



# Chemistry in the Oil Industry XI

## Regulation Meets Innovation - Moving Forward

Manchester Conference Centre, Manchester, UK  
2 – 4 November 2009

An International Symposium organized by the Royal Society of Chemistry Speciality Chemicals Sector and the European Oilfield Speciality Chemicals Association

### Final Programme



## Sponsors

AkzoNobel Surface Chemistry AB  
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## FINAL PROGRAMME

### Monday 2nd November

17.00 - 20.00 Registration

18.00 - 20.00 Welcome Reception

### Tuesday November 3rd

08.00 - 08.45 Registration

08.45 Welcome  
*David Karsa, TensioMetrics Ltd and RSC Speciality Chemicals Sector*

#### Session 1: REACH: Regulatory & Legislative Issues

Chairmen:  
Graham Payne, EOSCA Executive Secretary & Briar Technical Services Limited  
Dick Weare, Baker Hughes

09.00 Keynote Lecture:  
REACH: Registration Data and the Chemical Safety Assessment  
*Derek Knight, ECHA (European Chemicals Agency)*

09.45 The Interface between REACH and Competition Law: A Summary of the Key Issues  
*Nicola Clark, Hammonds LLP*

10.10 Pre-Registration at Baker Hughes: A Case History  
*Martin D Pritchard, Paul D Henson and Stephen R Keenan, Baker Hughes Limited*

10.35 REACH, SIEFs and Consortia: A Summary of the Key Issues  
*Patricia Jones, Hammonds LLP*

11.00 – 11.30 Refreshments, Exhibition and Posters

#### Session 2: Scale

Chairmen:  
Henry Craddock, Roemex Limited  
Harry Frampton, BP Exploration and Production Technology Group

11.30 Novel Chemical Solutions to Unusual Oilfield Scale Challenges  
*Myles M Jordan and Neil Feasey; Nalco Limited*

11.55 Laboratory Examination of the Factors Influencing the Formation of Silicate Scales under Oil Field Operating Conditions  
*Rob Wright\*, Keith Melvin, Talisman Energy UK; Robert Stalker, Sarah Dyer and Gordon Graham, Scaled Solutions Limited*  
*\* now of Scaled Solutions Limited*

12.20 A Technology Platform for Designing High Performance, Environmentally Benign Scale Inhibitors for a Range of Application Needs  
*Stuart Holt and Jannifer Sanders, AkzoNobel Surface Chemistry AB*

12.45 - 14.15 Lunch, Exhibition and Posters

### Session 3: New Chemistry

Chairmen:

Jack Dunlop, JD Horizons Limited

Paul Reid, Impact Engineering Solutions of Reading

- 14.15 **Gel Systems with Properties Suitable for Remediation of Water Injection Wells with Performance Impaired by Fractures and Super-permeability Zones**  
*Harry Frampton, BP Exploration and Production Technology Group; Spencer Taylor, University of Surrey*
- 14.40 **Modification of Relative Permeability in Wet Wells in Sandstone Reservoirs: Multiple Well Treatments and Core Experiments**  
*Roger J R Cairns, Enhanced Recovery Systems Limited*
- 15.05 **Development of a Novel Fracturing Fluid for Applications in Russia**  
*Andrey Federov, Aleksey Borisenko, Dmitri Oussoltsev, Bernhard Lungwitz, Kevin Mauth and Dan Fu, Schlumberger, Russian Federation*
- 15.30 -16.00 **Refreshments, Exhibition and Posters**
- 16.00 **Design of Highly Inhibitive Water-Based Drilling Fluid for Environmentally Sensitive Land Drilling Applications**  
*Arvind D Patel and Emanuel Stamatakis, M-I SWACO*
- 16.25 **Advances in Kinetic Gas Hydrate Inhibitors**  
*Osama M. Musa, Cuiyue Lei, Jun Zheng and Marc M Alexandre, International Specialty Products (ISP)*
- 16.50 **Structure-Property Relationships for Novel Low-Alkoxyated Corrosion Inhibitors**  
*Per-Erik Hellberg, AkzoNobel Surface Chemistry AB*
- 17.15 **Close**
- 19.30 - 20.00 **Cocktail Reception at the Yang Sing Restaurant**
- 20.00 **Symposium Dinner at the Yang Sing Restaurant**

### Wednesday November 4th

#### Session 4: OSPAR & REACH (reprise)

Chairmen:

Gordon C Graham, Maersk Oil North Sea UK Limited

Graham Payne, EOSCA Executive Secretary & Briar Technical Services Limited

- 08.30 **Keynote Lecture:**  
**Gap Analysis of the OSPAR's Harmonised Mandatory Control System and EC Registration Evaluation Authorisation and Restriction of Chemicals Regulations (1907/2006)**  
*Anthony Millais, Edward J Smith, Robert J Rowles, Denise Doran, Max La Vadrine, Joanna Corton, Steven Supple and Lynn Jones, Cefas*
- 09.10 **The Impact of REACH on the Regulation of Chemicals used Offshore in the OSPAR Convention Area - Another Chance for Harmonisation?**  
*Ian Still, Champion Technologies Limited & EOSCA Chair*
- 09.35 **The Impact of Active Compound Application Methods on the Validity of Ecotoxicity Study Data**  
*Max La Vadrine, Edward J Smith, Anthony Millais, Denise Doran, Lynn Jones, Robert Rowles, Steven Supple and Joanna Corton, Cefas*
- 10.00 **The Development of the EOSCA Generic Exposure Scenario Tool (EGEST) – Why we need it? The development of a method to conduct a generic exposure scenario for offshore chemical use to enable REACH registration**  
*Graham Payne, Briar Technical Services Ltd & EOSCA Secretary; Ian Still, Champion Technologies Limited & EOSCA Chair; Nik Robinson, BMT Cordah Ltd and Steve Groome, Rhodia UK Limited*

10.25 - 11.00 Refreshments, Exhibition and Posters

**Session 5: Biodegradation**

Chairmen:

Harry Frampton, BP Exploration and Production Technology Group  
Paul Reid, Impact Engineering Solutions of Reading

11.00 **Green Polymers for the North Sea**  
*Stefan Frenzel, BASF SE; Andrea Assmann and Roland Reichenbach-Klinke, BASF Construction Polymers GmbH*

11.25 **Progress Towards Biodegradable Phosphonate Scale Inhibitors**  
*Andrew F Miles, Champion Technologies, UK; Henry C Fisher, Scot H Bodnar, Steve D Fidoe and Curtis D Sitz, Champion Technologies Inc*

**Session 6: Sustainability**

Chairmen:

David Karsa, TensioMetrics Ltd and RSC Speciality Chemicals Sector  
Dick Weare, Baker Hughes

11.50 **Keynote Lecture:**  
**Beyond Environmental Regulation: Towards More Sustainable Oil & Gas and Chemical Industries**  
*Professor Adisa Azapagic, University of Manchester*

12.30 – 14.00 Lunch, Exhibition and Posters

**Session 7: Methodologies**

Chairmen:

Gordon C Graham, Maersk Oil North Sea UK Limited  
Dick Weare, Baker Hughes

14.00 **Applying Biochemistry Concepts to Oilfield Produced Fluid Monitoring: A Focus on Latently Detectable Tags and Tracers**  
*Anne-Marie Fuller, Fiona Mackay, Cameron Mackenzie, Catherine Rowley-Williams, Emma Perfect and Vjera Magdalenic, LUX Assure*

14.25 **The Formulation of HTHP Low-Toxicity Oil-Based Drilling Fluids for Wells with Narrow Hydraulic Windows**  
*John W. Chapman, Andy Popplestone and Mike H Hodder, M-I SWACO*

14.50 **Clay Swelling Inhibitor Structure-Activity Relationships: A Combined Molecular Simulation and Experimental Study**  
*Ian Ratcliffe & Pete A Williams, Glyndwr University; Richard Anderson & H Chris Greenwell; Durham University; Steve Cliffe, M-I-SWACO; James Suter and Peter V Coveney, UCL*

15.15 **Selection of Demulsifiers for Electrocoalescence Dehydration**  
*Christine Dalmazzone and Christine Noik, IFP*

15.40 **Reprise: The Symposium's Vision of Regulation Meets Innovation – Moving Forward**  
*Jack Dunlop, JD Horizons Limited and Henry Craddock, Roemex Limited*

16.00 Close  
Refreshments Available