

NAME: Troy Holland

Dept. / Major: Chemical Engineering

Field of Study: Coal char oxidation modeling

Year in School: 3rd year graduate student

Degree Being Pursued: PhD in Chemical Engineering

Date Expected: 2017

Academic Advisor: Thomas H. Fletcher

Email: tmholland86@gmail.com

Personal URL (optional):

http://www.et.byu.edu/~tom/students/Holland_Troy.html

Degree(s) held: B.S. in Chemical Engineering

Field(s) of Interest: Energy solutions, uncertainty quantification, high performance computing, and biochemical engineering

Planned Years in the PSAAP II Program: 4

Year in the PSAAP II Program: 2

Description of Your Work/Project Within PSAAP II: Coal char oxidation and gasification modeling during oxy-fuel combustion

NNSA Laboratory Visit Information: LANL October 2015-February 2016 mentored by Dr. Joel Kress (Theoretical Division, group 1 group leader)

Selected Publications:

Steam Gasification Rates of Three Bituminous Coal Chars in an Entrained-Flow Reactor at Pressurized Conditions; Lewis, A., Holland, T., Marchant, N., Fletcher, E., Henley, D., Fuller, E., and Fletcher, T.H.; Energy and Fuels February 2015

Streamlined extract preparation for Escherichia coli-based cell-free protein synthesis by sonication or bead vortex milling; Shrestha, P., Holland, T., and Bundy, B.; Biotechniques September 2012



Honors / Awards (optional):

-Office of Research and Creative Activities (ORCA) undergraduate research grant

-8 years in United States Coast Guard Reserve

-Primary responsibilities:

- 1) Hazardous materials control (oil and hazardous material spill response and prevention)
- 2) Anti-terrorism efforts (marine facility and container inspections)

Date Updated: [09 November 2015](#)