

The University Consortium for Field-Focused Groundwater Research

Our Mission: Conduct world-class credible research to serve the needs of both society and industry, contribute to the advancement of groundwater contamination science, while focusing on real-world problems at contaminated sites.

The University Consortium for Field-Focused Groundwater Research (the “Consortium”) was established in 1987, with the first annual Consortium Meeting taking place in 1988.

Our Members: 3 distinguished directors and 26 principal investigators, from Canadian, Swiss and American universities.



Dr. John Cherry
Director
SOE Adjunct Professor,
University of Guelph &
Distinguished Professor
Emeritus, University of
Waterloo



Dr. Beth Parker
Associate Director
G³⁶⁰ Institute for
Groundwater Research,
NSERC Senior Industrial
Research Chair
Professor, SOE,
University of Guelph



Dr. Tom Sale
Associate Director
Professor in Civil
Engineering
Colorado State
University

The Consortium is unique in its combination of a strong field focus, intensive collaborations with researchers and practitioners around the globe, and frequent interactions with the corporate sponsors.

Our Approach: Each Consortium Sponsor provides a cash contribution of \$200K annually. Consortium principal investigators leverage these contributions with additional private and public grants for a combined value of more than \$10 million per year; this approach to funding ensures the research remains unbiased.

These combined funds are used to conduct field research at actual industrial sites, supporting real-world data with field and laboratory experiments and mathematical modeling. Our overarching goals are to inform remediation and mitigation efforts and improve the decision-making of groundwater practitioners by developing and using novel methods and tools to advance the science surrounding characterizing, monitoring, and conceptualizing real-world sites.

Consortium Sponsors gain access to the results of the Consortium Research Program, and the Consortium hosts a 3-day event at the University of Guelph in June and a special topic focus meeting in Denver in October each year. The Consortium also communicates with its corporate sponsors, the regulatory community, and the groundwater professional community through other meetings, symposia, conferences, and short courses.



Our Success: The Consortium’s continuity and growth over its 32-year history is testimony to its value to the industrial sponsors and achievement of major advances at the frontiers of science. With your support, Consortium researchers collectively publish 40-60 journal articles each year based on Consortium-sponsored research, and graduate 15-20 MSc’s and 1-3 PhD’s. Graduates regularly move onto positions with corporate sponsors or their consultants.

Sponsor Benefits:

Technical Expertise:

- Access to Consortium principal investigators for consulting at sponsor sites.
- Opportunity for research-related field work at reduced rates.
- Access to the Consortium's network of experts.

Information Dissemination: Access to cutting-edge research often before it is even published.

Education: Opportunities to learn from world-class educators, either by having them come to sponsor sites or by teaching workshops.

Networking: Other industrial consortium sponsors often have lessons learned from implementing remediation strategies or technologies at their site.

The University Consortium Pursues the Development of Better Methods and Science Relevant to:

1. Site Characterization Methodologies in a Process Based Framework
2. Off-Site Liability from Contaminant Impacts
3. Methodologies for Improved Data Acquisition, Storage & Analysis
4. Monitoring and Sensing Technologies & Strategies
5. Robust Methodology for Conceptual Site Modeling
6. Develop GCMs for Diverse Contaminant & Hydrogeologic Systems
7. Transport & Fate of Emerging Contaminants
8. Groundwater Resource Protection
9. In-Situ Remediation Technology Assessment
10. Enhanced Attenuation & Long-term Site Management
11. Life-cycle Cost / Benefit Analysis for Source & Plume Management
12. Knowledge Translation & Transfer

Principal Investigators

Andre Unger	Kari Dunfield
Andrew Binns	Kirk Hatfield
Colby Steelman	Mike Annable
Daniel Hunkeler	Orfan Shouakar-Stash
Doug Mackay	Peeter Pehme
Emmanuelle Arnaud	Ramon Aravena
Erica Pensini	Rick Devlin
Frank Loeffler	Rick Johnson
James Longstaffe	Shaily Mahendra
Jana Levison	Susan De Long
Jay Ham	Tadeusz Gorecki
Jens Blotevogel	Tom Al
Jessica Meyer	Ulrich Mayer

Principal Universities

Canada

University of Guelph
University of British Columbia
University of Ottawa
University of Waterloo

USA

Colorado State University
University of Florida
University of Iowa
UC Davis, UC Los Angeles
University of Kansas
Oregon Health & Science University

Switzerland

University of Neuchâtel

Corporate Sponsors

Dow Chemical (>1988)
Boeing (>1993)
Syngenta (>1997)
Dupont (>1999)
Chevron (>2001)
Hydrite Chemical (>2003)
BP (>2006)
Lockheed Martin (>2009)
ExxonMobil/Esso (>2010)
Shell (>2010)
Nestlé Waters (>2015)
Chemours (>2017)

Collaborating Organizations

Academic

Lund University	University of Barcelona
McMaster University	University of Bologna
Missouri Institute of Sci & Tech	University of Calgary
Rutgers University, Newark	University of Hong Kong
Stanford University	University of Lausanne
SUSTech (China)	University of Rome
UC Santa Cruz	University of Tennessee
Universite Laval	USP, Sao Paulo

Government

City of Guelph
City of Ottawa
Geological Survey of Canada (GSC)
Geological Survey of Sweden (SGU)
Minnesota Geological Survey
NSERC
Ontario Ministry of Research and Innovation
USGS
U.S. DOE