

# CAMILLE ANISSE VIOLET

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## YALE UNIVERSITY

Chemical and Environmental Engineering, PhD student

2019-present

## OREGON STATE UNIVERSITY

Chemical Engineering, B.S. and International Studies, B.A.

2010-2016

Boren Scholar 2015-2016

## EMPLOYMENT

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### MANUFACTURING ENGINEER

*OSRAM Opto Semiconductors – Quantum Dot, Portland OR*

*Dec 2016 – Jun 2019*

- Synthesized and characterized Cd-Se based quantum dots at pilot and research scale
- Supported process engineering team with process monitoring, improvements, and scale-up activities
- Main interface with purchasing, logistics, and quality teams to develop and implement new mfg. systems
- Supported partnership with Columbia University via barrier layer synthesis of quantum-well particles

### CHEMICAL ENGINEERING INTERNSHIPS

*Tanzania Breweries Limited, Arusha, Tanzania*

*Nov 2015 – March 2016*

- Completed rotations within effluent treatment, process engineering, and analytical chemistry departments
- Assisted in design of cooling tower and determination of steam & refrigeration line operating conditions
- Performed technical maintenance including tank sampling, descaling condensers and replacing filters

*Clarus Water Solutions, Portland, OR*

*June 2016 – Sept 2016*

Assisted in system design and construction of modular water filtration systems.

- Supported field construction efforts of 100,000 gal holding tank at municipal hazardous waste site
- Sized process equipment and constructed piping & infrastructure of 85 gpm stormwater treatment system

*Bend Research, Bend, OR*

*March 2014 – June 2014*

- Investigated gelation mechanism in PVP tablets by disintegration testing excipient combinations

### CALCULUS-BASED PHYSICS TEACHING ASSISTANT

*April 2012 – March 2013*

*Undergraduate Teaching Assistant for Dr. Bannon, Oregon State University*

## RESEARCH

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### Reduction of CO<sub>2</sub> via Corona Discharge in Microreactor

*January 2015 - June 2015*

OSU Senior Project and Eng Expo poster presentation, sponsored by Microproducts Breakthrough Institute

- Team leader in construction of microreactor to measure CO<sub>2</sub> conversion via corona discharge with GC

### Feasibility Study of Waste Plastic to Oil Plant in Tanzania

*August 2015 - June 2016*

International Degree Thesis, funded by US NSEP Boren Scholarship

- Identified Dar es Salaam as feasible site for plastic pyrolysis plant by reviewing regional waste availability

### Rheological Characterization of Nucleus Pulposus Hydrogels

*June 2010 – December 2011*

OSU Johnson Internship, funded by Howard Hughes Medical Institute

- Characterized high and low acyl Gellan Gum and taught polymer fundamentals to high school students

## SKILLS & ACADEMIC HONORS

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- **Honors:** 2019 NSF Graduate Research Fellow, 2015 US NSEP Boren Scholar in Tanzania, 2013 & 2014 US Critical Language Scholar in Bangladesh
- **Software:** MATLAB, basic C/Python/JavaScript
- **Languages:** Swahili (fluent), Bengali (intermediate), Spanish (intermediate)
- **Chemistry Techniques:** Schlenk line synthesis, ALD, UV-Vis, Quantum Yield, GC, Rheology, ICP digestion