

**Thursday 23<sup>rd</sup> March 2006**

# **Aquifer Contamination and In Situ Remediation**

A meeting convened by The Hydrogeological Group of The Geological Society

**at The British Geological Survey, Keyworth**

**Final Programme and Registration**

The Hydrogeological Group of The Geological Society meeting has organised a one day meeting on Aquifer Contamination and Insitu Remediation for Thursday 23<sup>rd</sup> March 2006 at the British Geological Survey in Keyworth, Nottingham. The meeting will cover current research in all aspects of aquifer contamination and in situ remediation, with emphasis on the application and demonstration of in situ remediation technologies for management of contaminated groundwater, regulatory considerations, scientific understanding of processes, performance evaluation and practical implementation.

As this meeting will be very well attended, it is recommended that you register as soon as possible. To register, send an email entitled "Aquifer Contamination & In situ Remediation Registration" to Jenny Chambers at the University of Sheffield ([J.A.Chambers@sheffield.ac.uk](mailto:J.A.Chambers@sheffield.ac.uk)), indicating: (i) name, (ii) affiliation, (iii) Geological Society membership if applicable.

The deadline for registrations is **Friday 17<sup>th</sup> March 2006**

Registration costs are as follows :

Members : £20

Non-members: £40

Students : Free, upon production of a valid student identity card

Registration fees cover lunch and refreshments. Registered delegates should pay by cash or cheque on the day of the meeting. Cheques should be made payable to the "Hydrogeological Group". Receipts will be provided for all payments.

For further information, contact the meeting convenors :

Steve Thornton (University of Sheffield), Email: [s.f.thornton@sheffield.ac.uk](mailto:s.f.thornton@sheffield.ac.uk)

Gareth Digges la Touche (MJ Carter Associates), Email: [gdl@mjca.co.uk](mailto:gdl@mjca.co.uk)

Registration details and abstracts of presentations are available on the Geological Society website: <http://www.geolsoc.org.uk>

The programme of platform and poster presentations is provided overleaf

<b>Provisional programme of platform presentations</b>	
<b>Time</b>	
09.30	<b>Registration and coffee</b>
	<b>Morning session</b>
10.15	Introduction by Steve Thornton
10.20	<i>Management of contaminated mega sites in Germany (Invited presentation)</i> M. Schirmer (UFZ Leipzig-Halle, Germany)
10.50	<i>Uncertainty in quantifying DNAPL source zone distribution for in situ remediation design and performance assessment</i> G. P. Wealthall, M. R. Lelliott, M. R. Cave, C. S. Cheney, E. J. Whitehead & L. Houlden (BGS & Archon Environmental Consultants Ltd)
11.15	<i>Optimising data point density for mass flux-based assessment of in situ remediation performance</i> R. D. Wilson, C. Naas & D. Mackay (University of Sheffield, University of Waterloo, Canada & University of California at Davis)
11.40	<i>Evaluation, design and operation of a permeable reactive barrier (PRB) for carbon disulphide-contaminated groundwater</i> P. Morgan, R. Thurgood & M. Campbell (ESI Ltd & Terralsula)
12.05	<i>A kerosene spill on the Chalk – a risky business</i> T.E.J. Wright, J.N. Robinson & M.L. Goldberg (Atkins Environment Ltd)
12.30-13.45	<b>Lunch and poster session</b>
	<b>Afternoon session</b>
13.45	<i>Sequential in situ remediation: combining aggressive technologies with microbial degradation (Invited presentation)</i> P. Bjerg (Technical University of Denmark)
14.15	<i>Pump-and-treat remediation of dissolved chlorinated solvent plumes at the Borden research site, Canada</i> M. O. Rivett, S.W. Chapman, R. M. Allen-King, S. Feenstra & J. A. Cherry (University of Birmingham, University of Waterloo, Canada, University at Buffalo, USA & Applied Groundwater Research Ltd, Canada)
14.40	<i>Environmental controls on MTBE degradation in the UK Chalk aquifer</i> S. F. Thornton, N. Shah & S.H. Bottrell (University of Sheffield & University of Leeds)
15.05-15.35	<b>Break and poster session</b>
15.35	<i>Phytoremediation of trichloroethene</i> I. F. Ross (Arcadis Geraghty and Miller Int. Ltd)
16.00	<i>Aromatic hydrocarbon invasion into a clay influenced by the presence of palaeo-root holes</i> R. A. White, M. O. Rivett & J. H. Tellam (University of Birmingham)
16.25	Meeting close

Poster presentations overleaf

<b>Poster presentations</b>
<p><i>The dipole flow and reactive tracer test as a novel aquifer assessment tool</i>                      C.J. Berryman, D. McKnight, N. Nayagum, M. Mohamed, A.L. Smalley, S.A. Banwart, S.F. Thornton, R.D. Wilson, N.R. Thompson, D.N. Lerner. (University of Sheffield &amp; University of Waterloo, Canada)</p>
<p><i>Linking chemical composition to physical properties of coal-tar NAPLs to optimise free phase recovery</i>                      H. Briers &amp; R. D. Wilson (University of Sheffield)</p>
<p><i>The biodegradation of contaminant mixtures under aerobic conditions</i>                      M. Burke, S.A. Banwart, S.F. Thornton &amp; H. Potter (University of Sheffield &amp; Environment Agency)</p>
<p><i>Design of zero-valent iron fracture reactive barriers for remediating a TCE plume in a chalk aquifer</i>                      Z. Cai, D. N. Lerner, R. G. McLaren &amp; R. D. Wilson (University of Sheffield &amp; University of Waterloo, Canada)</p>
<p><i>Integration of groundwater circulation with micro and nano-scale zero-valent iron for reductive dechlorination</i>                      S. Forster (IEG Technologies UK Ltd)</p>
<p><i>Are permeable reactive barriers (PRBs) a viable technology for remediation of diffuse nitrate pollution?</i>                      P. Goodman P., S.J. Mooney &amp; E.H. Bailey (University of Nottingham)</p>
<p><i>Impacts of highway run-off on groundwater quality</i>                      A.R. Green, B. Sargent &amp; T. Watkins (Hyder Consulting UK Ltd)</p>
<p><i>Performance prediction and verification of in situ remediation systems</i>                      L. Houlden, G. P. Wealthall &amp; M. Lelliott (Archon Environmental Consultants Limited &amp; BGS)</p>
<p><i>Dynamic effects in two-phase flow behaviour in porous media: Inclusion of micro-heterogeneity and viscosity effects</i>                      M. Mirzaei, R. Gauldie &amp; D. Bhusan Das (University of Oxford)</p>