Scientific Publications

1. Fleming, Kelly L., Pfaendtner, Jim. "Characterizing the Catalyzed Hydrolysis of β-1, 4 Glycosidic Bonds Using DFT." *The Journal of Physical Chemistry A* (2013).

2. Fleming, Kelly L., Matthaei, James, and Pfaendtner, Jim. "A New Graduate Level Seminar to Prepare Students for the Next Step in Their Careers." *Chemical Engineering Education* (2015).

3. Fleming, Kelly L., Tiwary, Pratyush, Pfaendtner, Jim. "A New Approach for Investigating Reaction Dynamics and Rates with Ab Initio Calculations" *Journal of Physical Chemistry A (2015), Editor's Choice.*

4. Fleming, Kelly L., Tung, Michael, Pfaendtner, Jim. "An automated high-throughput screening of coating compounds for industrial applications" *In preparation.*

Science Media Publications:

Gray Matter Happy Hour, http://happyhourforyourbrain.blogspot.com/, science blog. Owner and sole contributor.

Fleming, Kelly. "Addressing Science Deniers: Communicating With Differing Worldviews" *Engage Science Blog.* URL: https://courses.washington.edu/engageuw/student-post-addressing-science-deniers-communicating-with-differing-worldviews/. February 2015.

Fleming, Kelly. "What Smoking Weed Does to Teen Brains: A Look at the Scientific Research" *The Stranger*. URL: http://www.thestranger.com/seattle/what-smoking-weed-does-to-teen-brains/Content?oid=20884581. October 2014.

500 Women Scientists. "An Open Letter To President Trump From 500 Women Scientists" *Forbes Magazine.* URL: http://www.forbes.com/sites/thelabbench/2017/01/22/an-open-letter-to-president-trump-from-500-women-scientists/#40f2023d39b7. January 2017.

500 Women Scientists, https://medium.com/@500womenscientists Contributor and Editor.

Selected Presentations

1. Fleming, Kelly. "Developing Economically and Environmentally Sustainable Biofuels." Oral Presentation at Town Hall Seattle, Seattle, WA, April 23, 2015.

2. Fleming, Kelly, Pfaendtner, Jim. "Molecular simulation of hydrolysis reactions to engineer more efficient biomass conversion." Oral Presentation at the American Chemical Society Annual Meeting, Denver, CO, March 23, 2015.

3. Fleming, Kelly, Pfaendtner, Jim. "Probing Reaction Details Critical for Converting Biomass to Fuel Using Molecular Simulation." Poster Presentation at the AAAS National Meeting, San Jose, CA, February 15, 2015.

4. Fleming, Kelly, Burney, Patrick, Deighan, Mike, Jaeger, Vance, Hough, Blake, Pfaendtner, Jim. "Pfaendtner Research Group." Poster Presentation at the Research Symposium in Olympia, Olympia, WA, February 14, 2014.

5. Fleming, Kelly, Pfaendtner, Jim. "Computational Investigation of Solvent Effects On the Hydrolysis of Ether Linkages." Oral Presentation at the American Institute of Chemical Engineering Annual Meeting, San Francisco, CA, November 3, 2013.

6. Fleming, Kelly L., Matthaei, James, Richards, Jeff, Pozzo, L.D., Pfaendtner, Jim. "A New Graduate Level Seminar to Prepare Students for the Next Step in their Careers." Poster Presentation at the American Institute of Chemical Engineering Annual Meeting, San Francisco, CA, November 4, 2013.

7. Fleming, Kelly, Pfaendtner, Jim. "Characterization of the Hydrolysis of β-1,4 Glycosidic Bonds." Oral Presentation at the American Institute of Chemical Engineering Annual Meeting, Pittsburgh, PA, October 31, 2012.

8. Fleming, Kelly, Pfaendtner, Jim. "Enhanced Sampling with Ab Initio Dynamics to Sample Sugar Hydrolysis Reaction Pathways." Poster Presentation at the American Institute of Chemical Engineering Annual Meeting, Pittsburgh, PA, October 31, 2012.

9. Fleming, Kelly, Pfaendtner, Jim. "Characterization of the Hydrolysis of β-1,4 Glycosidic Bonds." Poster presentation at the Graduate Student Symposium at the University of Washington, Seattle, WA, September 20, 2012.

10. Fleming, Kelly, Pfaendtner, Jim. "Characterization of the Hydrolysis of β-1,4 Glycosidic Bonds." Poster presentation at the Foundations of Molecular Modeling and Simulation conference, Mount Hood, Oregon, July 25, 2012.

11. Fleming, Kelly, Pfaendtner, Jim. "Quantum Characterization of the Retaining Glycoside Hydrolase Reaction Mechanism for use in Hydrolysis of Xylan." Poster presentation at the Computational Material Science for Energy Generation and Conversion conference, Santiago, Chile, January 19, 2012.