



This meeting is a forum for communications between the Consortium academic community and the corporate sponsor community, research collaborators and "friends" of the Consortium who provide additional insights and links to relevant research in other parts of the world. It also provides opportunity for graduate students to acquire presentation experience in front of an audience with diverse experience and interests.

NOTE: Wireless internet access will be available in Rozanski Hall. Please do not leave valuables in cars in the parking lot.

Presenters Please Allot 3-5 Minutes of your Time Slot for Questions

Day 1: Tuesday June 6th Presentations in 103 Rozanski Hall, UG

7:30 - 8:15 Registration (Rozanski Hall Registration Area); BREAKFAST served (Coffee, tea, juice, fruit, yogurt, croissants, danish, muffins etc.)

8:15 - 8:25 B. Parker (UG) Welcome to the University of Guelph and G360
 8:25 - 8:35 J. Cherry (UG) Consortium Overview: Past, Present, Future and This Meeting

Theme 1: Evolution of Source and Plume Conditions Part 1

Moderator: B. Parker (UG)

8:35 - 8:40 Moderator Overview
 8:40 - 9:00 B. Parker (UG) Source Zone Evolution & Longevity: Thirty Years of Consortium Effort & Insights from Field Research
 9:00 - 9:15 R. Stuetzle (DOW Chemical Company) Free Product DNAPL Located in a Complex Sedimentary Rock System Based on Conceptual Model
 9:15 - 9:30 P. Wanner (UG) Assessing the effect of chlorinated hydrocarbon degradation in aquitards on plume persistence due to back-diffusion
 9:30 - 9:50 S.K. De Long (CSU) Use of Meta-omics Data to Resolve Microbial Processes

9:50 - 10:05 Discussion

10:05 - 10:25 BREAK- Coffee, tea, juice

Theme 1: Evolution of Source and Plume Conditions Part 2

Moderator: O. Shouakar-Stash (UW)

10:25 - 10:30 Moderator Overview
 10:30 - 10:40 J. Cherry (UG) Chambers Works Site Overview: Old Contaminated Site With Extreme Complexity
 10:40 - 10:55 T. Gilevska (UT) High Resolution Compound Specific Isotope Analysis contributions to Conceptual Site Model Development at the Detailed Study Area, Chambers Works Site
 10:55 - 11:15 O. Shouakar-Stash (UW) Latest Research and Insights on CSIA Applied to Monochlorobenzene and 1,2-DCA
 11:15 - 11:30 S. Chapman (UG) Simulation of a Quasi-Stationary Plume in Fractured Sandstone
 11:30 - 11:45 K. Bairos (UG) DNAPL Origin for Deep Metolachlor Contamination in a Dolostone Aquifer

11:45 - 12:00 Discussion

12:00 - 1:00 GROUP LUNCH

Theme 2: Emerging Technologies and Approaches

Moderator: J. Cherry (UG)

1:00 - 1:05 Moderator Overview
 1:05 - 1:25 J. Cherry (UG) 30 Years of Innovation in The Consortium
 1:25 - 1:40 E. Persaud (UG) Innovative Application of FLUTE™ Liners for Cross-Hole Testing
 1:40 - 1:55 J. Fernandes (UG) Recent Developments in Multi-Level Monitoring Systems
 1:55 - 2:10 M. Irianni-Renno (CSU) Analysis of Cryogenically Preserved Samples
 2:10 - 2:30 T. Gorecki (UW) Advances in permeation passive sampling of VOCs

2:30 - 2:45 Discussion

2:45 - 3:05 BREAK- Coffee, tea, gourmet cookies

Theme 3: Recent Advances in Contaminated System Analysis

Moderator: J. Meyer (UG)

3:05 - 3:10 Moderator Overview
 3:10 - 3:30 R. Cramer (Burns & McDonnell) Environmental Sequence Stratigraphy: A Focus on Geology to Predict Subsurface Conditions Between and Beyond Data Points
 3:30 - 3:50 J. Meyer (UG) Enhanced Geological Characterization to Improve a Site Conceptual Model for a Mixed Composition DNAPL Site
 3:50 - 4:10 T. Al (UO) Observations of variable geochemical porosity for Cl and Br from clay-rich sedimentary rocks
 4:10 - 4:25 J. Kennel (UG) Geostatistics as a Working Tool for Site Characterisation and Monitoring

4:25 - 4:40 Discussion

END OF DAY 1

5:00 - 6:00 - Cash Bar @ Science Complex Building; UofG

6:00 - 8:30 - Group Dinner @ Science Complex Building; UofG

Day 2: Wednesday June 7th Presentations in 103 Rozanski Hall, UG

Consortium Business Meeting (By Invitation Only)

Room: Rozanski Room 109

7:00 - 7:30 BREAKFAST for Business Meeting

7:30 - 10:00 Consortium Business Meeting

Day 2 Program Presentations Begin:

9:30 - 10:00 Coffee, tea, pastries, fruit

Theme 4: Riverine Characterisation and Sediment Transport

Moderator: H. Klammer (UF)

10:00 - 10:05 Moderator Overview

10:05 - 10:25 A. Binns (UG) Overview of Riverine Sediment Transport Processes and Implications for Contaminant Behaviour

10:25 - 10:45 A. Jackson (TTU) The Use of Spatially Discrete Passive Samplers to Simultaneously Evaluate Contaminant Transport and Impacts of Biogeochemical Processes in Dynamic Systems

10:45 - 11:00 G. Martin (DOW Chemical Company) Future Deployment Opportunities for the "Button" Peeper Sampler

11:00 - 11:20 H. Klammer (UF) Passive Measurement of Vertical Water and Solute Fluxes in Sediment Beds

11:20 - 11:35 L. Tochko (CSU) The Use of Oleophilic Bio-Barriers to Manage Sheens at Hydrocarbon-Contaminated Sites

11:35 - 11:40 Discussion

Theme 5: Advances in Groundwater Recharge Analysis

Moderator: C. Steelman (UG)

11:40 - 11:45 Moderator Overview

11:45 - 12:00 F. Manna (UG) Analysis of Mechanisms of Recharge to Refine Plume Contaminant Fluxes

12:00 - 12:15 K. Walton (UG) Numerical Modeling of Recharge and Implications for Vadose Zone Contaminant Behavior

12:15 – 1:15 GROUP LUNCH

1:15 Begin Boarding the Bus to the Bedrock River Research Station, Bus leaves at 1:30

Theme 6: Tour of the Bedrock River Research Station

C. Kennedy (UG) Bedrock Seepage Meters and Surface Water-Groundwater Hydraulics

C. Steelman (UG) Riverbed Geoelectrical Mapping

D. Capes (UG) Ambient Temperature Monitoring in Sealed Bedrock Boreholes within a Seasonally Dynamic Groundwater-Surface Water System

P. Quinn (UG) Advanced Technology for High Resolution Borehole Hydraulic Testing

P. Pehme (UG) Temporary Deployment of Downhole Measurement and Sampling Devices for Bedrock

4:15 Begin Boarding Bus back to UoG, Bus leaves at 4:30

END OF DAY 2

5:00 - 6:00 - Cash Bar @ Science Complex Building; UofG

6:00 - 8:30 - Group Dinner @ Science Complex Building; UofG

Day 3: Thursday, June 8th Presentations in 103 Rozanski Hall, UG

7:30 - 8:00 BREAKFAST (Coffee, tea, juice, fruit, croissants, danish, muffins etc.)

Theme 7: Gas Behaviour in the Vadose Zone

Moderator: K. Dunfield (UG)

8:00 - 8:05 Moderator Overview

8:05 - 8:25 J. Burken (MST)

Sampling Tree Cores in Assessing Vapor Intrusion Risk

8:25 - 8:40 O. Forde (UBC)

Gas Migration and Emissions from a Controlled Methane Injection in the Borden Aquifer, Ontario

8:40 - 9:10 Discussion

Theme 8: Emerging Contaminants

Moderator: J. Blotevogel (CSU)

9:10 - 9:15 Moderator Overview

9:15 - 9:30 J. Blotevogel (CSU)

Electrochemical Treatment of a 1,4-Dioxane Source Zone and Implications for Future Process Design

9:30 - 9:45 Y. Liu (UW)

Removal of Perchlorate, Pharmaceutical Compounds, Artificial Sweeteners, and Perfluoroalkyl Substances from Water using Photocatalytic and Passive Treatment Systems

9:45 - 10:05 S. Pitkin (Cascade)

PFAS Mobile Laboratory Capability Enables Dynamic High Resolution Site Characterization at AFFF Sites

10:05 - 10:20 Discussion

10:20 - 10:40 BREAK- Coffee, tea, juice

Theme 9: Low Energy Approaches for In-Situ Remediation

Moderator: T. Sale (CSU)

10:40 - 10:45 Moderator Overview

10:45 - 11:00 J. Eisenbeis (CDM Smith)

Bioelectrochemical Treatment (E-Redox) to Enhance Back Diffusion and Contaminant Degradation

11:00 - 11:15 D. Tsao (British Petroleum)

Demonstrating the Potential Range of Phytotechnologies

11:15 - 11:35 T. Sale (CSU)

Thermal Energy Balance to Resolve Continuous Natural Source Zone Depletion Rates

11:35 - 11:50 Discussion

Lunch to go 12pm

END OF MEETING

Abbreviations:	
CSU	Colorado State University
MST	Missouri University of Science and Technology
TTU	Texas Tech University
UBC	University of British Columbia
UF	University of Florida
UG	University of Guelph
UO	University of Ottawa
UT	University of Toronto
UW	University of Waterloo