

# Nicholas Dement

1406 Clover Blossom Way | Knoxville, TN 37920  
(423) 794-9983 | ndement2@gmail.com

## Education

### *The University of Tennessee*

*Bachelor of Science - Chemical Engineering*

*May 2016*

*Bachelor of Science - Nuclear Engineering*

*May 2013*

3.6/4.0 GPA

## Experience

### *The University of Tennessee*

*June 2015 - present*

#### *Undergraduate Researcher*

- Recruited as a cross functional member of a research team tasked with operating, optimizing and demonstrating a solvent extraction process to recover rare earth elements (REE's) from phosphate ore
- Developed and conducted a designed experiment to quantify the processing window of the separation process
- Worked in junction with Oak Ridge National Lab (ORNL) to perform in situ REE solvent extraction via mixing-settling at Florida Industrial and Phosphate Research Institute (FIPR)
- Responded to shifting demands caused by process constraints, material availability and temporal limits to still achieve project milestones
- Created and optimized a solvent extraction process to recover REE's and uranium from a wet process phosphoric acid stream
- Awarded the 2016 Professor Jack S. Watson Undergraduate Award for Excellence in Separation Research
- Tasked with training new researchers on how to further progress the aforementioned research

### *The University of Tennessee*

*Jan 2016 - present*

#### *Undergraduate Researcher*

- Designed and constructed a reactor system to perform the photocatalytic reduction of carbon dioxide
- Utilized cost effective resources and personal relationships within the department to progress project with limited funding
- Coded and implemented Arduino controllers to control temperature and pressure of a reactor system

### *Moe's Southwestern Grill*

*July 2013 - Aug 2015*

#### *Manager*

- Worked with clients to organize and deliver catering events, contributing to an increase of 26% in catering sales from 2013 to 2014
- Offered management position after six months of work, with no prior food service experience
- Managed and collaborated with eight team members to prepare meals for service in a fast pace work environment that serves up to 1000 customers a day
- Worked 25 hours a week while attending school full-time

## Organizations

American Institute of Chemical Engineers

*Aug 2014 – present*

UT Canoe and Hiking Club

*Aug 2009 – present*