



Behrokh Shams

bshams@etu.unistra.fr Behrokh.shams@yahoo.com Behrokh.shams@gmail.com

Göttingen, Germany

LinkedIn: <https://www.linkedin.com/in/behrokh-shams-6623a18b/>

Education:

Master of Science – Bi-national program in Sustainable materials:

Polymer science

University of Freiburg, Germany/ University of Strasbourg, France

Sep 2018 - Mar 2021

Focus: Material science, Polymer physics and chemistry, Characterization, and analytical techniques such as **FTIR, spectroscopy, SEM, DSC, NMR, etc.**

Master thesis: Development of a new method for electrodeposition of chitosan in enzymatic biosensor array

Master of Science – Polymer Engineering

Tarbiat Modares University, Iran Sep 2013 - Oct 2021

Focus: Polymer Mechanics, rheology, and chemistry. Applications of polymers in wide range of industries such as automobile, medical, packaging industries.

Master thesis: Development of antibacterial nanocomposite: whey protein-gelatin-nanoclay films with orange peel extract and tripolyphosphate as potential food packaging

Bachelor of Science – Chemical Engineering

Isfahan University of Technology, Iran Sep 2008 - Sep 2012

Focus: Heat and mass transport process, fluid mechanics, thermodynamics and Reactor processing and unit operation.

Bachelor thesis: Recycling methods for PET

Work experience

Graduate research assistant

University of Freiburg, Germany Jun 2018 - Mar 2021

Description: Developing a new method for electrodeposition of chitosan on enzymatic biosensor array, doing experiments in the lab, analyzing the data and interpretation of the results, and writing an original draft of an article based on the results which is to be submitted as an ISI paper.

Translator of scientific articles

Baspar polymer magazine, Iran Jan 2015 - Sep 2018

Description: Translating scientific articles about innovation in polymer industries from English to Persian

Teaching assistant

Isfahan University of Technology, Iran Sep 2011 - Dec 2011

Course: Water waste treatment

Skills:

MS office

Origin lab

Python

Language:

English: Fluent

German:

Intermediate

Other jobs:

Content creator, Iran May 2017 – Apr 2018

Volunteer teacher, Society of students against poverty, Iran, Dec 2015- Feb 2016

Volunteer, Mahak Charity, Iran, Sep 2014- Jun 2015

Publications:

Development of Antibacterial Nanocomposite: Whey Protein-Gelatin-Nanoclay Films with Orange Peel Extract and Tripolyphosphate as Potential Food Packaging, Shams, B., Ebrahimi, G, N., Khodaiyan, C, F, *Journal of Advances in Polymer Technology.*, 2019.

Correlation of sorption-induced swelling in polymeric films with reference to attenuated total reflectance Fourier-transform infrared spectroscopy data, Khansari, M, A., Estahbanati, A, K, N., Shams, B., et al. *European Polymer Journal*, 2017.

Enzymatic biosensor array by electrodeposition of chitosan with constant electric current, Shams, B., Kieninger, J., Osorio, M,A., Weltin, A., Urban, G. To be submitted.