

Chemistry in the Oil Industry IX

31st October – 2nd November 2005, Manchester Conference Centre, UK

PROGRAMME

Session 1: Vision of 2020

Keynote Lecture:

How DTI Sees the Future of the Offshore Oil and Gas Industry

Hywel Evans, *Director - Offshore Environment and Decommissioning Unit, DTI*

Keynote Lecture:

The Role of the Chemistry Discipline Now and in the Future in the Oil Industry

Ken Sorbie, *Heriot-Watt University*

The Potential of Nanotechnology for the Oil Industry

Richard A L Jones, *University of Sheffield*

High Throughput Experimentation for the Oil Industry

Jonathan Oxley, *BP plc*

A Novel and Holistic Approach in Examining the Processes Impacting Barite Inhibition by DETPMP in the Presence of Divalent Cation by Molecular Mechanics Modeling

Fazrie Wahid, Heriot-Watt & Scaled Solutions Ltd; G B Thomson, Heriot-Watt; and Gordon M Graham, Scaled Solutions Ltd

Session 2: Environmental & Regulatory Issues

Environmental Pressures on the Continued Use of Chemicals in Offshore Oilfield Applications

Melanie Thatcher, *Baker Hughes Inteq & EOSCA*, and Graham Payne, *Briar Technical Services Ltd & EOSCA*

OSPAR, Regulators Drive Design: How Regulations Have Impacted a Service Company's Product Development Program

John Hall and Steve Almond, *Halliburton*

Displacement Chemicals and Environmental Compliance – Past, Present and Future

Dave Knox and Karen Mc Cosh, *M-I SWACO*

Session 3: Corrosion

Environmental Constraints of Oil Soluble Corrosion Inhibitors – Challenges and Opportunities

Chris Bowman, Wai Yeung Mok, Steven Keenan, Chris Gamble, Steven Jarrett, *Baker Petrolite*

Modern Concepts of Chemical Treatment for the Control of Microbially Induced Corrosion in Oilfield Water Systems

Jim F D. Stott, Tony Rizk and Simon Schapira, *CAPCIS Ltd*

Inhibition of Carbon Dioxide Corrosion by Formate Brines in High Temperature Environments

John Downs, William Benton, Alan Carnegie, *Cabot Specialty Fluids Ltd*; and Håkon Leth-Olsen, *Norsk Hydro Research*

Session 4: Drilling Fluids

Innovative Water-Based Reservoir Drill-in Fluid gives Improved Production Performance

Dave Ballard and C F Svoboda, *M-I SWACO*

Rheological Stabilization of Oil Based Drilling Fluids Utilizing Pre-crosslinked Resins

John W Chapman, Andy Popplestone, *M-I SWACO*, and Bertrand Guichard, *ELIOKEM*

The Analytical Pyrolysis of Drilling Fluids and Drilling Fluid Additives

Timothy G J Jones, *Schlumberger*; Mark W Sanders, *MI-SWACO*; and Bryan D Chambers, *BP*

Complex Chemistry Produces HTHP Water-Based Drilling Fluid

Ahmadi Tehrani, Trevor Jappy, Andy Popplestone, *M-I SWACO*; and S Carminati, *EniTecnologie*; and A Guarneri, *Eni E&P*

Session 5: Production

Advances in Alleviation of Liquid Loading Using Chemicals in European Gas Fields

Sunder Ramachandran, J Collins, C Gamble, P Schorling, *Baker Petrolite*; Rob Eylinder and C Wittfeld, *Shell International Exploration & Production*

Application of Viscoelastic Surfactant Based Self Diverting Acid in Gas Wells

Bernhard Lungwitz, Chris Fredd, Mark Brady and Toan Bui, *Schlumberger*

A Practical Approach to EOR Surfactant Flooding Formulations

Peter W. Hou, Reinaldo C Navarrete and Dave Feuerbacher, *Akzo Nobel Chemicals, Inc.*

Scale Inhibitor Selection and Application: The SubSea Challenge

Myles M Jordan, Neil Feasey and Clare Johnston, *Nalco*, and Ian R Collins, *BP Exploration and Production*

Session 6: Scale

The Discovery of High Molecular Weight Naphthenic Acids (ARN Acid) Responsible for Calcium Naphthenate Deposits

Thomas Baugh, Nicholas O Wolf, ConocoPhillips Company; and Knut V Grande, Heidi Mediaas, Jens Emil Vindstad, Statoil ASA.

Naphthenate Formation in Oil Production: General Theories and Field Observations

Ken S Sorbie, A Shepherd, R E Westacott, *Heriot-Watt University*; and P C Smith, M Turner, *Oil Plus Ltd*

Development of a Phosphorus Tagged Polymeric Scale Inhibitor to Enable Squeeze and Topside Scale Control via the Same Inhibitor Chemistry

Andre Leontieff, Neil Poynton, D D Dugue and S A Green, Baker Petrolite

Phosphonate Based Scale Inhibitors for High Iron and High Salinity Environments

Tessa Johnson, Claudia Roggelin, *Solutia*; and Caroline Simpson, Robert Stalker, *Scaled Solutions Ltd*