

## **CO<sub>2</sub>Chem Network – Mineralisation Cluster Workshop**

### ***Mineral Carbonation: Identifying the R&D Priorities***

**10:00am – 4:45pm (& after) Wednesday 28th November 2012**

**Library, Royal Society of Chemistry, Burlington House, Piccadilly, London**

(location: 5mins walk midway between Piccadilly Circus or Green Park tube stations)

*Industry Chair: Michael Priestnall (CEO, Cambridge Carbon Capture Ltd)*

*Academic Chair: Mercedes Maroto-Valer (Professor, Heriot-Watt University)*

## **Programme**

- 10:00-10:20      *Registration, coffee & networking*
- 10:20            **Welcome, mineralisation overview, workshop & cluster objectives; participants' interests & introductions**  
Michael Priestnall (Cambridge Carbon Capture Ltd)
- 10:35            **Setting the scene – natural cycle: CO<sub>2</sub>, silicates, rivers & oceans**  
Prof Mike Bickle (Cambridge University, Earth Sciences)
- 10:45            **Setting the (R&D) scene – international research progress & status**  
Prof Mercedes Maroto-Valer (Heriot-Watt University, Engineering & Physical Sciences and Institute of Petroleum Engineering)

### **Session 1: Large-scale CO<sub>2</sub> sequestration via mineral carbonation**

- 11:00            **ETI's Mineralisation Project – overview, results and conclusions**  
Dr Rebecca Sweeney (Energy Technologies Institute)
- 11:20            **ETI's Mineralisation Project – influence of mineral type on reactivity**  
Prof Mike Styles (BGS/NCCCS)
- 11:30            **UAE natural analogue for mineral carbonation**  
Alicja Lacinska (BGS/NCCCS)
- 11:40            **Coupling mineral carbonation with ocean alkalinity enhancement**  
Dr Phil Renforth (Oxford University, Martin School, Geoengineering)
- 11:50-12:10      *Q&A, comments & discussion*

## Session 2: R&D activities, opportunities & pace of development

- 12:10**                    **Research at Heriot-Watt** – Prof Mercedes Maroto-Valer (Engineering)
- 12:20**                    **Research at Aberdeen** – Prof Fred Glasser (Chemistry)
- 12:30**                    **Research at Southampton** – Prof Damon Teagle (Ocean & Earth Sciences)
- 12:40**                    **Research at Hull** – Dr Will Mayes (Environmental Science)
- 12:50**                    **Research in USA** – Dr Juerg Matter (Earth Sciences, Columbia)
- 13:00-13:20*            *Q&A, comments & discussion*
- 13:20-14:00*            *Lunch & networking (and posters)*

## Session 3: Industrial applications & commercial development

- 14:00**                    **Silica, metals & Mg/Ca oxides (& power) from minerals & wastes**  
Michael Priestnall (Cambridge Carbon Capture Ltd)
- 14:10**                    **Aggregate products via carbonation of APC dust wastes**  
Prof Colin Hills (C8S Aggregates Ltd)
- 14:20**                    **A European perspective on carbonation of wastes**  
Dr Fidel Grandia (Amphos21 Consultants)
- 14:30**                    **Commercial mineral carbonation in Netherlands**  
Dr Keesjan Rijnsberger (Innovation Concepts BV)
- 14:40**                    **Carbon sequestration in the cement industry**  
Prof Alan Maries (MIRO/SCI)
- 14:50-15:10*            *Q&A, comments & discussion*
- 15:10-15:20*            *Tea & networking*

## Session 4: Key application opportunities & associated R&D (& policy) milestone priorities

- 15:20**                    **Workshop session 1 – parallel discussion groups**
- 15:50**                    **Workshop session 2 – parallel discussion groups**
- 16:20**                    **Feedback of workshop main conclusions**
- 16:40*                    *Closing comments*
- 16:45**                    **Close**
- 17:00-19:00*            *Drinks & networking*

Many thanks to all our sponsors. A list of workshop participants will be available at the meeting.  
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