Curriculum Vitae

Name

Tamara Athamneh

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Academic Experience

10/2021- Currently Jordan University of Science and Technology

Nanotechnology institute

Assistant professor

2/2021- 10/2021 Hashemite University

Faculty of Pharmacy

Assistant professor

10/2020- 2/2021 Jadara University Faculty of Pharmacy

Assistant professor

10/2020- 2/2021 Jordan University of Science and Technology

Assistant professor- Part time

03/2016- 06/2020 Hamburg University of Technology (TUHH) and University of Hamburg

Research Associate

Key results

• Developed a pulmonary drug carrier of alginate and hybrid alginatehyaluronic acid by the aerogel technology.

- Optimization of the pulmonary drug carrier using the emulsion gelation technique.
- Assessment of the gelation point by a rheological characterization (elastic and the viscous modulus).
- Assessment of the physicochemical and aerodynamic properties of the alginate and hybrid alginate-hyaluronic acid pulmonary drug carrier.

9/2014- 6/2015 Lecturer at Jordan University of Science and Technology

Teaching practical courses in the pharmaceutical microbiology and quality control

Tea

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Academic Qualifications

03/2016- 06/2020 University of Hamburg

Doctoral studies in pharmaceutical technology

Jordan University of Science and Technology

09/2011-04/2014 Master of Science in pharmaceutical technology

Optimization of a transdermal patches of levodopa and β-cyclodextrin

Investigation the in vitro drug release from the transdermal patches using

excised rat skin mounted in the franz diffusion cell

09/2003-02/2008 Jordan University of Science and Technology

Bachelor in pharmacy

Publications

- 1. Enhancement of levodopa stability when complexed with β-cyclodextrin in transdermal patches Pharmaceutical Development and Technology (2016)
- 2. Alginate and hybrid alginate-hyaluronic acid aerogel microspheres as potential carrier for pulmonary drug delivery (2019).
- 3. Mechanically Strong Polyurea/Polyurethane-Cross-Linked Alginate Aerogels (2020)
- 4. Polyurea-crosslinked biopolymer aerogel beads (2020)
- 5. Pulmonary drug delivery with aerogels: Engineering of alginate and alginate-hyaluronic acid microspheres (2021)
- 6. Evaluation of the orally administered calcium alginate aerogel on the shift of gut microbiota and toxicity of Wistar rats (2021)
- Enhanced synergic effect of the antibacterial activity and hydrophobicity of polydimethylsiloxane polymer loaded with titanium dioxide nanoparticles and ciprofloxacin (2022)
- 8. Nanoliposomes as Drug Delivery Systems for Antifungal Therapy (2022)
- 9. In vivo tests of a novel wound dressing based on agar aerogel (2023)
- 10. Enhanced response and selective gold nanoparticles/carbon nanotubes biosensor for the early detection of HER₂ biomarker (2023)

Conference

- Hyaluronic acid-alginate aerogel as potential drug carrier. The fourth international seminar on aerogels. <u>2018</u>, <u>Hamburg</u>, <u>Germany</u>
- Preparation and characterization of alginate- hyaluronic acid nanoporous microspheres as potential carrier for pulmonary drug delivery using supercritical fluid technology. (Awarded the Postgraduate Oral Presentation Awards), Applied Science Private University Pharmacy Fourth International Conference, 2019, Amman, Jordan.
- Preparation and characterization of alginate- hyaluronic acid nanoporous microspheres as potential carrier for pulmonary drug delivery using supercritical fluid technology. Jahrestreffen der ProcessNet-Fachgruppen Adsorption und Hochdruckverfahrenstechnik. 2019, Freiberg, Germany
- Pulmonary drug delivery with aerogels: Engineering of alginate and alginate-hyaluronic acid microspheres. (Awarded the first prize for the best oral presentation in early career investigator forum), the International Conference on Aerogels for Biomedical and Environmental Applications. 2020, Santiago de Compostela, Spain.
- Alginate and Hyaluronic Acid Aerogels as Novel Materials for Wound
 Dressing applications (Awarded the first communication prize for the
 session: wound material-based dressing and aerogels processing. In the
 "Symposium on aerogel for biomedical applications"), 2021, Porto,
 Portugal.

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Experience

Jordan Health Aid Society

09/2009-02/2010 Pharmacist

International Medical Corps (IMC)

05/2015-01/2016 Mental health case manager

Languages • Arabic, Native speaker

• English, Full professional proficiency

• German, Intermediate, B1 level