



Engineering Group of the Geological Society and Hazard Forum

JOINT EVENING MEETING

TUESDAY 16TH MARCH 2010 AT 6.00 PM

At The Geological Society Burlington House,
Picadilly, London, W1J 0BG

Safe Operation of Decarbonised Fuel Schemes

Presented by:

Haroun Mahgerefteh, Professor of Chemical Engineering, University College London

Laurence Cusco, Head of Fire & Process Safety Unit, Health & Safety Laboratory

Murray Shearer, Development Engineer, Hydrogen Energy

Carbon capture and storage (CCS) involves the capture of carbon dioxide generated by the combustion of fossil fuels to provide energy, transporting the captured carbon dioxide to a suitable site, and storing it deep underground in geological formations. In the global battle to counter carbon dioxide emissions, CCS is starting to be recognised by governments and industries as a potent weapon that could be applied to reduce emissions in the near to medium term, while helping to stabilise carbon dioxide levels for the longer term. CCS has a particularly important potential role in countering the carbon dioxide arising from fossil fuel-fired power stations. In many of the schemes, hydrocarbon fuels are converted to CO₂ and hydrogen. The hydrogen is then used as a zero carbon fuel and the waste CO₂ is subject to capture and storage. The safety of CCS schemes will be a key feature in gaining the public's acceptance. Understanding the behaviour of high pressure CO₂ releases and the hazards of hydrogen are critical to providing public reassurance. Both topics will be addressed at this event.

Programme:

18.00	Welcome and introduction, Adrian Collings, Chair
18.05	Presentations <ul style="list-style-type: none">• High Pressure Carbon Dioxide Releases (HM)• Hazard identification for Carbon Capture and Storage processes and a comparison of hazard & risk calculations for CO₂ and natural gas pipelines (LC)• Building design for hydrogen fired gas turbines (MS)
19.05	Discussion and questions
19.35	Concluding remarks
19.40	Wine and light refreshments
20.30	Close

Forthcoming meetings of the Engineering Group of the Geological Society
23rd March 2010 Joint IHT Annual Seminar, Leamington Spa
20th April 2010 Terrain Evaluation



Tea/Coffee will be served in the lower library from 5.30pm

There is no charge for the meeting but please register your interest by emailing the convenor.

Geological Society

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