|  |  |
| --- | --- |
| **Alaa mahran**Doctoral student | Turku, Finalnd +358451667220 alaa.mahran@abo.fi Alaa Mahran  |

|  |  |
| --- | --- |
|  | **Personal Profile** |

I would describe myself as a hardworking, enthusiastic individual who is very passionate about doing research and scientific work. I am an excellent team worker and can work independently in busy environments and have good communication skills with the working group. I am flexible, and reliable, possess excellent timekeeping, and am eager to take any chance of learning new skills. I am very fond of traveling and making friends with other people.

|  |  |
| --- | --- |
|  | Education |

## B.Sc. of Pharmaceutical Sciences| Faculty of Pharmacy, Assiut University

### September 2009 – June 2014

Excellent with Honour degree

## M.Sc. of Pharmaceutical Sciences (Pharmaceutics) | Faculty of Pharmacy, Assiut University

### May 2015 – August 2020

Teaching Assistant

Master's degree research

Thesis title: Formulation and Evaluation of Triamcinolone Acetonide Microemulsions as an Ocular Drug Delivery System, Excellent

|  |  |
| --- | --- |
|  | EMPLOYMENT HISTORY |

## Research assistant | Pharmaceutics department, Faculty of Pharmacy, Assiut University

### May 2015 – August 2020

Teaching practical courses in Physical Pharmacy, Dosage Forms, Biopharmaceutics, Basic & Clinical Pharmacokinetics, Therapeutics, Clinical Pharmacy and Radiopharmacy to undergraduate pharmacy students.

**Assistant lecturer | Pharmaceutics department, Faculty of Pharmacy, Assiut University**

### August 2020 – TILL NOW

In my master’s degree research, I worked with microemulsion as an ocular drug delivery system of corticosteroids for the treatment of eye inflammation.

## Doctoral student | Pharmaceutical Science laboratory, Faculty of Science and Engineering, Åbo Akademi University

### MARCH 2021 – TILL NOW

I have been working with mesoporous silica nanoparticles as a drug delivery carrier for hydrophobic drugs and biologicals. Additionally, I have been working with nanocomposite hydrogels and using 3D printing as a tool to fabricate personalized dosage forms.

|  |  |
| --- | --- |
|  | SKILLS and language EXPERIENCE |

|  |  |
| --- | --- |
| * Good communication
* Team-working skills gained through my expertise as a teaching assistant and a member of the scientific research group
* Arabic (Native language) (fluent speaking and writing)
* English (Excellent) (speaking and writing)
* Finnish (Beginner level)
* Computer skills (Very good computer skills (windows, word, office, PowerPoint... etc.) – ICDL, ImageJ, Photoshop, MS Office, Prism, Origin
 | * Semi-solid extrusion 3D printing technique
* Nanomedicine (microemulsion, silica nanoparticles (non-porous and mesoporous silica nanoparticles))
* Surface modification of nanoparticles
* Rheology
* Biomaterial development
* Biologicals (proteins and enzymes)
 |

|  |  |
| --- | --- |
|  | Presentation and conferences |

* International Conference on Pharmaceutical and Healthcare Science, November 2019 (Alexandria, Egypt) (physical poster presentation)
* Nordic POP annual meeting 2022 (physical poster presentation)
* 15th & 16th, 17th & 18th Annual FinPharmaNet meeting 2021-2024 (oral pitch presentations)
* The International Young Researchers Meeting 2023 (Romania, Iasi) - Sour turned Sweet: Glycans bridging technology & precision medicine (physical poster presentation)
* European Federation for Pharmaceutical Sciences Annual Meeting (EUFEPS 2023 Portugal, Lisbon) (physical poster presentation).
* Turku Biomaterial Day 2023(physical poster presentation)
* New Horizons in Drug Delivery and Formulation 2023 conference (Uppsala, Sweden) (physical poster presentation).
* Nordic POP annual meeting 2023 (Uppsala, Sweden) (physical poster presentation)
* BioMed Networking Event for Young Researchers 18.1.2024 (oral presentation).
* Nordic POP annual meeting 2024 (Uppsala, Sweden) (physical poster presentation)
* 10th BBBB conference on Pharmaceutical Sciences “Today´s science, tomorrow´s healthcare” (Tartu, Estonia) (oral presentation)

|  |  |
| --- | --- |
|  | **Publications** |

1. **Mahran, A**.; Ismail, S.; Allam, A.A. Development of Triamcinolone Acetonide-Loaded Microemulsion as a Prospective Ophthalmic Delivery System for Treatment of Uveitis: In Vitro and In Vivo Evaluation. Pharmaceutics 2021, 13, 444.
2. **Mahran, A**.; Özliseli, E.; Wang, Q.; Özliseli, I.; Bhadane, R.; Xu, C.; Wang, X.; Rosenholm, J.M. Semi‐solid 3D printing of mesoporous silica nanoparticle‐incorporated xeno‐free nanomaterial hydrogels for protein delivery. *Nano Select* **2023**, *4*, 598-614
3. Özliseli, E.; Şanlıdağ, S.; Süren, B.; **Mahran, A**.; Parikainen, M.; Sahlgren, C.; Rosenholm, J.M. Directing cellular responses in a nanocomposite 3D matrix for tissue regeneration with nanoparticle-mediated drug delivery. *Materials Today Bio* **2023**, *23*, 100865.
4. Prabhakar, N.; Långbacka, E.; Özliseli, E.; Mattsson, J.; **Mahran, A.**; Suleymanova, I.; Sahlgren, C.; Rosenholm, J. M.; Åkerfelt, M.; Nees, M., Surface Modification of Mesoporous Silica Nanoparticles as a Means to Introduce Inherent Cancer‐Targeting Ability in a 3D Tumor Microenvironment. Small Science **2024**, 2400084.

|  |  |
| --- | --- |
|  | **Courses**  |

* Instrumental analysis (Assiut University)
* Physical chemistry (Assiut University)
* Basic statistics (Assiut University)
* Computer sciences (Assiut University)
* Molecular biology (Assiut University)
* Laboratory safety and waste disposal (Assiut University)
* Kinetic principles in pharmaceutical dosage forms (Assiut University)
* Modern techniques of drug delivery (Assiut University)
* Pharmaceutical technology (Assiut University)
* Advanced drug delivery systems (Assiut University)
* Drug Targeting (Assiut University)
* Pharmaceutical Nanotechnology (Assiut University)
* Molecular Pharmaceutics (Assiut University)
* Methods in Pharmaceutical Analysis (Åbo Akademi University)
* Pharmaceutical Nanotechnology (Åbo Akademi University)
* Basics of Rheology (Åbo Akademi University)
* Colloidal sol-gel processing of nanomaterials (Åbo Akademi University)
* Polymers in pharma (Chalmers University)
* Human Digestion and Absorption - a Mechanistic Understanding (University of Copenhagen)
* Research ethics (Åbo Akademi University)
* Good manufacturing practice in the pharmaceutical industry (Åbo Akademi University)
* Basics of research data management (Åbo Akademi University)