## Erica Amelia Mason

Local Address: 2500 University Avenue Austin, TX 78705 ericamason@utexas.edu Permanent Address: 312 Meadowcreek Road Coppell, TX 75019 Cell: 972-979-7807

Objective: Seeking a summer internship in Chemical Engineering

Education: Bachelor of Science, Chemical Engineering

GPA: 3.73

The University of Texas at Austin

**Expected May 2018** 

**Related/Current Courses:** Thermodynamics, Photovoltaics, Transport Phenomena, Physical Chemistry 1 and 2, Organic Chemistry/Lab 1 and 2, Differential Equations, Engineering Communications; Intro to MATLAB

**Experience:** 

Synthesis and Photocatalytic Performance of FWCNT and TiO2-CNT

<u>Pickering Emulsions in the Degradation of Organic Dyes</u>
Dr. Saleh Sustainable Nano-Engineering Lab
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- Saleh Sustainable Nano-Engineering Lab
   Synthesis and analysis of Pickering Emulsions of FWCNTs and Sudan iii dye
- Skills: Tip and Bath Sonication, UV-Vis Spectroscopy, Confocal Microscopy, SEM, Raman; use of Rayonet RPR-100 Photo Reactor to degrade dye

## Engineering Summer Research Internship

Dr. Jose Miguel Aguilera Gastronomic Engineering Lab Pontificia Universidad Católica, Chile

Summer 2016

- Stabilization of oil in water microemulsions of WPI and sodium alginate
- Skills: Optical Microscopy, Ultra Turrax; conduct research in spanish

## Silver Nanoparticle (AgNP) Synthesis and Toxicity Analysis

Graduates Linked with Undergraduates in Engineering

Fall 2015

- Synthesize and Characterize AgNPs and apprentice Grad student
- Skills: DLS, Clean Lab training, Wet lab techniques, Fire Extinguisher Certified

**UT Austin Study Abroad - Santander, Spain** 

**Summer 2015** 

Publications:

"Wavelength shifting of Chemiluminescence using Quantum Dots to enhance Tissue Light penetration." Optical Materials Express 2016

Foreign Language Fluent in Spanish

Awards: Research Competitions: 1st PEER Engineering Research Competition GLUE

Division (Spring 2016) and 3rd PEER Engineering Research Competition

Underclassmen Division (Spring 2016)

Scholarships/Honors: UT Engineering Honors College Scholar (2016), UT

Student Success Scholarship (2015), UT Engineering Honors Scholarship (2014), Texas

Exes Regional Scholarship (2014)

Athletics: 3<sup>rd</sup> at Texas Collegiate Climbing Series Regional Championship (2015)

Activities: Society of Women Engineers (SWE) - Member 2014-Present

UT Austin Campus Ministry: FOCUS Student Leadership Summit (2016),

FOCUS Mission Trip Guatemala (2016), Social Justice Team Member (2015-Present)

UT Austin Rock Climbing Team - Member 2014-2015

Interests: Hiking, travel, Spanish culture, unicycling