General Information

"In Situ Remediation '14" is an international conference organised and presented by CL:AIRE on behalf of the ADVOCATE network and will take place **in the heart of London on 2nd – 4th September 2014**. Combining 2-days of presentations and a third day of thematic workshops, the conference will present and discuss the latest scientific research, technical advances and innovations in the management, assessment and sustainable in situ remediation of contaminated land and groundwater.

Venue

The Conference will be held at **St James and Westminster suites at the Queen Elizabeth II Conference Centre** which is located in the heart of Westminster (http://www.qeiicc.co.uk/).

By plane: London has five major airports, ordered by proximity: London City, London Heathrow, London Gatwick, London Luton and London Stansted. Further information can be found directly from the airport's websites and the conference website.

By train: Eurostar is a quick and easy way to travel between the UK and continental Europe via the Channel Tunnel. For up-to-date information on getting to and from St Pancras International visit the Eurostar website (http://www.eurostar.com/). However, to plan a regional journey to London by rail, please use the National Rail website (http://www.nationalrail.co.uk/).

London transport: You can move around Central London by taxi, bus or tube. For information on all forms of transport in London, please visit transport for london website (http://www.tfl.gov.uk/).

Accommodation

The Conference website will provide a list of nearby hotels. Please note that accommodation is not included in the price, nor are we able to place bookings on your behalf. If you want to book a hotel in the meantime, you can use the website recommended by the conference venue (https://www.hotelmap.com/pro/M7QAN).

Workshop Information

Thanks to **Geosyntec Consultants**, half-day workshop has been organised and will run between 8.30 - 13.00. The workshop can be attended by those attending the conference and by external delegates. The workshop themes is:

- "In Situ Remediation of Contaminated Sites" 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**.

Conference rate

Full registration £240 (plus VAT) | **Full registration and dinner** £295 (plus VAT)

More information in: http://www.theadvocateproject.eu/conference/main.html

Follow us: ADVOCATE Marie Curie Network group

@advocatenetwork The Advocate Marie Curie Network

In Situ Remediation'14

2nd – 4th September 2014

The In Situ Remediation 2014 Conference is organised by **CL:AIRE** on behalf of the ADVOCATE Network

Sponsored by

ARCADIS EC HARRIS

Celtic enGlobe

Geosyntec consultants

REGENESIS

PeroxyChem

REMEDX

This conference 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

Tuesday 2nd September 2014

8.30 **Registration**

10.00 **Opening Address**

10.15 **Session 1: Urban groundwater contamination and emerging contaminants**

Co-chair: Miller Mueller (PeroxyChem) & Vidhya Chittoor Viswanathan (EAWAG)

Keynote: Challenges in urban hydrogeology - Examples from Berlin

Prof. Dr. Gudrun Massmann (Carl von Ossietzky Universität Oldenburg)

Groundwater energy and remediation: realising the synergy in the Netherlands

Rachelle Verburg, ARCADIS Netherlands

Emerging contaminants in urban groundwater in areas of Doncaster

Debbie Allen, British Geological Survey

Carbon and chlorine isotopes fractionation of chlorinated ethenes during diffusive transport in low permeability sediments

Philipp Wanner, University of Neuchâtel

Adaptation: A requirement when assessing and managing emerging contaminants — Perfluoroctane Sulfonate (PFOS) as a case study

Adrian Bhreathnach, ARCADIS EC Harris

12.00 **Lunch and Poster Discussion**

13.30 **Session 2: Novel methods for the assessment of in situ remediation processes and performance**

Co-chair: Dr Ian Ross (ARCADIS EC HARRIS) & Oksana Voloshchenko (UFZ)

Keynote: Radon - An effective environmental tracer for subsurface NAPL contamination and in situ remediation assessment

PD Dr. rer. nat. habil. Michael Schubert (Helmholtz Centre for Environmental Research - UFZ)

Removal of diesel hydrocarbons by constructed wetlands — Isotopic methods to describe degradation

Andrea Watzinger, Austrian Institute of Technology GmbH

To what extent can isotopes help substantiate natural attenuation of chlorinated ethenes?

Alice Badin, University of Neuchâtel

Assessment of residual Dense Non-Aqueous Phase Liquid (DNAPL)

Thomas Held, ARCADIS Deutschland

Microbial nitrogen transformation in constructed wetlands treating contaminated groundwater

Oksana Voloshchenko, Helmholtz Centre for Environmental Research - UFZ

15.15 **Coffee Break**

15.45 **Session 3: Permeable reactive barriers, in situ chemical oxidation, enhanced abiotic and thermal treatment technologies**

Co-chair: Dr David Major (Geosyntec Consultants) & Franklin Obiri-Nyarko (HydrogeotechnikavSp. Zo.o.)

Keynote: Challenges in subsurface in situ remediation of chlorinated solvents

Associate Professor Mette Martina Broholm (Technical University of Denmark, Dept. of Environmental Engineering)

Integrating sustainable in situ thermal and biological treatment at a fractured bedrock site

James Baldock, Environmental Resources Management

Use of electrokinetically-enhanced bioremediation (EK-BIO) and chemical oxidation (EK-ISCO) to remediate source areas in clay and silt

Marcus Ford, Geosyntec Consultants

Application of permeable reactive barriers for sustainable remediation of groundwater contaminated by heavy metals and BTEX

Franklin Obiri-Nyarko, Hydrogeotechnika Sp. z o.o.

A combination of high vacuum extraction and in situ chemical oxidation for the recovery and destruction of chlorinated hydrocarbons

Chris Taylor-King, Celtic Ltd

17.30 **Close of First Day**

19.30 **Conference Dinner in Brasserie Le Blanc, Covent Garden (Central London)**

Wednesday 3rd September 2014

9.00 **Session 4: Natural attenuation and engineered in situ bioremediation**

Co-chair: Dr Jeremy Birnstingl (REGENESIS) & Uwe Schneidewind (VITO, Ghent University)

Keynote: Microbial services and their management: recent progress in soil clean-up and bioremediation technology

Prof Dr ir Willy Verstraete (LabMET, Ghent University)

Performance of an in situ chemical reduction bio-barrier for remediation of tetrachloroethene and trichloroethene in a chalk aquifer

David Granger, URS Infrastructure & Environment UK Limited

Permeable reactive interceptors: blocking diffuse nutrient and greenhouse gases losses in key areas of the farming landscape

Owen Fenton, TEAGASC

Enhanced biodegradation using nano-scale iron oxides

Thomas Held, ARCADIS Deutschland

Bioremediation of groundwater enhanced by microbial interaction with solid state electrodes

Wei Huang, University of Sheffield

10.45 **Coffee Break**

11.15 **Session 5: Fate and transport of contaminants in the vadose zone**

Co-chair: Felipe Couto (REMEDX) & Natalia Fernandez de Vera (University of Liège)

Keynote: Optimization of remediation strategies using vadose zone monitoring systems

Dr Ofer Dahan (Zuckerberg Institute for Water Research, Ben-Gurion University of the Negev)

Vadose zone studies at an industrial contaminated site: The vadose zone monitoring system and cross-hole geophysics

Natalia Fernández de Vera, University of Liège

LNAPL transport and fate in the subsurface: Remediation industry best practice guidance

Gary Wealthall, Geosyntec Consultants

Reactive transport in porous media: Verification of subsurface processes with stable isotope fraction

Ali Mongol, Helmholtz Centre for Environmental Research - UFZ

Investigating the impact of heterogeneity in streambed sediments on flow, transport and biodegradation processes in the hyporheic zone

Uwe Schneidewind, VITO and SOCON, Ghent University

13.00 **Lunch and Poster Discussion**

14.30 **Session 6: Sustainability assessments of in situ remediation technologies, including economic aspects and feasibility studies**

Co-chair: Dr Joe Teer (Celtic Ltd) & Alistair Beames (VITO, Ghent University)

Keynote: Innovative remediation techniques: The key to sustainable and green remediation?

Dr. Ilse Van Keer (VITO - Flemish Institute for Technological Research, Environmental Modelling Unit)

Sustainable application of steam enhanced dual phase extraction in the treatment of heavier end and high viscosity hydrocarbons

Felipe Couto, RemedX Ltd

Sustainability assessment and temporal variations between remediation technologies

Alistair Beames, VITO and SOCON, Ghent University

A review of the legislative and regulatory basis for sustainable remediation in the European Union and United Kingdom

Steven Tan, URS Infrastructure & Environment UK Limited

The influence of feasibility study in selecting a sustainable approach for the remediation of soils and deep impacted groundwater at active petrol stations

Michael Murphy, RemedX Ltd

16.15 **Award of Prizes and Closing Address**

16.30 **Conference Close**

Thursday 4th September 2014 - Workshop (see first page for details)