

WORKSHOP

September 4th

The QEICC, London



In Situ
Remediation'14

2nd – 4th September 2014

In Situ Remediation of Contaminated Sites

The workshop, presented by international experts in their fields, will deliver focus on key aspects critical to the delivery of successful in situ remediation projects. The course will be presented by:

Professor Gary Wealthall, Ph.D., an Associate of Geosyntec Consultants, based in Toronto, and an Adjunct Professor in Environmental Engineering at the University of Guelph (ON Canada). A co-author of best-practice guidance on DNAPLs and LNAPLs, he has led advanced training courses on five continents.

Jim Wragg, MSc is a Principal Hydrogeologist with Geosyntec based in Delph, Oldham. He has over 25 years of experience in implementing a broad spectrum of remediation technologies at industrial sites in Europe, the Middle East, Southern Africa and South America.

David Major, Ph.D., is a Principal of Savron, a division of Geosyntec Consultants, an Adjunct Professor in the Department of Chemical Engineering and Applied Chemistry at the University of Toronto and Associate Editor of Ground Water Monitoring and Remediation. He has been a pioneer in the development and application of technologies to treat chlorinated solvents including Monitored Natural Attenuation (MNA) and Enhanced In Situ Bioremediation (EISB).

This is a half day workshop (0830-1300) organised by Geosyntec Consultants. The workshop fee is £89 and this includes workshop handouts, lunch and coffee break. Places are limited to 25, so please book early to avoid disappointment. Registration closes on **August 20th 2014**.



To register, please visit : <http://theadvocateproject.eu/conference/main.html> or CL:AIRE website: www.claire.co.uk

Geosyntec
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ADVOCATE



Programme

1. Development of Conceptual Models at Remediation Sites

In this opening session we will present published Conceptual Site Model (CSM) methodologies to guide project teams through the entire cleanup process, from project planning to site completion. The instructors will focus on the level of effort necessary to develop robust, credible and defensible CSMs, based on the level of site maturity, site complexity, and the magnitude of the characterization and cleanup challenges. The session will provide an in depth view of requirements for iterative improvement of understanding as the project proceeds, whereby the CSM becomes increasingly quantitative and decreasingly conceptual in nature as data are collected, data gaps filled, and CSM elements that help depict site data mature. We will conclude by examining some of the pitfalls in evolution of the CSM lifecycle, and present examples of CSMs that have been developed to meet the selection, design, implementation and performance assessment of increasingly sophisticated remedial technologies.

2. Bench & Field Scale Pilot Studies for In Situ Remediation Design

There are a rapidly growing number of established and emerging in situ remedial technologies available to tackle aspects of ground contamination at industrial sites. Successful implementation of these often requires bench or field scale testing. These may be used for proof of concept for unusual applications; to select the best performing amendment from a range of options or to establish key design parameters.

The middle session will set out the benefits of these design studies for the range of in situ remedial technologies and use case studies (for ISCO, EISB, PRB and MPE) to illustrate how they are scoped, implemented and the results interpreted to develop full scale designs.

3. Novel and Emerging In Situ Remediation Technologies

Recent developments in the array of available in situ remediation technologies are for the most part targeted at addressing those contaminants or components of the contaminant mass that established technologies just won't reach. Particular challenges include issues such as tarry free product in the subsurface and organic solvents in low permeability soils. The final session will lay out some exciting novel and emerging technologies that have been developed to address each of these problems: STAR & STARx and the EK-family -Bio, -ISCO, and TAP.

This workshop is organised within the framework of the Marie Curie Initial Training Network ADVOCATE—Advancing sustainable in situ remediation for contaminated land and groundwater, funded by the European Commission, Marie Curie Actions Project No. 265063