Department of Chemical Engineering

University of Washington

**LEADERSHIP SEMINAR SERIES**

2:30-3:20 p.m., Wednesday, Oct. 3, 2012

Physics Astronomy Building (PAA) Room A110

*Refreshments to follow in Benson Hall lobby.*

**"Energy Efficiency, Sustainability, and Pacific Northwest National Laboratory”**

Sarah Widder, BS ’09

Research Engineer, Pacific Northwest National Laboratory

**Abstract:**

Have you ever thought about working at a national laboratory? Sarah Widder has worked at Pacific Northwest National Laboratory (PNNL) since graduating from University of Washington in 2009. She has been very successful at PNNL, working on a variety of projects, including residential energy efficiency; life cycle analysis of biofuels; sustainability assessment of carbon, capture, and sequestration; and validation of new, energy saving technologies. Her chemical engineering curriculum and classes at University of Washington provided her with the foundation to be successful in a wide range of projects in the energy R&D field. She will talk about how she got her job at PNNL, including recommendations for students who will soon be looking for jobs in research, and discuss the pros and cons of working at PNNL. She’ll also discuss the range of projects and work PNNL is involved with, and provide a more in-depth summary of a recent research project assessing the environmental and human health impacts of the traditional carbon capture technology, adsorption by monoethanolamine (MEA), and present how the results can be used to guide future research and development decisions.

**Brief Bio:**

Sarah Widder works as a Research Engineer at Pacific Northwest National Laboratory where she focuses on the application of technology, standards, and regulations to meet sustainable design, energy efficiency, and greenhouse gas management goals. Some of her current projects involve researching innovative and cost-effective solutions for improving energy-efficiency in residential buildings with DOE’s Building America Program; helping DOE meet energy efficiency goals through more stringent standards for appliance energy consumption with DOE’s Appliance Standards program, and performing analysis to understand the overall sustainability impacts of energy-related choices using life cycle assessment and other sustainability assessment tools. She earned a BS in chemical engineering from the Univ. of Washington and is currently pursuing a PhD in Civil/Environmental Engineering from Washington State University, where her dissertation focuses on the relationship of indoor air quality, ventilation, and energy efficient construction.