Battelle's 6th International Symposium on Bioremediation and Sustainable Environmental Technologies

May 8 - 11, 2023, Austin, Texas

Featured Presentations

Monday, May 8, 2023

Short Course - Best Practices for Bioremediation and Reductive Technologies

8 AM to 12 PM The purpose of this course is to present the current best practices for applying bioremediation and reductive technologies to treat common environmental contaminants of concern.

Room 502 **Instructors**: Fayaz Lakhwala (Evonik), Sophia Dore (GHD), Paul Dombrowski (In-Situ Oxidative Technologies, Inc. [ISOTEC]), and Alberto Leombruni (Evonik)

Tuesday, May 9, 2023

Session – A2. Engineering Biogeochemical Transformation

10:30 AM Waterloo 1-2 Spatial and Temporal Application of Two Remedial Technologies at an Active Industrial Site Help Manage the Environmental Risks.
R. Srirangam, F. Lakhwala, A. Kokorsky, and J. Wood.
Ravikumar Srirangam (Evonik/USA)

10:55 AM Waterloo 1-2 Min-Traps for Collection and Analysis of Reactive Iron Sulfide Minerals for Abiotic CVOC Degradation.
C. Divine, S. Justicia-Leon, J. Tilton, D. Liles, D. Taggart, and K. Clark.
Craig Divine (Arcadis/USA)

Session – A3. Biogeochemically-Enhanced Treatment of Chlorinated Organics and Metals

1:25 PM Waterloo 1-2 Biogeochemically-Enhanced Treatment of Chlorinated Organics and Metals.
D. Leigh and A. Seech.
Daniel Leigh (Evonik/USA)

Session – C2. Remediation and Management of Petroleum Hydrocarbon Contaminated Sites

1:50 PM Waterloo 4 Application of an All-in-One ISCO Technology for the Treatment of Hydrocarbons, BTEX and MTBE at a Former Retail Petrol Station in Italy.
A. Leombruni, M. Mueller, and B. Smith.
Alberto Leombruni (Evonik/Italy)

2:15 PM Waterloo 4 TBA Remediation Approaches at Two Distinct Sites: One Large-Scale and One with Really High Concentrations.
A.A Rees, F.J. Barajas, and D.M. Monson.
Assaf Rees (AECOM/USA)

2:40 PM Waterloo 4 Remediation and Management Strategies for Redevelopment of a Former MGP Site.
J. Bergman, H. Nord, P. Elander, J. Molin, B. Smith, E. Toumie, and F. Westin.
Jonny Bergman (Sheeba Enviromental Engineering AB/Sweden)

Wednesday, May 10, 2023

Session – A5. Optimization of Classical Bioremediation Technologies

9:40 AM
Waterloo 1-2

Evaluating the Effect of Salinity on In Situ Biological Reduction of a 1,2-DCA Plume.
I. Pelz, A. Chemburkar, A. Breckenridge, J. Kerl, and D. Leigh.
Isaac Pelz (ERM/USA)

Session – E6. Bioremediation of Munitions Constituents

1:25 PM
Waller A-B

Linking Proven Technologies to Bioremediate TNT and Metabolites and Facilitate On-Site Reuse of Soil.
S.M. Larew, E.D. Meeks, and A.G. Seech.
Scott Larew (Kennedy/Jenks Consultants/USA)

Thursday, May 11, 2023

Session - A9. Ex Situ and Vadose Zone Biological Treatment

8:50 AM
Waterloo 1-2

Optimizing Bioremediation of Recalcitrant Soil Contaminants in Canada's Cold Climate.
J. Pare and M. Bendouz.
Jean Pare (Chemco, Inc./Canada)

9:15 AM
Waterloo 1-2

Bioremediation of Soils Containing Organic Explosive Compounds Using ZVI/Organic Carbon Reagents.
J. Valkenburg and A. Seech.
John Valkenburg (Evonik/USA)

9:40 AM
Waterloo 1-2

Enhanced Bioremediation of Pentachlorophenol Contaminated Soil.
A.G. Seech.
Alan Seech (Evonik/USA)

Session - C6. Bioremediation Case Studies

9:15 AM
Waterloo 4

Enhanced In Situ Reductive Bioremediation of Trichloroethene in an Aerobic, Fractured Bedrock Aquifer, MCB Camp Pendleton, San Diego, California.
N.I. Rothell, M. Cutler, and D. Leigh.
Daniel Leigh (Evonik/USA)

Session E. – Panel Discussion: Science, Application, Monitoring, and Illustrative Case Studies of Biogeochemical Remediation

10:30 AM
to
12:10PM
Waller A-B

This panel will discuss the key elements required to be successful in each step of remediation using biogeochemical processes. These steps include understanding the fundamentals and advanced concepts regarding the science, design, application, monitoring and case studies.
Moderator: Brant Smith, P.E., Ph.D. (Evonik)
Panelists: Paul Tratnyek, Ph.D. (Oregon Health & Sciences University), Alan Seech, Ph.D. (Evonik), Eliot Cooper (Cascade), Dora Taggart (Microbial Insights), Dan Leigh, P.G. (Evonik)

Featured Poster Presentations

Group 1 Posters
Display: Monday 7:00 PM – Tuesday 7:00 PM
Presentations: Tuesday 5:45 PM – 7:00 PM

Session – A2. Engineering Biogeochemical Transformation

Poster # 6 Application of a Combined Biological, Chemical and Biogeochemical Treatment of a Trichloroethene Plume in Northern California.
A. Chemburkar, D. Leigh, and S. Telesz.
Daniel Leigh (Evonik/USA)

Group 2 Posters
Display: Wednesday 7:00 AM – Thursday 1:00 PM
Presentations: Wednesday 5:45 PM – 7:00 PM

Session – A9. Ex Situ and Vadose Zone Biological Treatment

Poster # 12 Soil Bioremediation at a Former Insecticide Warehouse
R.E. Guerra and A. Seech.
Alan Seech (Evonik/USA)

Poster # 13 Treatability Testing for Effective In Situ Metals Immobilization at Complex Sites: Objectives, Methods, Results, and Lessons Learned from Vadose Zone Applications.
R.S. Srirangam and A. Seech.
Ravikumar Srirangam (Evonik/USA)

Session – C7. Bioremediation Approaches for the Innovative Management of Large or Dilute Plumes

Poster # 59 Full-Scale Application in Italy of a Combined ISCR and ERD Technology for the Treatment of an Aerobic Aquifer Impacted with Tetrachloromethane and Chloroform.
A. Leombruni, M. Mueller, F. Lakhwala, and D. Leigh.
Alberto Leombruni (Evonik/Italy)


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