, Jordan.
* 2016- Present. Member of the medicinal and herbal plants network in the Association of Agricultural Research Institutions in the Near East and North Africa (AARINENA). <https://aarinena.org/mhp-network/>

**Teaching Activities: I participated in teaching the following courses (2004 – Present)**

|  |  |  |
| --- | --- | --- |
| Course | Faculty | University |
| Immunology | Medicine | Mutah University |
| Microbiology | Medicine | Mutah University |
| Immunology and Allergy | Pharmacy& Allied Medical Sciences | Mutah University |
| Microbiology | Pharmacy& Allied Medical Sciences | Mutah University |
| Epidemiology | Pharmacy& Allied Medical Sciences | Mutah University |
| Nanotechnology and Polymers | Pharmacy& Allied Medical Sciences | Mutah University |
| Nutrition and cosmetics | Pharmacy& Allied Medical Sciences | Mutah University |
| Biology of skin and hair | Pharmacy& Allied Medical Sciences | Mutah University |
| Legislations for cosmetics | Pharmacy& Allied Medical Sciences | Mutah University |
| General microbiology | Dept. Nutrition & Food Tech | Mutah University |
| Food Biotechnology | Dept. Nutrition & Food Tech | Mutah University |
| Food Chemistry and Analysis | Dept. Nutrition & Food Tech | Mutah University |
| Biochemistry Lab | Dept. Nutrition & Food Tech | Mutah University |

**Research Skills**

* Human cell culture, MTT assay
* Polymerase chain reaction (PCR) techniques
* DNA isolation methods
* Biochemical tests
* Probit Analysis
* SEM, FTIR, XRD, UV-spectra, EDX, atomic absorption, microwave digestion, fluorescent microscopy, and ELISA
* Bacterial sensitivity tests.
* أعلى النموذج
* أعلى النموذج

# Grants

# Apr 2024. Postdoctoral Researcher “Development of Microfluidic Biosensor with Surface-Enhanced Raman Spectroscopy for Prostate Cancer Biomarker Detection”, Suranaree University of Technology, Thailand.

# Financial Grant from the Jordanian Enterprise Development Projects-Ministry of Industry for production of mushroom. Amount: (15,000JD). Year: 2009.

# Training Courses and Activities

* Engagement in the 'Fostering Academia-Industry Collaboration 1' facilitated by Erasmus+ Italy, from 28 Sep to 3 Oct 2019.
* Participation in the 'Fostering Academia-Industry Collaboration 2' facilitated by Erasmus+ Italy from, 28 Jan to 3 Feb 2018.
* Involvement in the "Building Capacity of Personnel in the Jordanian Food Industry" initiative, sponsored by the European Commission in Spain, occurring from March 11 to March 18, 2017.
* Successfully finished a training course on the implementation and documentation of ISO/IEC/17025:2005 in laboratories, supported by USAID in Jordan, spanning from September 25 to September 29, 2011.
* Conducted a training course for employees of the Kasih Foodstuff Company on biological hazards in Amman, from 15-25 Apr 2022.
* Participated in the Eighth Scientific Agriculture Conference held from October 15 to October 17, 2018.
* Attended the JNB webinar on Polymeric Nanoparticles, on 24 Feb 2022.
* Training food industry engineers on HACCP, GMP, and food safety management system, in cooperation with the Jordanian Association of Agricultural Engineers.

**Certificates and Degrees:**

* 2023. Holds a certificate of practicing academic work from the Ministry of Higher Education.
* Dec 2011. Achieved certification in Internal Auditing for the implementation of ISO/IEC 17025:2005 in laboratories, granted by USAID, Jordan.
* 2023. Achieved certificate of excellence in reviewing. International Journal of Environment and Climate Change. Certificate No: SDI/HQ/PR/Cert/109351/DRS.
* 2024. Achieved certificate of excellence in Peer- reviewing. B P International, 2024. Certificate No: SDI/HQ/PR/Cert/109351/DRS.
* Jul 2023. Received a certificate in the Application of Biotechnology for the Sustainable Production of Health Promoting Food Ingredients from INRA, on 6 July 2023.

**Publications Total citations= 134, h-index= 7**

1. **S.Y. Al-Qaraleh**, S.A. Oran, W.A. Al-Zereini, A.I. Al-Qtaitat, A. Alahmad, Improved anti-breast cancer activity of green synthesized selenium nanoparticles and induction of apoptosis by conjugation of the nanoparticles with polyethylene glycol (PEG), Advances in Natural Sciences: Nanoscience and Nanotechnology. (Q2).
2. **Samer Y. Al-Qaraleh**, Wael A. Al-Zereini, Sawsan A. Oran, Ahmad Z.Al-Sarayreh, and Sa'ed M.Al-Dalain. (**2022**), Evaluation of the antioxidant activities of green synthesized selenium nanoparticles and their conjugated polyethylene glycol (PEG) form *in vivo*. *OpenNano Journal.* [https://doi.org/10.1016/j.onano.2022.100109.](https://doi.org/10.1016/j.onano.2022.100109) (**Q1**)
3. **Samer Alqaraleh**, Wael Al-zereini, and Sawsan Oran. (**2023**), Phyto-decoration of selenium nanoparticles using *Moringa peregrina* (Forssk.) Fiori aqueous extract: chemical characterization and bioactivity evaluation. *Biointerface Research in Applied Chemistry*. 13, (2): 112. [https://doi.org/10.33263/BRIAC132.112.](https://doi.org/10.33263/BRIAC132.112) (**Q3, IF: 1.949**).
4. **Samer Y. Al-Qaraleh. (2023),** Metallic Nanoparticles Applications in Cosmetology: A Comprehensive Review. Nanomedicine and Nanotechnology Open Access. 8, (3). <https://doi.org/10.23880/nnoa-16000238>. (IF: 1.49).
5. Ezz Al-Dein M. Al-Ramamneh, Ayoup M. Ghrair, Ashok K. Shakya, Khalid Y. Alsharafa, Khalid Al-Ismail, **Samer Y. Al-Qaraleh**, Jacek Mojski, and Rajashri R. Naik. (**2022**). Efficacy of *Sterculia diversifolia* Leaves Extract: Volatile Compounds, Antioxidant and Anti-Inflammatory Activity, and Green Synthesis of Potential Antibacterial Silver Nanoparticles. *Plants.* 11: 2492. [https://doi.org/10.3390/plants11192492.](https://doi.org/10.3390/plants11192492) (**Q1, IF:4.658**).
6. Abdalrahim Alahmad, Wael A. Al-Zereini, Tahani J. Hijazin, Osama Y. Al-Madanat, Ibrahim Alghoraibi, Omar Al-Qaralleh, **Samer Al-Qaraleh**, Armin Feldhoff, Johanna-Gabriela Walter, Thomas Scheper. (**2022**), Green synthesis of silver nanoparticles using *Hypericum perforatum* L. aqueous extract with the evaluation of its antibacterial activity against clinical and food pathogens. Pharmaceutics 2022, 14, 1104. <https://doi.org/10.3390/pharmaceutics14051104>. **(Q1, IF: 6.734).**
7. Al-Maathidy A. Q, Karawya Q, **Al-Qaraleh S. Y**, Al-Qtaitat A. (**2023**), Histological Study of the Possible Protective Effect of *Spirulina Platensis* on Dibutyl Phthalate (DBP)-Induced Pulmonary Alveolar Changes in Adult Male Albino Rats. Biomed Pharmacol J;16(2): 915-926. [https://dx.doi.org/10.13005/bpj/2674.](https://dx.doi.org/10.13005/bpj/2674)
8. Ahmad Z Al-Sarayreh, Khaled M Khleifat, Sa’ed M Al-Dalain, Yousef M Al-Saraireh, Yaseen T Al- Qaisi, Ibrahim I Al-Farrayeh, **Samer Y AL-Qaraleh**. (**2022**), *Globularia arabica* methanolicleaf extract has higher efficacy on burn wound healing in diabetic rats compared to *Malva slyvestries* methanolic leaf extract. Journal of Burn Care and research. <https://doi.org/10.1093/jbcr/irac089>. **(Q1, IF: 2.2).**
9. Sahar Jaffal**, S.Y. Al-Qaraleh.** Switch in SNARE proteins accompanied with changes in signaling pathways during PGE2-induced TRPV1 sensitization. Journal of Applied Pharmaceutical Science**. Accepted.**
10. **Samer Y. Alqaraleh;** Wael A. Al-Zereini; Nesrin R. Mwafi; Sahar M. Jaffal; Aiman I. Al-Qtaitat. The green synthesis of selenium nanoparticles: a comprehensive review on methodology, characterization, and biomedical applications. Research Journal of Pharmacy and Technology. **Submitted.**
11. Sati Y Al –Dalain, Moawiya A. Haddad, **Samer Y Alqaraleh**. (**2023**), Utilizing Sweet Lupin as a nutritional supplement and its therapeutic properties to create chicken burgers that are healthy. Current Research in Nutrition and Food Science Journal; 11(1) (Q3).
12. Haddad M. A, Dalain S. Y. A, Fraihat A. H. A, Parisi S, Parisi A, Arabiat S, **Alqaraleh S. Y**. (**2023**). Use of Fresh Pumpkin Fruits for Producing Chicken Sausage Suggests Functional Properties. Curr Res Nutr Food Sci; 11(2).
13. **Samer Y. Alqaraleh** and Khaled tarawneh. (**2016**), Antioxidant Activity of Methanolic Extracts of *Aloysia triphylla*, *Ceratonia siliqua, Cupressus sempervirens* and *Punica granatum* Selected from Karak Region-Jordan. American-Eurasian Journal of Agriculture & Environment Sciences 16 (3): 479- 486**.** DOI: 10.5829/idosi.aejaes.2016.16.3.12847. **(IF: 0.12).**
14. Nofal S. Al-Ameiri Muwaffaq R. Karajeh, and **Samer Y. Qaraleh**. (**2015**), Molds Associated with olive fruits infested with olive fruit fly, *Bactrocera oleae* and their effects on some oil quality traits. Jordan Journal of Biological Sciences. 8 (3): 217 – 220**.**
15. Osama Mohawesh, Timothy Coolong, Mohammad Aliedeh, **Samer Qaraleh**. (**2018**), Greenhouse evaluation of biochar to enhance soil properties and plant growth performance under arid environment. Bulgarian Journal of Agricultural Science 24(6):10-12. **(Q3, IF: 0.512).**

**References**

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