Scott Essenmacher

Education:

Georgia Institute of Technology – Atlanta, GA Anticipated Graduation: 2020
Ph.D. in Chemical Engineering
Honors: Georgia Tech Foundation's President's Fellowship

Hope College – Holland, MI Graduation: May 2015
B.S. in Engineering (ABET accredited)
with Chemical Engineering Emphasis; minor in Chemistry
Honors: Summa Cum Laude; Phi Beta Kappa; Sigma Xi; Dean's List; Presidential Scholarship; Michigan Competitive Scholarship

Related Work Experience:

Graduate Research Assistant, Georgia Institute of Technology Current
Research Title: "Removal of Particulate Contaminants from Process Effluents by Affinity Flotation"

Research Assistant, Hope College May 2012 - July 2015
Research Title: "Preparing for Harvesting Radioisotopes from FRIB"

- Collaborated to develop a procedure for extracting copper 67 from a solution of various metals

Tutor/Teacher's Assistant, Hope College September 2013 - May 2015

- Supported students with an assortment of math related problems in Math Lab
- Assisted instructors in Physical Chemistry I Lab and Introduction to Circuits Lab
- Administered help session for students in Conservation Principles and Process Calculations

Undergraduate Research Assistant, University of South Carolina May 2014 - August 2014
Research Title: "High Temperature Oxygen Sensors Based on Ruddlesden-Popper Type Oxides"

- Conducted research on responses of praseodymium nickelate electrodes at 750 °C in various oxygen partial pressure conditions

Publications:

- Mastren, T., Pen, A., Peaslee, G.F., Wozniak, N., Loveless, S., Essenmacher, S., Sobotka, L.G., Morrissey, D.J., & Lapi, S.E. Feasibility of Isotope Harvesting at a Projectile Fragmentation Facility: ^{67}Cu. *Sci. Rep*. **4**, 6706; DOI:10.1038/srep06706 (2014).

Poster Presentations:

"High Temperature Oxygen Sensors Based on Ruddlesden-Popper Type Oxides"
E. Dogdibegovic and X.D. Zhou

- AIChE Annual Meeting, Atlanta, GA November 2014
- University of South Carolina Summer Research Symposium, Columbia, SC July 2014

"Preparing for Harvesting Radioisotopes from FRIB"
K. Petrasky, N. Wozniak, T. Mastren, A. Pen, P. DeYoung, G. Peaslee, S. Lapi, and D. Morrissey

- AIChE Annual Meeting, San Francisco, CA November 2013
- Celebration of Undergraduate Research, Holland, MI April 2013

College Scholastic Activities:

Formula Society of Automotive Engineers club September 2011 - May 2015

- Leader of Driving Team September 2014 - May 2015
- Designed, fabricated, and tested scaled down Formula One-type cars with other group members