NAME: Teri Snow Draper

Dept. / Major: Chemical Engineering

Field of Study: Combustion

Year in School: 1st year

Degree Being Pursued: Ph.D.

Date Expected: 2017

Academic Advisor: Eric Eddings

Email: teri.snow.draper@gmail.com

Degree(s) held: B.S. and M.S. in Mechanical Engineering

Field(s) of Interest: optical diagnostics, oxy-coal combustion

Planned Years in the PSAAP II Program: 3 years

Year in the PSAAP II Program: 1st year

Description of Your Work/Project Within PSAAP II: I am a part of the experimental team within the V&V/UQ team. I will be developing optical diagnostic techniques to provide high quality data in order to validate the simulations.

NNSA Laboratory Visit Information: TBD

Selected Publications:

T. S. Draper, D. Zeltner, D. R. Tree, Y. Xue and R. Tsiava, "Two-dimensional flame temperature and emissivity measurements of pulverized oxy-coal flames," *Applied Energy*, vol. 95, pp. 38-44, July 2012.

- **T. S. Draper**, D. Zeltner, D. R. Tree, Y. Xue, C. Periasamy, T. Kang and R. Tsiava, "Characterization of a primary-swirled, high oxygen participation coal flame: Flame temperature, emissivity, NO, and burnout measurements," **(peer reviewed paper)** in *The 34th International Symposium on Combustion*, Warsaw, Poland, July 30-August 3, 2012.
- D. Zeltner, **T. S. Draper**, J. Thornock, D. R. Tree and Y. Xue, "Total and Visible Radiative Heat Flux Intensity Measurements of Air- and Oxy-Coal Flames," in *The 37th International Technical Conference on Clean Coal and Fuel Systems*, Clearwater, Florida, June 3-7, 2012.
- D. Zeltner, **T. S. Draper**, D. R. Tree, Y. Xue, C. Periasamy, T. Kang and R. Tsiava, "Characterization of a Primary-Swirled, High Oxygen Participation Coal Flame: Flame Temperature, Emissivity, and NO Measurements," in *The 2012 Spring Technical Meeting of the Western States Sections of the Combustion Institute*, Tempe, Arizona, March 19-20, 2012.
- **T. S. Draper (presenter)**, D. Zeltner, D. R. Tree, Y. Xue and R. Tsiava, "Two-Color Imaging of an Oxy-Coal Flame using an RGB, Digital Camera," in *The 36th International Technical Conference on Clean Coal and Fuel Systems*, Clearwater, Florida, June 5-9, 2011.

Honors / Awards (optional):

Best Student Paper, Clearwater Clean Coal International Conference, June 2011

Date Updated: June 2014