

SARAH E. MCNEW

4588 Valley Parkway Se Apt K
Smyrna, GA 30082
sarah.mcnew@chbe.gatech.edu
912-663-2941

EDUCATION

Georgia Institute of Technology, Atlanta, GA **5/2010-present**
• PhD in Chemical Engineering

Georgia Institute of Technology, Atlanta, GA **8/2009**
• Bachelor of Science in Chemical and Biomolecular Engineering

EXPERIENCE

Georgia Institute of Technology, Atlanta, GA **5/2010-present**
Graduate Research Assistant

- Synthesized and characterized solid catalysts for hydrodeoxygenation of bio-oils
- Designed and built flow reactor to test catalytic activity
- Designed and built TPD-MS flow reactor set up for detailed surface science studies
- Assisted in new laboratory start-up and organization

Dawson Stem Cell Biophysics and Engineering Lab **5/2009-8/2009**
Undergraduate Researcher

- Made LB media, LB agar, and glycerol solutions to culture and freeze aliquots of E. coli
- Performed DNA purifications and DNA gel electrophoresis
- Isolated protein from cancer cell lines and found concentration using BCA assay
- Measured tumors and harvested organs from mice
- Responsible for organization of new lab space, including ordering of new supplies

Institute of Nuclear Power Operations, Atlanta, Georgia **Summer 2007**
Project Engineer

- Analyzed and projected trends in degradation of nuclear plant chemistry
- Interpreted work orders from plants to determine focus for Areas for Improvement
- Worked with a mentor and assisted in planning of plant investigations
- Proofread Performance Objectives and Criteria and made amendments
- Completed self-guided projects and adhered to given deadlines

SKILLS

- Experienced in Microsoft office, MATLAB, HTML, and HYSYS
- Certified Labview Associate Developer (2011-present)
- Analytical techniques: Experience with GC, GC-MS, TPR/TPD-MS, SEM, XRD, N₂ physisorption
- Began certification required to become a Nuclear Professional

HONORS AND ACTIVITIES

- Paper Science and Engineering Fellow (2010-present)
- Member of American Institute for Chemical Engineers (2005-present)
- Academy for Nuclear Training scholarship recipient (2006-2007, 2007-2008)