

Evening Workshop

Monday, 14 Sept 2026

Title	Compound-specific isotope analysis (CSIA) as a characterisation tool for site impacts from organic contaminants
Date and Time	Monday, 14 September 2026, 6:30 PM – 8:30 PM
Duration	2 Hrs
Venue	Adelaide Convention Centre*
Presenter	Daniel Bouchard, PhD Technical Director – In Situ Remediation and Hydrogeology, Contaminated Site Assessment and Remediation GHD, Eastern Canada - Montreal Office
Registration Fees	\$ 200 incl GST

About this workshop

This workshop aims to explain the fundamentals of the Compound-specific isotope analysis (CSIA) method, to describe state-of-the-art applications, to depict field implementation strategies for a successful CSIA assessment, and to expose all type of information that can be obtained when deploying CSIA at field sites contaminated by petroleum hydrocarbons or chlorinated solvents. Field cases covering monitoring natural attenuation, forensic investigations and performance assessment of diverse in situ remediation treatments will be provided and discussed to highlight the value of CSIA as a diagnostic tool and the lessons learned. .

Why Attend?

Over the past three decades, numerous research studies performed on CSIA have successfully produced a highly sensitive field assessment tool to document source signatures and transformation processes for organic constituents of concern (COC). The scientific foundations and practical applications of CSIA have been widely disseminated into the industry through numerous scientific review publications, comprehensive textbooks, and guidance documents. As a result, the method has become cost effective and is now increasingly used by field practitioners to gain key information on COC origin and fate that traditional methods based on concentration analysis are unable to reveal.

Whether you are new to isotope techniques or looking to expand your expertise, this short course will provide practical tools and knowledge that can immediately enhance your ability to investigate contaminated sites using CSIA with confidence and technical rigor. By the end of the course, participants will have a clear understanding of both the capabilities and limitations of CSIA, enabling them to use this powerful tool with technical rigor and improve site management and remediation decisions..

Who should attend?

- Regulators and Compliance officers
- Consultants
- Risk Assessors
- Asset and landowners

Workshop attendees will receive

- 2.0 hrs of CPD point
- Presentation slides (as secured PDF) on USB
- A downloadable online resource folder

Workshop Program

Evening Session:	
6:30 – 6:40 PM	Introduction
6:40 – 7:20 PM	The workshop starts
7:20 – 7:30 PM	Break
7:30:– 8:15 PM	The workshop continues
8:15 – 8:30 PM	Q&A and wrap-up

Session topics will include

- Isotope fundamentals
- Principles and mechanism of isotope fractionation
- Field data interpretation concepts
- Field applications – Field case examples
- Limitations & pitfalls in CSIA application
- Summary – Q&A

Presenter



Daniel Bouchard, PhD

Technical Director – In Situ Remediation and Hydrogeology, Contaminated Site Assessment and Remediation
GHD, Eastern Canada - Montreal Office

Dr. Bouchard is currently a Technical Director for in-situ remediation and hydrogeology at GHD, where he provides technical leadership on complex contaminated site projects requiring in-depth contaminant characterisation to better understand their origin, behaviour, and environmental fate prior to support implementation of site-specific in-situ remediation treatments. His expertise focuses on assessing contaminant sources, transport mechanisms, degradation processes, and environmental fate through the integration of hydrogeological, geochemical, and forensic assessment tools. Dr. Bouchard has more than 20 years of experience applying and advancing Compound-Specific Isotope Analysis (CSIA) for environmental investigations and remediation projects. He has contributed to the development and application of CSIA through doctoral research focused on isotope method development and postdoctoral research evaluating the use of CSIA to assess remediation performance at the University of Neuchâtel, Switzerland. Throughout his career, Dr. Bouchard has bridged the gap between CSIA research and practice by leading and participating in numerous industry-funded research initiatives and field applications. He is a recognized practitioner in the application of environmental isotopes and has helped transfer advanced CSIA methodologies from academic research to practical implementation at contaminated sites across North America and internationally.

Notes:

(*) Workshop room details will be advised closer to the event date.

(+) Time slots suggested in the program are indicative and may vary slightly based on the final program.

-Delegates are required to bring their laptop to complete hands-on exercises and access workshop resources
