

Andrew Juergens

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126 Orchard St, Apt 11, East Lansing, MI, 48230

313-917-6640

EDUCATION

Michigan State University, East Lansing, MI

Expected May 2017

Bachelor of Science, Biosystems Engineering

- Honors College
- 3.74/4.0 GPA
- Bioenergy Engineering and Biomedical Engineering Concentrations
- Dean's List Honoree

Fall 2013-Spring 2016

EXPERIENCE

Research Assistant

May 2016-August 2016

Michigan State Engineering Undergraduate Research Experience, East Lansing, MI

- Conducted dozens of experiments to explore effects of electrocatalysis on raw bio-oil
- Analyzed and quantified results through analytical chemistry techniques such as HPLC, GC-MS, and NMR
- Reduced reactive compounds in raw bio-oil by up to 80%, significantly increasing transportation feasibility
- Co-Author: A. Juergens, R. Sak, C. Saffron. "Stabilization of Raw Bio-oil Using Electrocatalytic Hydrogenation." Poster presented at the Mid-Michigan Symposium for Undergraduate Research Experiences, Michigan State University, July 27, 2016.

Research Assistant

Sept 2015-May 2016

Biomass Thermochemical Conversion Lab, East Lansing, MI

- Managed daily operations of bench scale pyrolysis reactor
- Performed experiments to quantify impact of biomass feedstock on bio-oil yield
- Optimized reactor operating conditions in order to maximize bio-oil yield

Office Assistant

Feb 2015-Sept 2015

MSU Academic Orientation Program, East Lansing, MI

- Served as front-line university representative to ensure incoming student transition issues were properly addressed
- Provided dozens of presentations of Michigan State University's technological resources to large groups of over 200 incoming students

Skills and Activities

- Experience with MatLab, LabView
- Familiar with AspenPlus, AUTOCAD, GaBi
- Biosystems Engineering Club

Fall 2014-Present