

SPE review

magazine of the Aberdeen and London sections
of the Society of Petroleum Engineers

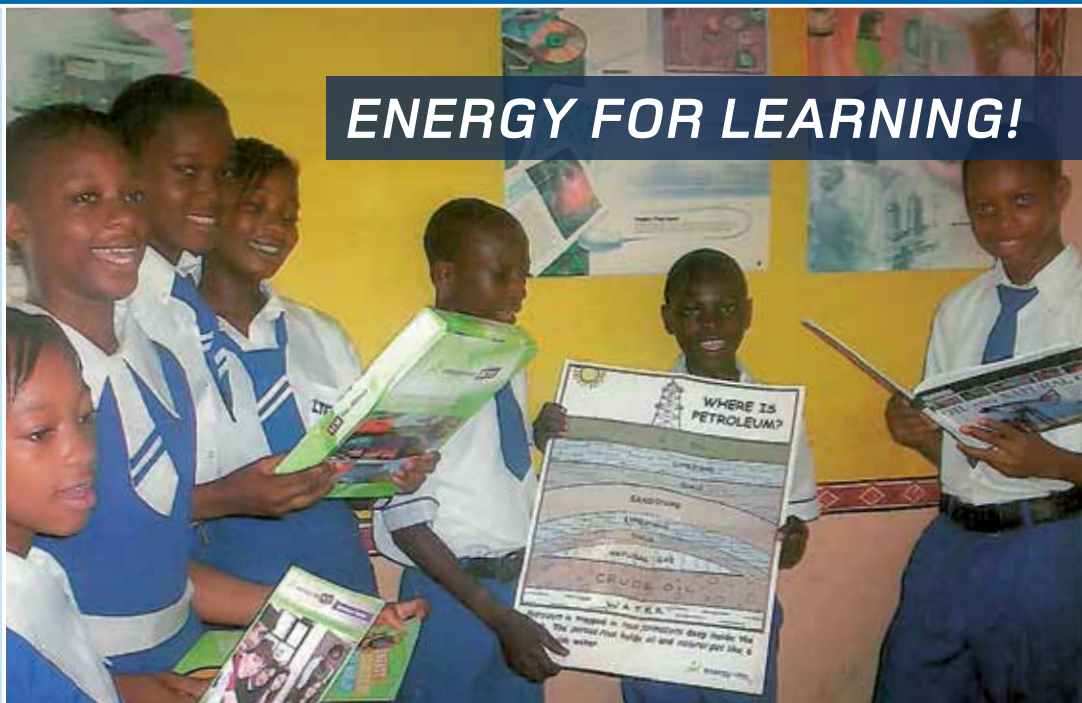
issue 249 | April 2011



Society of Petroleum Engineers

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ENERGY FOR LEARNING!

Delighted pupils at the LTB Schools in Lagos, Nigeria, display their new SPE **Energy4me** learning materials. These were donated by Colin Black, SPE Aberdeen Careers Guidance (CG) Committee Chair, member of the SPE Energy Information Committee (EIC) and Director with Optima Solutions UK Ltd. The global resources provide teaching aids, speaker resources, sample presentations, classroom activities and hands-on experiments for teaching energy in the classroom in a fun, exciting way. Locally, the CG Committee have distributed the materials to schools throughout Aberdeen and Aberdeenshire.

www.energy4me.org



LONDON YPS LOOK TO THE FUTURE AT HOUSE OF COMMONS EVENT



Any event involving a ballot for places means you have something successful on your hands. Such was the case at a special panel discussion organised by the Young Professionals of SPE London Section and the Petroleum Exploration Society of Great Britain (PESGB).

'Your career...in whose hands?' was designed to encourage young members of both organisations to engage with senior politicians on issues concerning their future in the UK oil and gas industry.

Four panellists presented their views, before taking questions from the 138-strong audience. Charles Hendry, the Minister of State for Energy and Climate Change, spoke first, describing his audience as "the lifeblood of this industry", before outlining the Government's goal for the sector.

"We want to see a shift towards a low carbon economy, but we have to be realistic about the speed at which that can happen. There is something in the region of £2 trillion worth of oil and gas left in the UK Continental Shelf (UKCS). This is a matter of immense importance to us as a nation, and our ambition is to get every drop we can, so that we can remain self-sufficient for as long as possible."

Investment in the UK industry is on the rise, he explained, with £8 billion of funding expected to enter the UKCS in 2011 – 60% up on the previous two years – demonstrating that "the UK is absolutely back in business."

continued on page 3.

SPE review

The Society of Petroleum Engineers (SPE), a not-for-profit professional association of 90,000+ members from more than 100 countries worldwide, is a key resource for technical knowledge related to the oil and gas exploration, drilling and production industry.

The SPE provides services through its global events, publications and website at www.spe.org.

SPE review is published 10 times per year by the Aberdeen and London sections of the Society of Petroleum Engineers. It is sent to over 4,500 UK SPE members, and quarterly to an additional 6,000+ European members. If you have read this issue and would like to join the SPE and receive your own copy of **SPE review**, as well as many other benefits – or you know a friend or colleague who would like to join – please visit www.spe.org for an application form.

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The copy deadline for the May 2011 issue is **18 April 2011**, with publication scheduled for **4 May 2011**.

SPE London and Aberdeen Joint Communications Committee would like to clarify that last month's email advising SPE European members of the cessation of paper copy distribution of SPE Review was inadvertently sent to some UK members. The e-mail was intended only for European members and for those UK members working in other parts of the world. Members with UK addresses will continue to receive hard copy, and can also access the e-book version of the magazine in the Publications section at: www.spe-uk.org.

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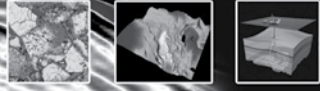
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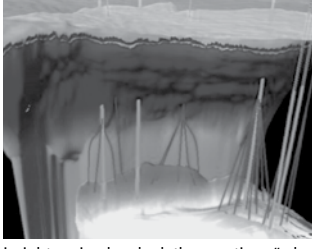
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International conference to mark 30 years of the Petroleum Group

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For 30 years the Petroleum Group has tracked the development of petroleum geosciences in exploration and exploitation. To mark this milestone, 'Major Discoveries of the 21st Century' will focus on the highest profile petroleum discoveries and new plays of the last 10 years. Through invited talks and panel discussions the conference will examine the insights gained and ask the questions "where and what next?"


In returning to the historic Pump Rooms in Bath, England this conference will be a prestigious celebration of 30 years of the Petroleum Group's role at the forefront of petroleum geoscience.

Keynote speakers: Mike Daly(BP), Bruce Levell(Shell) and Malcolm Brown(BG)

- Discoveries in Angola, Gulf of Mexico, Venezuela, Malaysia, Ghana, Uganda, West Siberia, India, UK, Brazil and others
- Talks from Tullow, ExxonMobil, Kosmos, Nexen, Chesapeake, TNK, BHP, Chevron, Cairn, Total, USGS, Petrobras and others

This conference promises to be a prestigious celebration of 30 years of the Petroleum Group's role at the forefront of petroleum geoscience.

For further information and registration, please contact: Steve Whalley, Event Co-ordinator: +44 (0)20 7432 0980 or email: steve.whalley@geolsoc.org.uk



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www.geolsoc.org.uk/petroleum

continued from front page.

LONDON YPS LOOK TO THE FUTURE AT HOUSE OF COMMONS EVENT

There is much evidence to support his statement, said Chief Executive of Oil and Gas UK and fellow panellist Malcolm Webb, including the reverse in decline that the UK is currently witnessing.

"We have seen an uncomfortable production decline rate in the past six or seven years of around 6.5% per year. But this year, I'm pleased to say it is beginning to flatten out to 5%, and we expect that to flatten further and come down to something like 3%."

Far from being the dying industry some have portrayed, Webb argued that the sector is the *"greatest industry success story that the UK has enjoyed since the Second World War"*, and continues to be a challenging, rewarding place to build a career.

That continued success is only possible if Britain's main political parties continue to agree on the big issues, said Huw Irranca-Davies, Shadow Minister for Energy and Climate Change. *"There are some issues we disagree on, but on the big things there is a huge degree of consensus. That is important, so you know you have long and fruitful careers in front of you, and that the investors in this industry, the ones who provide the jobs, know with great certainty that this industry will not flit from one policy approach to another with every change of government."*

Both Hendry and Irranca-Davies spoke of the need to encourage more students to take up STEM – science, technology, engineering and maths – subjects if the industry is to fill the 50,000 new jobs likely to be needed in the coming years. The UK faces a challenge on this front, with just 6% of graduates obtaining a degree in engineering technology in



Attendees had the opportunity to discuss topics from the event

2006, and the engineering sector filling less than three-quarters of graduate vacancies in 2008/9.

However, the current economic climate makes it increasingly difficult for students to access funding, particularly postgraduates, and during the questions Hendry admitted that some tough choices have had to be made.

All the speakers highlighted the increasingly flexible nature of the oil and gas business. *"Twenty years ago, your career would have been working on an offshore rig in the North Sea,"* said Mike Weir, the Scottish National Party Work and Pensions, Trade and Industry and Energy spokesman in Westminster. *"Now, people travel the world for this business."*

Equally, the skills young engineers are developing are likely to become increasingly transferable as the renewables sector continues to grow.

"We have to get that message out there," said Weir.

Following the panel discussion, the guest speakers talked more informally with their audience, something organiser and PESGB Co-Chair James Thompson believes is vital to the success of such events.

"We wanted to make politicians more accessible," he said. *"It is about being involved in politics and taking a sense of ownership in the industry you work for. I think it's important that we try to influence these discussions."*

For the speakers, the night represented an opportunity to meet the future of an industry the UK relies upon. *"We want this group to know that everything they do in their careers is worthwhile and relevant,"* said Hendry. *"As a minister, it is overwhelming to see the skill, the talent, enthusiasm and drive in this room."*

During the closing comments, Alejandro Primera, Chair of the London SPE YP Committee, highlighted the potential contribution of young professionals; *"We need to raise the profile of the oil and gas sector across schools and universities; this is a role both SPE and PESGB should take actively within the UK."*



Speakers with the Young Professional committees of the PESGB and SPE

On behalf of the YPs, we would like to thank Lisa Davison, Editor of BP's internal magazine, who has kindly written this article.



Carbon Capture & Storage – what does it really mean?

20 April, Shell Woodbank, Woodbank House, North Deeside Road, Pitfodels, Aberdeen (6pm start)

This Aberdeen YP Discover Series event will discuss all aspects of carbon capture and storage (CCS), from the emissions source to the reservoir, through case studies. The event will cover the following objectives:

- Provide a review of the various technologies appropriate to capturing CO₂ from hydrocarbon combustion – at power stations, cement works, steel and aluminium smelters, and similar large energy consumption sites.
- Discuss the compression and transportation requirements – both for pipelines and for shipping of CO₂.
- Outline some of the technical challenges associated with handling CO₂.

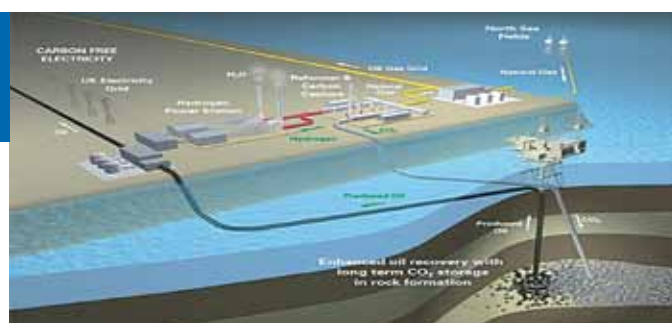


The session will be presented by Ian Phillips, of CO₂DeepStore. Ian is also the Director of the Carbon Capture and Storage Association. CO₂Deep Store is a developer and operator of deep geological CO₂ storage facilities located in depleted gas fields and large saline aquifers. Ian will outline the development of CO₂DeepStore from an entrepreneurial start-up in 2007 to a 50/50 Joint Venture Partner with Shell in the Goldeneye redevelopment as a CO₂ store.

Prices: £10 (SPE members); £5 (students); £15 (non-members)

Event Programme: 6pm to 7pm: Technical Session; 7pm onwards: Networking Session over light refreshments and finger food.

The SPE Aberdeen Young Professionals thank EnQuest and Shell for sponsoring this event.



- Review the range of potential reservoirs suitable for CO₂ storage – both depleted hydrocarbon reservoirs and the larger, but more challenging, potential of deep saline aquifers.
- Describe some of the unusual health, safety and environmental issues.
- Outline the current state of the emerging market for CCS.

New annual event aims to make the unconventional conventional

A major new two-day conference was launched in Aberdeen last month, "gathering the right expertise, at the right time, in the right city, to decisively shape our energy future".

Unconventional Gas Aberdeen 2011 – the first event of its kind in Scotland – was attended by more than 300 professionals from a range of backgrounds, with an interest in the burgeoning area of European unconventional gas exploration and production. SPE Aberdeen and the Industry Technology Facilitator (ITF) were partners of the high-profile event, hosted by Aberdeen City Council at Aberdeen Exhibition and Conference Centre, on 1-2 March.

The intensive two-day conference discussed the full spectrum of sector interests, with presentations and in-field case studies ranging from diverse technical challenges and new technology applications, to environmental and legal considerations and financial opportunities. The corresponding exhibition enabled industry majors and individual consultancies alike to showcase their versatility in developing technologies and services to support the unconventional gas market.



"Investment in European acreage will create tangible commercial opportunities," Simon Seaton, event Chair and Vice President Halliburton UK, told the audience. *"There will be a critical role for disciplines perfected in the North Sea, such as reservoir modelling, extended reach and horizontal drilling, and well completions. Now is the time for industry to benefit from and shape the future."*

He concluded: *"By pooling technological excellence developed in the world's most challenging regions, with exceptional international research and Aberdeen's natural industrial aptitude, we will join forces to meet the challenge of making unconventional gas conventional."*



"Aberdeen City Council has supported the establishment of this major and significant conference, which we plan as an annual event in the city, to open the debate about the potential 'size of the prize', as unconventional gas operations take off in Europe and beyond... This is also a symbol of our commitment to maintaining the position of Aberdeen as a centre of excellence in the international energy arena." **Gordon McIntosh, Director of Enterprise, Planning and Infrastructure, Aberdeen City Council.**

"This event has been very good for us. We have met a lot of people and have shared our experience of shale gas exploration in USA and Poland. It's clear that there are plenty of opportunities for innovation. Production may be a fair distance off, but now is the right time to look at our technology and see how we can modify it to suit some of the challenging land locations. It's important to get a head start – it will be a very competitive industry!" **Stuart Ross, Region Technical Sales Manager, Expro.**

"The conference has given a useful overview of a wide range of activity on the unconventional gas front, including applications of new technology. The quality has been very good and some of the discussions have given us a number of ideas to reflect upon." **Andrew Gunning, CBM Operations Manager, Centrica Energy Upstream.**



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London

'On the road to smart technologies in underground gas storage' is the after-dinner presentation topic at SPE London's evening meeting, on **26 April, at the Geological Society, Piccadilly. Ken Brown, Principal Consultant with the Data & Consulting Services Division of Schlumberger**, Pittsburgh, USA, will discuss 'The One Idea', which proposes that employing intelligent well technologies to optimise the design, operation and management of underground gas storage facilities can yield significant returns, even at modest levels of deployment. He will explain how intelligent technologies are helping underground gas storage (UGS) operators in their quest for greater efficiencies, lower costs and innovative business methods, with the result that the industry is slowly, but steadily, moving towards the 'digital oilfield'.

After presenting a brief review of the underground gas storage industry and simple definitions of smart wells and smart fields, Ken will examine three different levels of intelligent technologies being applied to underground gas storage operations in North America and Europe. The presentation will also include case study examples of how various levels of smart technology are being deployed in UGS facilities, including use of real-time data to identify and track changes in well damage over time, and daily validation and use of real-time deliverability models to update deliverability forecasts on a 'continuous' basis.

Please note that due to the speaker's overseas work commitments the previously advertised pre-dinner presentation has been cancelled. Details of the replacement presentation will be posted, when finalised, at: London Events, www.spe-uk.org

Before dinner: 5-6.30pm

Dinner: 6.30-7.30pm

After dinner: 7.30-9pm

Booking: www.katemcmillan.co.uk; tel: 07736 070066; katespe@aol.com

Cost: £34 for SPE/PESGB/EI members, £44 non-members,

£19 unemployed members, £5 students booking by Friday 22 April (£19 after)

Aberdeen

SPE Aberdeen's Another Perspective Committee will host the monthly technical presentation on **27 April, at the Douglas Hotel, Aberdeen.**

Elisabeta Isaj, Senior Production Engineer, ConocoPhillips, will discuss **'Salt mitigation in SNS gas wells – a case study'.**


Salt deposition is a problem present in many gas wells of the Southern North Sea. Traditionally, different scale prediction tools were used to identify the halite scaling tendency and support the diagnostics in wells with poor performance. Fresh water washes or other expensive intervention methods have been applied to investigate and clean wells prone to salting.

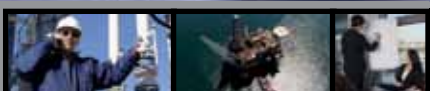
Recently, with the help of a consulting company, a three dimensional halite deposition envelope was completed, related to a type of formation water composition. It was successfully used in prediction of halite deposition, location and optimisation of water wash requirements for the lifecycle.

Understanding of the salting mechanism contributed to optimising the water wash requirements and assessing the best manner to complete the new wells.

Elisabeta's case study presentation will include the modelling methodology, findings and practical application that resulted in production rate increase.

For bookings and enquiries, visit: www.rodgerandco.com, or Aberdeen Events at www.spe-uk.org





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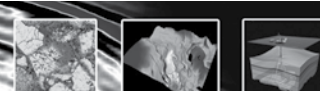

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Tertiary Fan Reservoirs of the North Sea

31 August - 2 September, 2011
 University of Aberdeen, Aberdeen, UK

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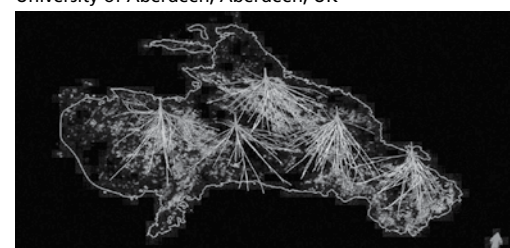
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The discovery of the giant Forties Field in 1970 triggered a 40 year history of exploration and exploitation of Tertiary deep marine fan reservoirs in the North Sea.

To date there has been no event specifically dedicated to these important reservoirs which have made such a major contribution to the success of this hydrocarbon province and continue to present opportunities from new exploration discoveries through to the re-development of mature fields.

This conference aims to showcase the geological diversity that exists across a range of depositional and structural settings and highlight the uncertainties and challenges in finding and developing hydrocarbons from these complex reservoirs. The event will consist of a core workshop followed by two days of talks and poster sessions. There is also a conference dinner scheduled on Thursday 1st September at the University of Aberdeen.

For further information and registration, please contact:
 Steve Whalley, Event Co-ordinator: +44 (0)20 7432 0980
 or email: steve.whalley@geolsoc.org.uk



At the forefront of petroleum geoscience
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London

A record audience of more than 140 SPE members and guests attended the SPE London technical meeting on 22 February, sponsored by Deloitte Petroleum Services.

Are Reservoir Engineers keeping up with the times (and the hardware)?



David Gorsuch

This provocative question was posed by David Gorsuch, Director of Schlumberger's INTERSECT Project, in his presentation, *'The Future of Reservoir Modelling'*, at SPE London's technical meeting on 22 February.

David – a former Chair of the Section, with 25 years' experience in the oil and gas industry, first as a Reservoir Engineer and more recently in the world of E&P software – presented an engaging 'warts n' all' argument for change to the traditional practices associated with reservoir simulation. This was focused on three soul-searching questions:

- Why do we approach reservoir simulation the way we do?
- Do we have anything to worry about?
- Should we make any changes to our work practices going forward to ensure we achieve good predictive capabilities?

First, David discussed the historical reasons for today's common practice of simplifying detailed geological models using upscaling and other techniques. He suggested that the approach should be questioned due to the massive increase in availability of affordable computing capacity, the resulting advances in geophysical data acquisition and processing, and geologists' ability to create large numbers of equi-probable realisations.

He then summarised the various issues associated with the common tendency to rely on history matching and gridding and upscaling, and discussed the diverse approaches to addressing these that have been suggested by discipline experts in recent years. He pointed out that while each has its own benefits, there are also significant issues – and none of these solutions can address the fundamental problem facing reservoir engineers today:

"On the one hand, we would like to use a highly detailed and representative model to as fully as possible capture the underlying geological description and represent the hydraulic behaviour around the wells. However, bigger models with complex gridding take longer to run and it is unlikely that we will be able to run a lot of these. So to explore a wide range of possibilities we have to use simpler models. But how then do we cope with the inaccuracies inherent in such models?"

The answer, David suggested, lies within his own sphere of new 'multi-fidelity' modelling, which, in essence, means combining both approaches. He explained that advanced simulation software is a key factor in achieving such a capability, and that the highest priority requirement for such a system is to provide a streamlined workflow for creating different models and tracking their relationships and results. The software also needs to considerably reduce the amount of time simulation models take to run; to accelerate and improve the process of history matching, and to provide a framework for generating and

running multiple realisations that combines appropriate statistical analysis of the outcomes with the ability to probe individual realisations as needed.

Not surprisingly, David's presentation sparked an animated discussion with the many subsurface experts in the audience, which continued throughout the networking buffet.

A valuable insight into E&P investment decisions

How can companies with seemingly similar assets have vastly different degrees of success when it comes to raising capital?

Christian Coulter's after-dinner presentation *'Valuing junior oil and gas companies: an E&P investor's perspective'*, addressed the perennial business question with a useful insight into the world of project finance and principal equity investment that revealed how some investors determine how much they are willing to pay for the shares of an E&P company and what factors, both 'hard' and 'soft', tangible and intangible, are commonly used in such an assessment.

Christian, an Associate Director with the Energy Capital group at Macquarie Bank Ltd, London, began with an overview of his group's activities. These include providing debt and equity capital to junior oil and gas exploration and production companies around the world. The group, which has offices in London, Houston, Calgary and Sydney, uses Macquarie Bank's balance sheet to provide senior and reserve-based loans, mezzanine and subordinated facilities, equity-linked and royalty purchase structures, and also makes passive principal equity investments in listed and unlisted companies. Being technically-focused – its global team of 40 executives includes 13 reservoir engineers and a petroleum geologist – the group says it is well-placed to attribute value not apparent to traditional capital providers, based on in-house assessment of reserves.

Christian then put valuation in context, explaining that valuation rigour leads to good project selection and ensures that expectations are realistic. This done, the availability of capital is the number one factor leading to company or project success or failure. Almost all investment decisions rely on the valuation as a first pass, he said. Most companies follow the same basic lifecycle – from asset gathering, through investment proposition, capital raising, execution and follow-on capital – which they then repeat. Proper valuation is the foundation for investment: long-term E&P investors will look for sensible valuation, while other investors may base their decisions on other factors, including speculation, hype or technical indicators.

He went on to discuss valuation methodologies, illustrating their impact in a case study of a private company seeking \$100m in equity to pursue exploration and appraisal projects across Sub-Saharan Africa.

The final part of the talk focused on weighing the total investment proposition. Valuation results in a core price, plus a range of outcomes for the target price – from \$0.75 per share to \$10.50 per share depending on the method and risk. However, factors other than valuation will contribute to an investor's decision whether or not to invest. These include the track record of the company's management team, and whether the company aims for 'gold plating' when buying in resources, or whether it takes a 'scrappy', 'man with a bag' approach to raising finance and building up the company. Christian explained that such an approach was adopted by Peter Levine when growing Imperial Energy. When sold four years later the company was valued at £1.4 billion!

Aberdeen

Innovations are securing promising future for North Sea tight gas

'Unlocking the Potential of Tight Gas Reserves' was the focus of SPE Aberdeen's Technical Meeting, on 23 February, with a comprehensive and practical presentation by Mark Norris, Engineering Advisor with DCS Schlumberger.



Mark Norris

Mark, who has more than 28 years' experience in reservoir stimulation, began by outlining the drivers for tight gas stimulation in the North Sea. With demand set to steadily increase, natural gas will continue to be a large and important part of the EU energy mix, he explained. However, encouraging gas in place in fallow fields is often associated with low permeability; gas prices are volatile compared to oil prices, and gas producers must compete with oil producers for resources. Add to that the need

to maximise the commercial potential of each new well and the need to take advantage of the current surface infrastructure before it becomes too old and is decommissioned, and there is a strong case for increasing and developing tight gas stimulation activity, particularly in the Southern North Sea.

This led to a discussion of the various aspects of North Sea fracture design for tight gas, which began with a definition of horizontal well hydraulic fracturing, which has been used with considerable success in many tight gas regions. Mark explained that this is a well-proven technology that was largely pioneered in the North Sea for oil wells and latterly in the USA/Canada for gas wells. More than 95% of current North Sea stimulation work is carried out in horizontal wellbores and all these involve multiple fracturing operations. He then examined recent improvements in fracture design via simulation, comparing new P3D numerical models with traditional analytical models and demonstrating the enhanced capability to achieve economic optimisation.

How is OH Horizontal Well Fracturing Performed?

- Uncemented liner with external packers and selectable ports
- OH interval fractured sequentially from toe to heel
- Balls dropped from surface isolate below and open the next zone
- Packers designed to withstand shock cooling (45 degF frac fluid)
- Inflatables and swellables less well designed for shock cooling, solid element types typically used (approx 4,000 wells to date)
- Balls flow to surface or can be milled out with seats for PLT access



Slide 52

SPE Aberdeen Section - Evening Meeting



Leading the audience through the fracturing process and latest materials used, Mark explained that in recent years a switch has been made to larger proppants such as 12/18 mesh, which, coupled with fracturing fluid advances, minimises the Beta factor and maximises fracture

permeability/conductivity, especially in horizontal well fracturing. He discussed treatment execution methods, including plug and guns well bore preparation, whereby coil tubing or snubbing is used for perforating, cleaning out excess proppant and setting retrievable bridge plugs if required. This method allows standalone completions to be performed while the rig continues to drill and prevents well control issues due to brine weights.

He also showcased some enabling technologies and techniques that have been introduced to enhance the commercial profile of tight gas in the North Sea. These include OH horizontal well fracturing (see slide), used with significant production-enhancing success in US land-based operations, and the HiWAY technique, whose ability to address fracture conductivity issues was illustrated in a South American case study.

Finally, Mark had an upbeat message with regard to stimulation resources. Previously, many operators had discounted stimulation due to lack of surface resources (the entire North Sea region was until recently limited to two purpose-built stimulation vessels). However, more recently, operations have often moved to temporary classed stimulation vessels using converted platform supply vessels (PSVs) – known as FlexSTIM vessels – which commonly mobilise for one to three months. More than 25 large-scale proppant fracture treatments have been executed in this way in the Southern North Sea since Q1 2007, demonstrating that the service industry is no longer constrained by low levels of available stimulation resources.

You can download Mark's full presentation from the Aberdeen Events section at: www.spe-uk.org

Edinburgh

Getting to the core of the matter

By Philip McCurdy

Colin McPhee, of Senergy, presented his Distinguished Lecture on 'Core Analysis: a guide to maximising added value', to an Edinburgh SPE audience, on 2 February.

Colin, citing a recent Bob Harris JPT article, introduced the talk by highlighting that "Logs cannot characterise a reservoir if knowledge of the rock is absent." Despite this fact, it is described as "a struggle to convince management that the project benefits from the knowledge gained" from a well-managed core testing programme.

Colin went on to point out that in his review of around 25,000 special core analysis (SCAL) measurements, 70% of legacy data was unfit for purpose. Stark examples were provided of poor management, inappropriate laboratory practices and unaligned testing objectives, that have contributed to undermining the value that should be derived from core data.

Finally, the solution was outlined where appropriate planning and design, from core acquisition to results interpretation, allowed for provision of superior quantity and quality of core data to an informed end user.

Questions from the floor showed the diversity of the audience, ranging from Heriot Watt University students, professors, laboratory experts and industry professionals. The well-attended event was sponsored by Senergy.

Philip McCurdy is an SPE member in Edinburgh who has been chairing and assisting the coordination of the local meetings.



Colin McPhee

ABERDEEN EVENTS

DEVEX 2011

11-12 May, Aberdeen Exhibition
& Conference Centre

DEVEX 2011

Registration is now open for this major annual event, organised by SPE Aberdeen, PESGB, AFES and DECC, and designed for geologists, geophysicists, petrophysicists, reservoir engineers, petroleum engineers, production technologists, well engineers and drilling engineers. The strong Technical Programme features 44 presentations from 25 organisations, keynote speakers from TAQA and Maersk, and a larger than ever Poster Programme comprising more than 20 poster presentations. Sponsorship and exhibition slots are being snapped up, but there are still some available. Please visit the website for more details:

www.devex-conference.org

Smart Energy 2011
Delivering return on investment by applying technology and expertise

7 June, Mercure Ardoe House Hotel, South Deeside Road, Aberdeen

In the last decade, globally, the industry has invested heavily in 'intelligent' or 'smart' technologies for the management of oil and gas fields. These developments are commonly known by terms such as i-field, Smart Field and Digital Oil Field. Technologies that only a few years earlier were seen as emerging are now routinely applied to new projects.

The UKCS is characterised by mature production facilities that generally have declining production rates, with further field development potential existing in smaller reservoirs than have historically been produced. Ownership of these assets is also shifting from the majors to a number of smaller operators. Simultaneously, the focus on sustainability, health and safety and the environmental has never been greater.

This SPE Aberdeen event will focus on case studies by operators and service companies large and small, on how they are applying appropriate levels of technology to maximise the return from their investment. Aberdeen has been at the forefront of Smart Oilfields, and this event will help us to better understand the challenges of mature field operators in the North Sea and the innovative solutions that have been effectively applied.

Come and learn from our speakers and exhibitors about:

- the use of new technology, method and/or procedures to manage more effectively and efficiently mature fields or reducing the overall OPEX
- performance benchmarks
- methodologies and/or technologies for knowledge capture and transfer to the new generations
- OPEX reduction initiatives that use Smart technologies or methodologies
- mature assets
- benefits of collaborative work practices

The keynote speaker is Bill Cattanach, Head of Industry Development, DECC and there will be presentations from Shell, BP, Total, IHS Cera and Apache North Sea.

For more details, to book exhibition space, or to raise your company's profile by sponsoring, contact organisers Rodger and Co, tel: 01224 495051; alexandra.stacey@rodgerandco.com

VOLUNTEERS WANTED

Continuing Education Volunteer Committee Members
are invited for:

- SPE ICoTA 17th European Well Intervention Round Table: 15-16 November 2011
- SPE EuALF (European Artificial Lift Forum): 22-23 February 2012
- SPE and Sand Management Network European Sand Management Forum: 21-22 March 2012

For more information or to volunteer, contact
Jane Rodger – jane.rodger@rodgerandco.com

CALLING CHEMISTS IN SPE!

This year is the International Year of Chemistry (IYC), led in the UK by the RSC (Royal Society of Chemistry). If you are interested in being involved in a specialist Continuing Education seminar focusing on Chemistry in Petroleum Engineering, in Aberdeen, later this year, please register your interest with Alexandra Stacey: spe@rodgerandco.com.



International Year of
CHEMISTRY
2011



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Senior industry speakers share personal perspective on achieving career goals

A motivational career development seminar, organised by SPE Aberdeen's Another Perspective Committee and the Energy Institute, and sponsored by some 16 companies in the oil and gas arena, was held at the Park Inn, Aberdeen, on 2 March. Committee Co-chair **Stephanie Nwoko** reports.

Another Perspective's first seminar, *'Unleashing the potential in your career'*, was seen as a success across the board, with positive feedback from attendees on the inspirational nature of the event.

The selection of industry speakers was varied in terms of background, career routes and experiences, but all came across as extremely enthusiastic about working in the industry and were very open and willing to share information from their careers and lives.

A wealth of practical tips and observations were exchanged during the day. For example, Nicola Gordon, Managing Director with Shell Denmark, and Oonagh Werngren, Head of Developments with GDF Suez, both mentioned the usefulness of international experience in shaping your career and said that hard work is a key priority in the working environment. Moya Cahill, President and CEO, PanGeo Subsea, stressed the importance of knowing what you want and making the right decision. Beth Gutweiler, Halliburton's UK Country Manager Supply Chain, talked about prioritising our work scope for more efficient project execution. The message from Leigh-Ann Russell, North Sea Completions Engineering Manager with BP, was *"Know your limit, don't be afraid to say no, but also put in your best at work."*

The seminar, which prompted lots of discussion during the post-event networking session, gave both audience and the Another Perspective Committee many things to think about with regard to their future plans!

"I thought the seminar was very good, mainly because I'm in the same situation as a lot of the speakers, with the whole work-life balance issue. I have a partner who is just as ambitious as I am and it's a challenge for us to fit everything in. It's really nice to hear how the speakers have managed to get to where they are and still have a balance between family and work."
Suzanne Kjenes, Offshore Safety Engineer, Atkins Limited.

"It was a very practical event and I learned a lot of new things. I found it interesting when they talked about motivation and all the pre-requisite beliefs you need to have if you want to be successful in this world."
Sergei Kelm, President, Aberdeen University SPE Student Chapter

• Another Perspective will host a technical presentation – *'Salt mitigation in SNS gas wells'*, by Elisabeta Isaj, of ConocoPhillips – at the Douglas Hotel, on 27 April, as part of the SPE Aberdeen Programme Committee's series of technical meetings.



Members of the AP Committee

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To find out more information please call Scott, Recruitment Representative, on 00 44 (0)20 7632 4967 or to apply visit www.jobsataramco.eu/spepdwo

The Society of Petroleum Engineers London Section Presents The 5th Annual **WOMEN IN ENERGY SEMINAR "HAVING IT ALL"**

Thursday, 19th of May 2011, Registration from 8.30 am; Seminar from 9.00 am to 5.00 pm

Imperial College Royal School of Mines Building, Prince Consort Road, South Kensington SW7 2BP London



London Section
www.spe-uk.org

This one-day seminar designed for Women at all levels in the Energy Industry, will help you shape your personal and career development, network and pick up new skills.

Speakers Include

- **Iman Hill** Senior Vice President Group Well Risk Management BG Group
- **Emma Fitzgerald** Vice President Global Retail Network Shell International
- **Jennifer Coconnier-Thomas** Exploration and Production Career Manager Total S.A
- **Demos Pafitis** Vice President Engineering Schlumberger Research & Engineering
- **Kate Gibbons** Functional Head Geoscience Baker RDS

The day's agenda includes the following

- Wonder Woman ; Fairy Tale or Reality; My Experience
- Gaining, Nurturing and Developing Female Talent in The Energy Industry
- Leveraging Social Media to Build Your career
- A Panel Session on Career Progression

Parallel Workshops on :

- Effective Communication Skills
- Achieving Work Life Balance
- Career Planning
- Dealing With Stress and Emotions at Work

TICKETS £40 (includes VAT and lunch). Informal drinks after 5pm.

BOOKING: Secure at www.katemcmillan.co.uk or call Kate on 07736 070066 or email katespe@aol.com

EARLY BOOKING IS STRONGLY ADVISED; Proceed to Room G 41 on arrival



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Technical and Financial Appraisal of Energy Projects

Oil and Gas Projects

20 - 22 July 2011

The course will address value creation in the petroleum industry and the application of methods of mathematical physics to oil and gas reservoir characterisation, the inter-relationship between primary resource estimates, uncertainty in predicting the form of decline curves and production profiles, and the impact these have on financial models.

Valuation of Coal Mining Projects

18 – 19 July 2011

This course will provide a comprehensive guide to the valuation of coal mining projects and an overview of the key technical aspects of the coal industry together with key financial concepts.

www.imperial.ac.uk/cpd/energy

For further details contact:

Stephanie O'Mahony, School of Professional Development
E-mail: cpd@imperial.ac.uk Tel: +44 (0)20 7594 6882

www.imperial.ac.uk/cpd

EAST AFRICA:

The Pursuit of African Oil

2 June, 9.30am-5.30pm,

Geological Society, Piccadilly,
London W1

This seminar has a primary focus on Kenya, Tanzania, Uganda, Mozambique and Madagascar. It is aimed at people with a variety of technical, commercial and management disciplines interested in knowing more about the opportunities in this exciting region.

The programme includes:



Speaker	Company	Presentation
Stephen Wright	Project Manager, Gaffney Cline	East African Petroleum Geology
David Aron	Founder and Owner, PDC	Current & Future Development in East Africa
Michael Hall	Remote Sensing Geologist, Infoterra	Geological Overview of the East Africa Rift System
Chris Machette-Downes	Owner, MDOIL	East Africa Exploration: 10 Years On
Robert Shepherd	Chief Financial Officer, Dominion Petroleum Limited	Experiences of Operating in Tanzania and Uganda
Simon Warren	Market Research, Vitol	Route to Market / Supply and Demand for East Africa

Tickets: (inc VAT) £200 members SPE/PESGB/EI, £230 non-members

Booking: secure advance booking at www.katemcmillan.co.uk or contact **Kate McMillan**, tel: 07736 070066, or email katespe@aol.com – early booking is strongly advised.

* NEXT EVENT * * NEXT EVENT *

FORTHCOMING UK EVENTS

LONDON

- **26 April (5pm-9pm)** (Before dinner): *Rescheduled presentation to be confirmed – check at London Events, www.spe-uk.org*
(After dinner): **'On the road to smart technologies in underground gas storage'**, Ken Brown (Schlumberger)
 - **2 June (9.30am-5.30pm): East Africa – The Pursuit of African Oil**
VENUE FOR ABOVE EVENTS: The Geological Society, Piccadilly, London W1
 - **19 May 2011 (8.30am): Women in Energy Seminar: 'Having It All'**
VENUE: Imperial College Royal School of Mines Building, Prince Consort Road, South Kensington, London
 - **9 June: SPE London 40th Anniversary Ball**
VENUE: Claridge's Ballroom, London
- For details of all SPE London events, visit: www.katemcmillan.co.uk and www.spe-uk.org 'London Events'. If you would like to sponsor an SPE London event, please email TKuiper@chevron.com

ABERDEEN

- **20 April (6pm): Young Professionals technical meeting: 'Carbon Capture & Storage – what does it really mean?'** Ian Phillips (CO₂ Deepstore)
VENUE: Shell Woodbank, Woodbank House, North Deeside Road, Pitfodels, Aberdeen
- **27 April (6.30pm): Another Perspective Committee chaired event: 'Salt mitigation in SNS gas wells – a case study'**, Elisabeta Isaj (ConocoPhillips)
VENUE: Douglas Hotel, Aberdeen

CONFERENCES/EXHIBITIONS

- **11-12 May: DEVEX 2011**
VENUE: Aberdeen Exhibition & Conference Centre
Details: www.devex-conference.org
 - **7 June: Smart Energy 2011**
VENUE: Mercure Ardoe House, South Deeside Road, Aberdeen
Booking: www.rodgerandco.com
- For details of all SPE Aberdeen events, please visit: www.spe-uk.org 'Aberdeen Events'

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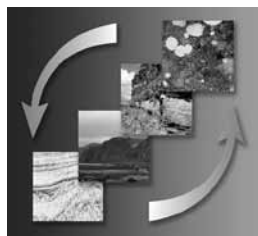


CALL FOR ABSTRACTS DEADLINE MAY 16 2011

Source Rocks: Character, Prediction and Value

12 - 14 September 2011

The Geological Society, Burlington House, Piccadilly, London



The past decade has seen the academic community significantly advance our understanding of organic rich rocks using novel techniques and new analytical tools. The industry challenge continues to be predicting the spatial and temporal distribution of effective source rocks in places like undrilled passive margins.

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For further information and registration, please contact: Steve Whalley, Event Co-ordinator: +44 (0)20 7432 0980 or email: steve.whalley@geolsoc.org.uk



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SPE
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