



2011 Global Sand Management and Control Interactive Technology Workshop 14 – 17 March, Istanbul, Turkey

In today's Oil and Gas industry operators are facing a number of challenges where sand production is becoming a major issue and if not controlled, it can cause major flow assurance problems.

Sand detection is a discipline that needs to be constantly monitored as sand can cause loss of production, it can damage equipment, it can cause erosion of completion components and lead to sand disposal issues. Furthermore it can raise a problem of harming well bore access and raise the need for routine cleanouts.

Downhole sand exclusion measures are often limited in their effectiveness and that is why it is vital to have a topsides sand handling capability. Ageing oil and gas reservoirs and the growth in deep-water fields with higher risks have increased the need for an effective sand management and sand control strategy. As sand production is unpredictable it requires a smart portfolio of actions in order to minimize the loss and increase the productivity. One of the keys for successful strategy is however a flexibility in technology selection and design. Sand control methods usually bring the most effective results when they are implemented early in the life of a well, before sand production leads to potential permanent problems. Today's sand monitoring devices are able to provide a clear picture and an immediate response when sand is detected. Being dependent on a number of factors where the main challenge is continuous information on their reservoirs there is a huge need in answers to these questions which require immediate reaction.

This workshop discusses the many sand production solutions that the oil and gas industry is in need of today. Understanding sand production mechanisms, development and implementation of sand prediction methods, establishment of sand management, and sand control strategies are all critical issues of sand production at any stage of reservoir and well life. This Interactive Technology Workshop is designed for dedicated professionals with diverse experiences and disciplines who are currently managing the challenges of sand production throughout the Middle East, Europe, the United Kingdom, Latin America and Malaysia.

Executive Technical Steering Committee Members Include:

Committee Chairman: Miltiadis Parotidis, Geomechanics Petrophysicist, BG GROUP, UK

Committee Co-Chairman: Kjell Lejon, Head of Production Support Centre, STATOIL, Norway

- Professor Musaed N. J. Al-Awad, *Head of Department, Petroleum and Natural Gas Engineering Department, College of Engineering, KING SAUD UNIVERSITY, Saudi Arabia*
- Hamed Soroush, *Geomechanics Adviser, WEATHERFORD, UAE*
- Knut Hovda, *Team Manager, Integrated Operations, Oil, Gas and Petrochemical, ABB, Norway*
- Gbenga Oluyemi, *Lecturer, School of Engineering /Member, IDEAS Research Institute, ROBERT GORDON UNIVERSITY, UK*
- Virochan Vasudevan, *Completion Engineer, SHELL, Malaysia*
- Adel Mohammed Al-Ajmi, *Assistant Professor, Petroleum and Chemical Engineering Department, SULTAN QABOOS UNIVERSITY, Oman*
- Luis Bianco, *Senior Completion Engineer, CHEVRON, Brazil*
- Alar Korgemagi, *Sand Management Services North Sea Manager, SCHLUMBERGER, UK*
- Pierre Cerasi, *Senior Research Scientist, SINTEF PETROLEUM RESEARCH, Norway*
- Maurice Dusseault, *Professor, Department of Earth and Environmental Sciences, UNIVERSITY OF WATERLOO, Canada*
- Hesham Bahaa, *Assistant Chairman for Drilling and Completion, EGAS, Egypt*
- Michael Anthony Addis, *Global Director for Sand Management, GEOMECHANICS INTERNATIONAL, UAE*
- Andrea Nicolino de Sá, *Senior Consultant – Well Engineering, PETROBRAS, Brazil*
- Udo B. Bregar, *Production Technology Manager, EP-Engineering, Production and Projects, OMV, Austria*

Speakers Include:

- Luis Bianco, Senior Completion Engineer, **CHEVRON**, Brazil
- Andrea Nicolino de Sá, Senior Consultant – Well Engineering, **PETROBRAS**, Brazil
- Pierre Cerasi, Senior Research Scientist, **SINTEF PETROLEUM RESEARCH**, Norway
- Manoochehr Salehabadi, Senior Research Associate in Petroleum Geomechanics, Department of Engineering, **UNIVERSITY OF CAMBRIDGE**, UK
- Udo B. Bregar, Production Technology Manager, EP-Engineering, Production and Projects, **OMV**, Austria
- Kjell Lejon, Head of Production Support Centre, **STATOIL**, Norway
- Hamed Soroush, Geomechanics Advisor, **WEATHERFORD**, UAE
- Lars E. Torbergsen, Principal Specialist, **DNV ENERGY**, Norway
- Miltiadis Parotidis, Geomechanics Petrophysicist, **BG GROUP**, UK
- Oystein Brandal, Senior Production Engineer, **STATOIL**, Norway
- Professor Musaed N. J. Al-Awad, Head of Department, Petroleum and Natural Gas Engineering Department, College of Engineering, **KING SAUD UNIVERSITY**, Saudi Arabia
- Gbenga Oluyemi, *Lecturer, School of Engineering /Member, IDEAS Research Institute*, **ROBERT GORDON UNIVERSITY**, UK
- Aase Unander, Senior Engineer, **ABB**, Norway
- Timothy Wood, SECURE Product Line Manager, **CHAMPION TECHNOLOGIES**, UK

TECHNICAL AGENDA

Day One: Monday 14 March

MASTERCLASS

- 10:00 - 10:30 **Registration & Welcome Refreshments**
- 10:30 - 10:45 **Praxis Welcome Address**
- 10:45 - 11:00 **Opening Remarks from the Executive Chairman**
- 11:00 - 11:10 **Welcome Address by Co-Chairman**

Masterclass: Sand Control Selection and Design

- 11:10 - 13:00
 - Handling sand at surface
 - Topside sand handling systems (jetting systems, sand cyclones)
- 13:00 - 14:15 **Networking Lunch**
- 14:15 - 16:00
 - Controlling sand down-hole
 - Introducing the techniques

Masterclass Leaders: TBC

- 18:00 - 21:00 **Ice Breaker Evening Cocktail Reception**

Workshop Day Two: Tuesday 15 March

08:30 - 09:00	Welcome Refreshments & Registration
09:00 - 09:15	Praxis Welcome Address
09:15 - 09:30	Opening Remarks from the Executive Chairman
09:30 - 09:40	Welcome Address by Co-Chairman

Session 1

Reviewing Successful Sand Production Prediction Models

09:40 - 10:50

- Investigating new developments in predicting sanding potential & rate
Pierre Cerasi, Senior Research Scientist, SINTEF PETROLEUM RESEARCH, Norway
- Experimental and numerical modeling of cavity shape after sand production
Hamed Soroush, Geomechanics Advisor, WEATHERFORD, UAE

10:50 - 11:20 **Networking Coffee Break**

11:20 - 12:40 **Interactive Breakout Discussion and Solution Finding Session**

12:40 - 14:00 **Networking Lunch**

Session 2

Preventing Sand Production

14:00 - 15:10

- Positioning a comparison: sand management versus control Case Study
Udo B. Bregar, Production Technology Manager, EP-Engineering, Production and Projects, OMV, Austria
- Preventing reservoir sand movement into the wellbore using locally developed filter
Musaed N. J. Al-Awad, Head of Department, Petroleum and Natural Gas Engineering Department, College of Engineering, KING SAUD UNIVERSITY, Saudi Arabia

15:10 - 15:40 **Networking Coffee Break**

15:40 - 16:50

- Sand management planning over the planned life of a well/field
Gbenga Oluyemi, Lecturer, School of Engineering /Member, IDEAS Research Institute, ROBERT GORDON UNIVERSITY, UK
- Improving formation properties by strengthening techniques
Timothy Wood, SECURE Product Line Manager, CHAMPION TECHNOLOGIES, UK

16:50 - 17:00 **Chairman's Closing Remarks and Close of Day 2**

19:00 - 22:00 **Evening Social Networking Activities: Turkish Dinner & Entertainment**

Workshop Day Three: Wednesday 16 March

08:30 - 09:00	Welcome Refreshments & Registration
09:00 - 09:15	Praxis Welcome Address
09:15 - 09:30	Opening Remarks from the Executive Chairman
09:30 - 09:40	Welcome Address by Co-Chairman

Session 3

Advancing Sand Control and Management Strategies

09:40 - 10:40

- From unacceptable to acceptable sand production – case history from Snorre A field

Kjell Lejon, Head of Production Support Centre, STATOIL, Norway

- Establishing effective control and alarm-based sand monitoring by use of ER probes on the Heidrun field

Oystein Brandal, Senior Production Engineer, STATOIL, Norway

10:40 - 11:40

- Integrating geomechanics into the sand management process

Miltiadis Parotidis, Geomechanics Petrophysicist, BG GROUP, UK

- New developments in sand production prediction

Manoochehr Salehabadi, Senior Research Associate in Petroleum Geomechanics, Department of Engineering, UNIVERSITY OF CAMBRIDGE, UK

11:40 - 12:10 **Networking Coffee Break**

12:10 - 13.30 **Interactive Breakout Discussion & Solution Finding Session**

13:30 - 14:45 **Networking Lunch**

Session 4

Minimizing Sand Production Consequences

14:45 - 15:45

- Improving effective sand erosion management

Lars E. Torbergsen, Principal Specialist, DNV ENERGY, Norway

-

- Sand Management– Ambition, Status and Way Forward

Kjell Lejon, Head of Production Support Centre, STATOIL, Norway

15:45 - 16:15 **Networking Coffee Break**

16:15 - 16:45

- Effective Sand Erosion Management in Chokes and Pipelines
Aase Unander, Senior Engineer, ABB, Norway

16:45 - 17:00 **Chairman's Closing Remarks and Close of Day 3**

19:00 - 22:00 **Evening Social Networking Activities: Cruise on Bosphorus**

Workshop Day Four: Thursday 17 March

08:30 - 09:00 **Welcome Refreshments & Registration**

09:00 - 09:15 **Praxis Welcome Address**

09:15 - 09:30 **Opening Remarks from the Executive Chairman**

09:30 - 09:40 **Welcome Address by Co-Chairman**

Session 5

Overcoming the Challenges via Sand Management and Control

09:40 - 11:00

- Sand control in highly deviated and horizontal wells
Andrea Nicolino de Sá, Senior Consultant – Well Engineering, PETROBRAS, Brazil
- Sand control for water injections
Luis Bianco, Senior Completion Engineer, CHEVRON, Brazil

11:00 - 11:30 **Networking Coffee Break**

11:30 - 12:30

Panel Discussion: Technology Innovations: Pros and Cons

- Exploring innovations
- Assessing technology gaps and many others

12:30 - 13:00 **Closing Ceremony**

13:00 - 14:30 **Networking Lunch**

14:30 **Close of Global Sand Management and Control Workshop**