

# Andrew Conrad Bambeck

conrad@outlook.com

937-336-0795

## Education

### University of Dayton

Bachelor of Chemical Engineering

Expected Graduation – May 2014

Masters of Materials Engineering

Expected Graduation – May 2014

GPA 3.56/4.00

## Experience

### University of Dayton Research Institute

Dayton, OH 08/2011-Present

*Composite Materials Engineering Research Assistant*

- Designing, purchasing, assembling a pump/filter system for 5000 gallon NAHF-X scale up
- Data organization and reporting for DMA, DSC, SEM, oxidation, erosion, and stress/strain testing
- Fabricated composite parts for multiple contractors using vacuum bag layup/autoclave procedure
- Operation and maintenance of autoclaves, furnaces, heat presses
- Material layup (carbon fiber, fiberglass, prepregs, polymers, resins)

### Maverick Corporation

Blue Ash, OH 01/2013-05/2013

*High Temperature Polymer Composite Research Co-op*

- Acquired TA thermal analysis DSC, TGA, DMA, and TMA data
- Developed reports and optimized cure cycles for the potential use of polyimide composite thick laminates on military aircraft
- Developed Microsoft VBA code to automate gas chromatography data entry and analysis
- Fabricated composite parts with vacuum bag layup

### ETHOS Program – Proleña

La Paz, Bolivia 05/2012-07/2012

*Technical Immersion Trip to Bolivia*

- Researched and designed a UASB waste treatment system for 2000 pig farm
- Optimized essential oil extraction for distilling limonene from orange peels
- Improved personal communication skills through Spanish language immersion

### Sinclair Community College

Dayton, OH 09/2010-08/2011

*Chemistry Resource Department Tutor*

- Explained lecture material and supervised peers for homework and discussion
- Guided and assisted groups of students for laboratory work

## Activities

### President of Tau Beta Pi Engineering Honor Society

05/2012 - Present

- Led recruiting efforts to gain an average of 15 members per semester at an increase of 15% over previous years
- Organized dinners, training seminars, information sessions, and attended national conventions
- Delegated tasks to a group of six officers while leading bi-weekly meetings and events

### Vice President of Service ETHOS Club

05/2012 - Present

- Led safety and transportation for the newly created ETHOS Blitz competition
- Organized and supervised monthly service projects such as urban farming, afterschool science day for kids, and community cleanups

### Research Assistant

08/2012-01/2013

*Advisor: Dr. Scott Gold*

- Assisted in the purchase, construction, and operation of a 3D printer

### Sustainability Club

### Math Club