DOE-ERSP Annual PI Meeting
National Conference Center, Lansdowne, VA

Agenda

Monday, April 7, 2008

Afternoon Session

1:00 p.m. **ERSP Programmatic Overview and Outlook for the Future**
David Lesmes, Acting Division Director, ERSD

1:30 p.m. **Welcome Back**
Anna Palmisano, Associate Director of Science for Biological and Environmental Research

2:00 p.m. **A Geologic Framework for Reactive Solute Transport Properties in Sedimentary Aquifers**
Richelle M. Allen-King, University at Buffalo (SUNY)

2:30 p.m. **Significance of Microporosity to Reactive Transport Modeling at DOE Sites**
James A. Davis, U.S. Geological Survey

3:00 p.m. BREAK

3:30 p.m. **Coupled Biogeochemical Processes in the Soil and Soil-Plant Systems Responsible for Enhanced Transport of Plutonium in the Vadose Zone**
Daniel Kaplan, Savannah River National Laboratory

4:00 p.m. **Terry Beveridge Memorial Lecture**
Grant Ferris, University of Toronto

5:00 p.m. **DINNER**

6:30 p.m. **Poster Session 1**

Tuesday, April 8, 2008
Morning Session

Integrated Field-Scale Subsurface Research Challenge (IFC) Presentations

8:30 a.m. **Oak Ridge Site**
Phil Jardine, ORNL, and Co-PI's

9:30 a.m. **Old Rifle UMTRA Site**
Phil Long, PNNL, and Co-PI's

10:30 a.m. **BREAK**

11:00 a.m. **Hanford 300 Site**
John Zachara, PNNL, and Co-PI's

12:00 noon **A Roadmap for Practical Deployment of Models for Microbially Mediated Remediation of Metals and Radionuclides at DOE Sites**
Jack Parker, University of Tennessee

12:15 p.m. **LUNCH and FREE TIME (Working Lunch with FREC and IFC teams)**

Afternoon Session

3:00 p.m. **Nitrite Enhanced Chromium Reduction in Three Model Organisms: *Geobacter metallireducens, Sulfurospirillum barnesii,* and *Desulfovibrio desulfuricans* 27774**
John F. Stolz, Duquesne University

3:30 p.m. **Structure and Function of Subsurface Microbial Communities Affecting Radionuclide Transport and Bioimmobilization**
Joel E. Kostka, Florida State University

4:00 p.m. **Metagenomics-Enabled Understanding of Metal-Reducing Communities at the ORNL-FRC**
James M. Tiedje, Michigan State University

4:30 p.m. **From Community Structure to Functions: GeoChip Development and Its Applications to Bioremediation**
Jizhong Zhou, University of Oklahoma

5:00 p.m. **DINNER**

6:30 p.m. **Poster Session 2**

Wednesday, April 9, 2008
Morning Session

8:30 a.m. **Integrated Hydrogeophysical and Hydrogeologic Driven Parameter Upscaling for Dual-Domain Transport Modeling**
John M. Shafer, University of South Carolina

9:00 a.m. **Hyphenated Techniques for Determining pH-Dependent Pore-Scale Uranium (VI) Speciation**
James F. Ranville, Colorado School of Mines

9:30 a.m. **Development of Modeling and Scaling Methods for Predicting Coupled Reactive Transport Processes**
T. Prabhakar Clement, Auburn University

10:00 a.m. **BREAK**

10:30 a.m. **The Role of Microbial Phosphates on Uranium Mobility in the Subsurface**
Patty Sobecky/Martial Taillefert. Georgia Institute of Technology

11:00 a.m. **Effects of Fermentative Activity on Fate and Transport of U and Cr**
Brent Peyton, Montana State University

11:30 a.m. **Biochemical Mechanisms and Energy Strategies of *Geobacter sulfurreducens***
Ming Tien, Pennsylvania State University

12:00 noon **LUNCH (SFA Panel Working Lunch—Orientation and Charge)**

Afternoon Session

Scientific Focus Area (SFA) Presentations—DOE National Laboratories

1:30 p.m. **SFA Overview and Background (ERSD)**
R. Todd Anderson, Program Manager, ERSD

2:00 p.m. **Lawrence Berkeley National Laboratory**
Susan Hubbard

2:30 p.m. **Pacific Northwest National Laboratory**
Harvey Bolton

3:00 p.m. **Oak Ridge National Laboratory**
Liyuan Liang

3:30 p.m. **BREAK**

3:45 p.m. **Stanford Synchrotron Radiation Laboratory**
John Bargar

4:05 p.m. **Argonne National Laboratory**
Carol Giometti

4:25 p.m. **Los Alamos National Laboratory**
Michael Ebinger

4:45 p.m. **Idaho National Laboratory**
Mark Ankeny

5:05 p.m. **DINNER**

6:30 p.m. **SFA Poster Session**

9:00 p.m. **MEETING ADJOURNED**