

# SAFIYE SELEN ÖZCAN

email: safiyesozcan@gmail.com

## **EDUCATION**

**Montana State University** *August 2016-Present*  
*Master of Science Degree in Chemical Engineering*

**Montana State University** *May, 2016*  
*Bachelor of Science Degree in Chemical Engineering*  
Completed a senior thesis entitled, "Commercial Synthesis of High-Grade Gasoline from Proven Syngas-to-Gasoline Technologies"

**Istanbul Technical University (ITU)** *May, 2016*  
*Bachelor of Science Degree in Bioengineering*  
Dual Degree Program at Montana State University.

## **EXPERIENCE**

**Montana State University – Graduate Teaching Assistant** *August 2016-Present*  
Graduate Teaching Assistant for ECHM 307 Chemical Engineering Thermodynamics I and EBIO 411R Biological Engineering Design I.

**MSU Center for Biofilm Engineering – Graduate Research Assistant** *August 2016-Present*  
Working in the Foreman Research Group investigating a novel metal working fluid (MWF) management strategy for testing biofilm eradication.

**Montana State University – Student Teaching Assistant** *Jan.2016-May 2016*  
Student Teaching Assistant for ECHM 451 Process Dynamics and Control.

**UCLA Bio and Nano Photonics Laboratory – Summer Internship** *May 2015-August 2015*  
Designed portable, cost effective pressure filtration system for *Giardia lamblia* cysts and *Cryptosporidium parvum* oocysts in water samples and imaged the surface of PCTE membrane using a smart phone based fluorescence microscopy.

**MSU Center for Biofilm Engineering – Undergrad Research Assistant** *Jan.2015-May 2015*  
Worked in the Chang Soft Matter and Microfluidics Lab on PDMS based droplet microfluidic device fabrications with a goal of mimicking extracellular matrix.

**ITU Microfluidics Laboratory – Undergrad Research Assistant** *August 2014-Jan.2015*  
Developed microdevices that met product performance, quality and timing requirements, used COMSOL, SOLIDWORKS, L-edit for simulations and design procedures, performed research studies and trained junior students in cleanroom laboratory, resulted in an IEEE Conference Paper for 10<sup>th</sup> IEEE International Conference, NEMS 2015.

**ITU Nanotechnology Research Center – R&D Cleanroom Internship** *June 2014-August 2014*  
Diagnosed problems and calibrated equipment, examined and obtained surface topography of client samples under Scanning Electron Microscopy (SEM) and characterized materials by using X-ray Diffractometry, applied physical vapor deposition (PVD) on quartz glass surface coated with photoresist using soft lithography technique to deposit Titanium electrot layers.

## **CONFERENCE PUBLICATIONS**

Emre Altinagac, **Safiye Selen Ozcan**, Yavuz Genc, Levent Trabzon and Huseyin Kizil "Biological Particle Manipulation by Dielectrophoresis: An Example of Jurkat Enrichment," 10<sup>th</sup> IEEE International Conference on Nano/Micro Engineered and Molecular Systems, Xi'an, China (April 7-11, 2015)

References available up on request.

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## **ADDITIONAL INFORMATION**

Volunteer student for NanoDays 2015 at Montana State University.

ATHENS Program Certificate for Product and Process Design Concepts in (Bio) Chemical Industries at Delft University of Technology, Netherlands.

HHMI Undergraduate Research Training and Innovation Program Certificate for Translational Biophotonics and Telemedicine Technologies at UCLA.

Proficient in oral and written English and Turkish languages.

## **RELEVANT COURSEWORK**

Thermodynamics (in progress), Reaction Engineering/Modelling (in progress), Chemical Engineering Thermodynamics I and II, Chemical Engineering Process Dynamics and Control, Transport Analysis, Chemical Engineering Heat Transfer Operations, Chemical Engineering Mass Transfer Operations, Chemical Engineering Fluid Mechanics Operations, and Chemical Engineering Reactor Design.

## **SOFTWARE PROFICIENCY**

COMSOL, MATLAB, POLYMATH, SOLIDWORKS, Aspen HYSYS, Excel.