

Agenda

Subsurface Biosphere Initiative

Summer Workshop

La Sells Stewart Center, OSU

Ag Production Room

July 21, 2010

- 8-8:30 AM **Continental Breakfast**
- 8:30-8:45 **Lew Semprini**, Distinguished Professor of Environmental Engineering and SBI Executive Committee Chair, OSU
Opening Remarks
- 8:45-9:15 **Steve Perakis**, Research Ecologist, USGS Forest and Rangeland Ecosystem Science Center and Courtesy Professor, Department of Forest Science, Oregon State University
Biogeochemistry across an Oregon Forest Soil Nitrogen Gradient
- 9:15-9:45 **Marco Keiluweit**, PhD Student, Crop and Soils Science, OSU.
C and N Dynamics at Organo-Mineral Interfaces in Soils: A Joined STXM/NEXAFS and NanoSIMS Approach
- 9:45-10:15 **Kelsey Yee**, PhD Student, School of Chemical, Biological and Environmental Engineering, OSU.
Production and Applications of the Lignin Degrading Enzyme Manganese Peroxidase
- 10:15 – 10:30 **Discussion:** Early Morning Speakers
- 10:30 - 10:45 **Break**
- 10:45-11:15 **Luis Sayavedra-Soto**, Associate Professor, Botany and Plant Pathology, OSU.
Nitrification and Ammonia-Oxidizing Archaea
- 11:15-11:45 **Mohammad Azizian**, Research Associate, School of Chemical, Biological and Environmental Engineering, OSU.
Evaluation of PCE, TCE, and Sulfate Reduction in Chemostats with Different Dehalogenating Cultures and Fermenting Substrates

- 11:45-12:15 **Hong Liu**, Assistant Professor, Biological and Ecological Engineering, OSU.
Microbial Fuel Cells: A Novel Technology for Sustainable Energy Generation and Remediation
- 12:15-12:30 **Discussion:** Late Morning Speakers
- 12:30 - 1:15 PM **Portable Lunches: LaSells Stewart Center**
- 1:15-1:45 **Dorthe Wildenschild**, Associate Professor, School of Chemical, Biological and Environmental Engineering, OSU.
Imaging Biofilm and Microbial-Driven Processes in Porous Media
- 1:45-2:15 **Nathan Fulton**, MS Student, Environmental Engineering, OSU.
Removal of Pathogens from Drinking Water with Alternative Media Biosand Filters
- 2:15-2:45 **Jeff Nason**, Assistant Professor, School of Chemical, Biological and Environmental Engineering, OSU.
Nanoparticles in Aquatic Systems: The Importance of Physico-Chemical Properties for Fate, Transport and Toxicity
- 2:45 – 3:00 **Discussion:** Early Afternoon Speakers
- 3:00 – 3:15 **Break**
- 3:15-3:45 **Tyler Radniecki**, Research Associate, School of Chemical, Biological and Environmental Engineering, OSU.
Nitrification Inhibition by Silver Nanoparticles: Importance of Nanoparticle Characterization and Dissolution
- 3:45-4:15 **Rick Colwell**, Professor, College of Oceanic and Atmospheric Sciences, OSU.
Geological Storage of Carbon Dioxide in Basalts: A Microbiological Perspective
- 4:15-5:00 **Discussion**
- 6:00 – 7:30 **Dinner CH₂M Hill Alumni Center Patio (near La Sells)**
- 7:30 – 9:00 **Poster Session**