



**Early Bird Registration Deadline
Extended: 02 September 2010**

Society of Petroleum Engineers

11–13 October 2010 | Beach Rotana Hotel | Abu Dhabi, United Arab Emirates

SPE Applied Technology Workshop

Intelligent Oilfields: A Practical Approach



Who Should Attend

The workshop is mainly addressed to oil and gas professionals, involved in various disciplines such as projects, facilities and construction, production and operations, health, safety, security, environment and social responsibility, management and information, projects, facilities and construction, production and operation, completion, planning, design and installation, processing systems and design, facilities and construction project management, platforms and floating systems, subsea systems, facilities operations, production monitoring and control, operations management.

Committee Members

Co-chairperson:
Ahmed Al-Riyami
ADMA-OPCO

Co-chairperson:
Marco Giannelli
BP

Abdullah Zahrani
Saudi Aramco

Fajhan H. Al-Mutairi
KISR

Gamal H. Hassan
Baker Hughes

Matthew Kirkman
ADMA-OPCO

Mohamed El-Sherbini
ADMA-OPCO

Muhammed Shafiq
Schlumberger

Saad Abdul Hamid Said
ADMA-OPCO

Saleh Saadeh
Honeywell

Timothy Keith Busing
ZADCO

Zara Khatib
Shell

Workshop Description

Oil and gas companies' business performance has been improving over the past few years by implementing automation and intelligent technologies and by making real-time operating decisions using collaborative environments to reduce risk, maximise production and improve HSE practices. Advances in these technologies together with learning adapted from automation in refineries, gas and chemical plants are continually opening doors for new applications in development of upstream oil and gas mature and new fields. It can be said that today, the oilfield has been furnished with the right tools to be able to get the right information, at the right time.

Practical applications of these new technologies have removed many limitations through design and development of automated and integrated closed-loop production systems incorporating workflows that include the subsurface, well and surface knowledge base. However, these implementations are challenging due to the lack of data and/or reliable instrumentation down the wells or on surface facilities particularly in mature fields. Although these technologies are key enablers, they are not enough to ensure significant and sustainable value if the people's skills are not compatible with the changes. Success requires a new approach where people capabilities and skills are fully integrated with new tools/equipment and system procedures.

This workshop will provide opportunity for sharing best practices in intelligent fields in terms of design, execution and operations using proven, practical technologies. The technical and financial risks associated with harnessing the new technologies, retirement of legacy and out-dated systems, refreshing an aging workforce, rising costs and uncertainty in oil prices will be discussed through breakout sessions. Special emphasis will be placed on real-time reservoir management of sweep efficiency control, data management, chemical automation for flow assurance, reservoir and production optimisation, surveillance and monitoring, remote operations, real-time production optimisation remote operations and remote monitoring and support of process equipment.

International companies, consultants, integrated control system providers, manufacturers, operating companies, and service companies each have a common need to improve industry performance and achieve a competitive edge. In this workshop participants from each of these sectors will create a diverse and innovative environment for focused discussion. This workshop will provide a venue to share and review the practical, state-of-the-art technologies for intelligent oilfields and their enabling applications.

www.spe.org/events/10aab5

Sponsorship Support

Sponsorship support helps offset the cost of producing workshops and allows SPE to keep the attendance price within reach of operations-level individuals, those who benefit most from these technical workshops.

Sponsors benefit both directly and indirectly by having their names associated with a specific workshop.

While SPE prohibits any type of commercialism within the conference hall itself, the society recognises that sponsoring companies offer valuable information to attendees outside the technical sessions.

Sponsorship Categories

Sponsorships are offered on a first come basis. Please contact SPE to verify the availability of a particular sponsorship. Existing sponsors have the opportunity to renew the same level of sponsorship for annual workshops.

The Available Sponsorship Categories are:

- Silver
- Workshop Coffee Breaks
- Networking Hour
- Luncheon—Per Day
- Speaker Gifts
- Audio—Visual Equipment
- Stationery
- Others

Sponsorship Benefits

In addition to onsite recognition; SPE will recognise sponsors on the SPE website and in all printed material for the workshop. Based on the sponsorship selected, sponsoring companies also receive logo visibility on promotional workshop items.

For More Information

For a detailed list of available sponsorships, including benefits and pricing, contact Barbara Stahli, at bstahli@spe.org.

Workshop Sponsors

Gold Sponsor



Bronze Sponsor



Lanyard Sponsor



Workshop Schedule

Monday, 11 October 2010

1800–1900 hours Collection of badges and delegate packs

Tuesday, 12 October 2010

0830–0945 hours

Executive Session: Leadership and Commitment – Vision and Business Case for Intelligent Fields.

Session Moderator: Ali Al-Jarwan, CEO, ADMA-OPCO

In the past decade, other industries such as the space industry have various evidence of business value for their assets when using intelligent systems or fully automated process control systems particularly in optimising design and operation, minimising human intervention and in facilitating faster decision-making processes. This same experience will take a leap in leadership and commitment in organisational change to adapt intelligent fields to existing and new development. Keynote Speakers from ADNOC, ADMA-OPCO, ADCO and ZADCO are invited to share their vision and their OPCO's strategy for making the step change and for transferring their operations into Intelligent fields



1015–1230 hours

SESSION 1: Technical Challenges and Opportunities - Business Case for Intelligent Oilfield in Existing and New Development

Session Chairs: Zara Khatib, Shell; Mohamed El-Sherbini, ADMA-OPCO

This session will build on the experience that other industry has and will highlight the technical challenges that the oil and gas industry has been facing to catch up. The challenges include:

- Effective real-time optimised operation across the entire value chain from exploration to production to facilities while integrating business partners, operators, service companies, logistic providers, software and technology providers and various government and non-government organisations
- Demonstrable long-term value for oil recovery and return on investment
- Closing the gap between measuring production and production forecasting
- Risk of technology failure affecting integrity and performance of facilities
- Flexible versus fixed control strategies

Business cases will be presented demonstrating one or more of the following: accelerating speed of planning and execution, reducing unit technical cost, improving security, improving reliability and availability, improving safety and minimising incident probability, improving hydrocarbon accounting accuracy compared to theoretical forecasting, maximizing probability and supporting remedial actions to minimise reoccurrences of problems

1330–1700 hours

SESSION 2: Application of Intelligent Technologies—Lessons Learnt

Session Chairs: Fajhan H. Al-Mutairi, KISR; Muhammad Shafiq, Schlumberger

Well measurement and control technologies (both downhole and surface) are critical in serving the objectives of Intelligent Oilfields through optimising production, enhancing recovery and managing hydrocarbon reservoirs. The oil industry has come a long way from making periodical measurements with limited and costly intervention capabilities to continuous and real-time monitoring along with flexible and remote downhole control using various sensing and downhole flow control technologies. This session is intended to discuss current intelligent field technologies which have been applied in-field including future intelligent field technologies.

1700–1930 hours

Networking Hour

Wednesday, 13 October 2010

0900–1230 hours

SESSION 3: Intelligent Optimisation

Session Chairs: Tim Busing, ZADCO; Gamal H. Hassan, Baker Hughes

This session addresses opportunities for practical use of intelligent technology at several scales. Digital technology has been applied for a number of years to acquire, transmit, and store large amounts of data. Subsequent technologies enabled optimisation of production and processes through real-time distributed control. More recent trends involve the rapid interpretation of data for better understanding of underlying physical principles, followed by modelling of complex processes, with a goal of optimal control founded on timely data and analysis. A highlighted topic of this session will be real-time reservoir management of sweep efficiency and ultimate recovery.

The session subtopics will include:

- Data interpretation
- Integrated field modelling
- Process and production optimisation
- New horizons

1330–1730 hours

SESSION 4: Organisational Readiness for the Intelligent Oilfield

Session Chairs: Saleh Saadah, Honeywell; Abdullah Zahrani, Saudi Aramco

Are the organisations ready for a more automated set up, leading to more and better remote operation, with more sophisticated analytical tools. Is resources training sufficient to support a faster operation transformation? Is the organisation matrix (supply chain system) up to date for smart and accurate commitments from reservoir to market? Is operation flexibility good enough for delivering on aggressive promises? Is the organisation ready to have more involvement by service companies as well as automation vendors?

All these questions are necessary to build an advanced technical infrastructure and support functions aligned together and ready for more operational complexities and an intelligent oilfield operation.

**Save USD 400
by registering
before
02 September 2010**

General Information

Workshop Venue

Beach Rotana Abu Dhabi
P.O.Box 45200, Abu Dhabi - U.A.E.
Tel: +971.2.697.9000 | Fax: +971.2.644.2111
E-mail: beach.hotel@rotana.com

Format

Two (2) days of informal discussions prompted by selected keynote presentations and discussions. Workshops maximise the exchange of ideas among attendees and presenters through brief technical presentations followed by extended Q&A periods. Focused topics attract an informed audience eager to discuss issues critical to advancing both technology and best practices. The majority of the presentations are in the form of case studies, highlighting engineering achievements and lessons learned. In order to stimulate frank discussions, no proceedings are published and the press is not invited to attend.

Documentation

- Proceedings will not be published; therefore, formal papers and handouts are not expected from speakers.
- Work in progress, new ideas, and interesting projects are sought.
- Professionally-prepared visual aids are not required; handwritten view graphs are entirely acceptable.
- Note-taking by participants is encouraged.

Poster Sessions

The Steering Committee encourages registrations from professionals who are able to prepare and present a poster on a relevant project. For further details kindly contact Barbara Stahli, event manager at bstahli@spe.org. Posters will be judged and the best poster will be awarded by the workshop Steering Committee.

Attendance

Registrations will be accepted on a first-come first-serve basis. The Steering Committee encourages attendance from those who can contribute to the workshop most effectively either in discussions or with posters. A mix of attendees in terms of geographic origin, companies and disciplines will be encouraged.

Workshop Deliverables

- The Steering Committee will appoint a "scribe" to record the discussions and to produce the full Workshop Report for SPE.
- This report will be circulated to all attendees as the workshop deliverable within 4–6 weeks following the workshop. The copyright of the report is with SPE.
- PowerPoint presentation materials will be posted on a specific SPE URL address after the workshop. Provision of the materials by the speakers will signify their permission for SPE to do so.

Commercialism

In keeping with workshop objectives and the SPE mission, commercialism in posters or presentations will not be permitted. Company logos must be limited to the title slide and used only to indicate the affiliation of the presenter and others involved in the work.

Attendance Certificate

All attendees will receive an attendance certificate attesting to their participation in the workshop. This certificate will be provided in exchange for a completed Workshop Questionnaire.

Continuing Education Units

Attendees at this workshop qualify for SPE Continuing Education Units (CEU) at the rate of 0.1 CEU per hour of the Workshop.

Registration Information

This is a non-residential workshop. The registration fee includes:

- Networking hour on 12 October 2010
- All workshop sessions
- Daily coffee breaks and luncheons
- Workshop workbook and certificate of Continuing Education Units (CEU)

Note: Registration fees does NOT include hotel accommodation for attendees.

Workshop Registration Fee

| | | |
|-----------------------|---------------------------|--------------------------|
| Before 12 August 2010 | USD 1,450 for SPE Members | USD 1,550 for Nonmembers |
| After 12 August 2010 | USD 1,850 for SPE Members | USD 1,950 for Nonmembers |

Registration Policy

- Registration fee MUST be paid in advance for attending the Applied Technology Workshop.
- Full fixed fee is charged regardless of the length of time that the registrant attends the workshop.
- Fixed fee cannot be prorated or reduced for anyone (Co-chairpersons, committee members, speakers, discussion leaders, students and registrants).
- Attendees are expected to attend all workshop sessions and are not permitted to attend on a partial basis.

Cancellation and Refund Policy

- a) A processing fee of USD 100 will be charged for cancellations received before the registration deadline 13 September 2010.
- b) For cancellations received after the registration deadline, 13 September 2010, 25% refund will be made to the registrant.
- c) No refund on cancellations received within seven (7) days prior to the workshop date, i.e. on or after 4 October 2010.
- d) No refund will be issued if a registrant fails to attend the workshop.

