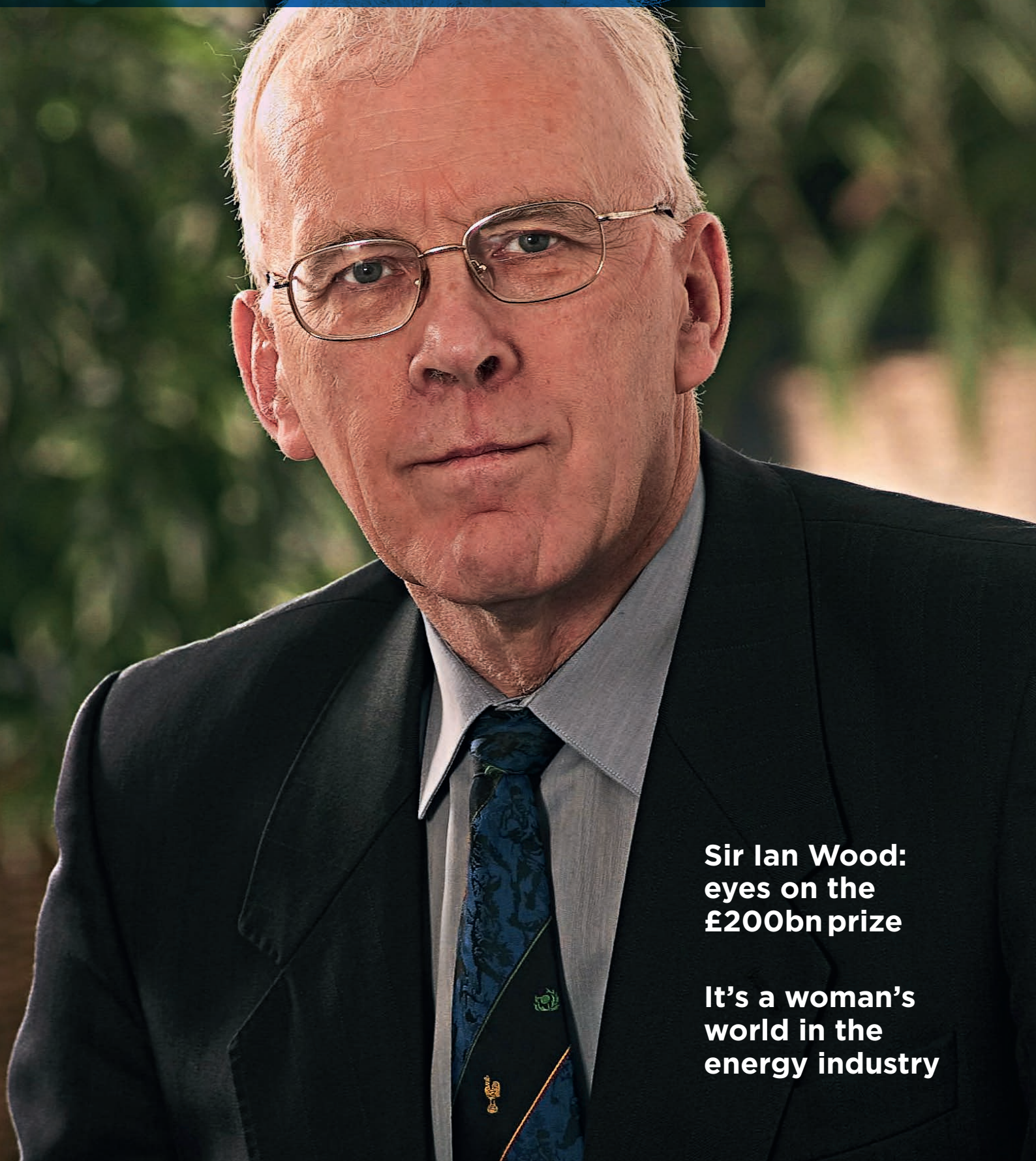


SPEREVIEW

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



**Sir Ian Wood:
eyes on the
£200bn prize**

**It's a woman's
world in the
energy industry**

Contents

NEWS

Woman's world in the energy industry..... 3

The SPE London annual Women In Energy (WIE) seminar takes place on May 21.

Young Professionals urged to become petroleum sleuths..... 9

The SPE London YP committee ran the PVT Knowledge Day in February, which once again proved invaluable for those interested in Pressure Volume and Testing (PVT) analysis, writes Karl Beardsley.

SPE Aberdeen bursaries 10

The Society of Petroleum Engineers (SPE) Aberdeen Section has awarded £18,000 this year as part of its annual student bursaries programme.

Green shares insight on completions 10

Advanced completion technology was the topic of February's SPE Aberdeen dinner presented by Annabel Green, product line director at TendeKa.

SPE Heriot-Watt Student Chapter kicks off 2014 in fine style 10

The new semester in 2014 began a bang for the SPE Heriot-Watt Student Chapter (HWSC), when it hosted a formal Robert Burns themed dinner for students at the Heriot-Watt Institute of Petroleum of Engineering (IPE).

FEATURE

Eyes on the £200bn prize..... 4

The oil and gas industry in the North Sea has experienced a number of landmarks in its illustrious history, and one of its leading figures may have just delivered another.

Potential catastrophe on the horizon..... 8

Change required to prevent future disasters, industry warned.

ABOUT US

The Society of Petroleum Engineers (SPE) is a not-for-profit professional association whose members are engaged in energy resources development and production. SPE serves more than 110,000 members in 141 countries worldwide. SPE is a key resource for technical knowledge related to the oil and gas exploration and production industry and provides services through its publications, events, training courses, and online resources at www.spe.org

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 5,000 UK SPE members, and quarterly to an additional 7,000+ 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.

The views expressed herein are not necessarily those of the SPE. Extracts may be reproduced subject to a clear acknowledgement of the source.

CONTACTS

Joint Communications Committee: Nick Curum, Elliot Kinch, Ella Minty, Pamela Tempone, Diane Wood and Ian Phillips

For queries please contact:

Editorial: Phil Allan, Fifth Ring, +44 (0)1224 626288 spe-editorial@fifthring.com

Advertising: Lorna Ord, Fifth Ring, +44 (0)1224 628139 spe-adverts@fifthring.com

Production: Jim Davidson, Fifth Ring, +44 (0)1224 628139 spe-adverts@fifthring.com

The editorial deadline and advert booking deadline for the May issue is 21 April, advert copy deadline is 23 April 2014, with publication scheduled for 7 May 2014.

CHANGE OF ADDRESS?

If you need to change any of your membership details, please visit the **Update your profile** link at the foot of the homepage at www.spe.org

Facing the future **with talent and ingenuity**

The state of the oil and gas industry is never really off the news agenda. The first quarter of 2014 has seen it regularly feature in headlines, be it safety, soaring costs, fiscal uncertainty, not to mention the forthcoming independence referendum in Scotland. All these issues contribute to a degree of anxiety.

During such turbulent times, it takes clear thinking, strategic vision and strong leadership to steer a path through troubled waters. These qualities are found in abundance within Sir Ian Wood, the man tasked by the UK Government to ensure the country's remaining hydrocarbon energy supplies are utilised to their maximum potential.

Speaking exclusively to SPE Review, Sir Ian explains that talented engineers, using their combined efforts and ingenuity, will play a fundamental role in ensuring that we all have a sustainable and long-term future in energy production here in the UK.

The increasingly important and influential role that women play in the industry also comes under the spotlight at a major conference next month, organised by the London chapter. Some may argue that the issue of glass ceilings for women should have been settled years ago, but the issue is still relevant and should remain near the top of the agenda.

We spoke to Sasol's Iman Hill, who believes it is up to individuals to smash through any barriers placed in their way. Iman will be a keynote speaker at the conference.

The first SPE conference to bring the world's leading risk managers, together to discuss the human factors that affect the industry – The Next Tipping Point – took place in Aberdeen last month and proved to be a great success. SPE Review was there to hear from some of the best in the business share their thoughts.

Listening to people such as Lord Cullen, it was clear that to improve standards and safety for all of us who make our living in the energy, will take hard work, collaborative working practices and no little amount of smart thinking – traits that are found in abundance within the SPE membership.



Anthony Onukwu
SPE Aberdeen Chair
2013/14



Arnaud Mille
SPE London chair
2013/14

www.spe-uk.org |



It's a woman's world in the energy industry



It's perhaps no small indictment on the workplace in the 21st century that the idea of there being a glass ceiling for women in industry, and the oil and gas industry in particular, is still a topic that merits serious discussion.

This is the theme of this year's SPE London annual Women In Energy (WIE) seminar, which takes place on May 21.

Childcare, career breaks and an industry that is still perceived by some as hard, dirty and aggressive have been cited as reasons why there are proportionally less women at senior levels of the business. However, it has long been recognised that having a diverse workforce throughout an organisation is beneficial to the company as a whole.

SPE has organised the (WIE) seminar for the past seven years. It is seen as the premier event for women in the energy sector and serves as an equivalent event to the Women in the City event for this industry.

The seminar will also focus on how companies in the oil and gas industry can retain their talented female population throughout their career journeys.

The WIE seminar presents an opportunity for the members of the energy sector to come together and discuss career challenges faced while working in the energy industry and like all SPE events, there is a strong focus on sharing knowledge and experiences to help colleagues.

Keynote speaker Iman Hill, (pictured) is General Manager of Technical and Operational services and delivery with Sasol Petroleum International, based in London. While she accepts that there are still relatively fewer women at senior levels – particularly in the boardroom – she believes the oil and gas industry is more meritocratic than others.

She explains: "There is no doubt that oil and gas is a male-dominated industry. But we are trying to answer some of the unspoken questions that women have. The conference allows us to explore what we need to do to progress and, very importantly, challenge our own mindsets on what we are doing that reinforces the paradigm of a glass ceiling. In addition, it offers deeper insight by allowing people to talk and share personal experiences about what works and what does not work.

"I firmly believe that if you are a person who is dependable, delivers on your promises and is committed to what you do, gender is irrelevant. This has been my experience throughout my career and in some positions, which could be considered 'difficult', for example as MD of Shell Egypt and Chairwoman of Shell Companies in Egypt, I was often asked 'what's it like being a senior leader in the Middle East?'"

"My honest answer is 'knowing your stuff, being a credible business partner and being willing to compromise to create value both for your company and for the host government you are working with, removes the gender issue'. This year's seminar has a lot of women getting together, but is important that we do not exclude men's views and that the debate is informed by the differing perspectives."

Hill has worked at BP, Shell, Monument Oil and Gas and BG Group, before joining Sasol in 2012. Following the death of her husband in

2009, she has sole responsibility for her five children and maintaining her high-pressure job. She has been a keen supporter of the Women In Energy conference since it began and she plays an active role in bringing women in the industry at all levels together.

In many respects, the main problem faced by dual career couples is finding a balance and attempting to juggle many competing, but, equally important, priorities.

Hill adds: "Whether we like it or not, the whole childcare aspect is still a practical problem. I accept this is a sweeping generalisation – but, the management of the household is still largely done by woman. Getting practical advice from people who have gone up the career ladder is extremely useful."

With a BSc in Biochemistry and MSc in Computing Sciences from Aberdeen University, Hill knows that having the right educational qualifications is essential when setting out on a career in the industry. For more women to climb the corporate ladder, the first rung has to be taken whilst still at school. Schools need to encourage more girls to choose subjects such as maths, sciences and technical subjects that allow them to compete.

"For me, the biggest restriction to our industry going forward is the availability of talent. We have made great strides in addressing this, but the industry is faced with a challenge of attracting young people," says Hill.

"The industry needs to get more involved at school level, before pupils make their choices at GCSE and A Level. I would like to see us doing more work explaining that oil and gas is not a dirty industry and that responsible companies think very carefully about their licence to operate, how to create sustainable economic development in the countries where they operate and their environmental and social corporate responsibility."

Panel sessions feature industry leaders discussing views on achieving a balance between the genders in work and family life, on how the glass ceiling can be further broken through and the gender gap minimised. In particular this year, the conference will discuss the impact of the European Commission's proposed law to improve gender balance in company boardrooms.

A series of workshops, on topics such as communication skills, assertiveness and leadership skills will be delivered by experienced professional consultants.

The eighth Annual Women in Energy Conference 2014: Continuing the Journey Through the Glass Ceiling – Increasing the Number of Women in Senior Roles, takes place from 8.30am-6.30pm on May 21, at the Royal Institution, 21 Albemarle Street, London.
Booking info @ <http://london.spe.org/events/>

Top comedian will host London Gala dinner

The TV funnyman Milton Jones has been confirmed as special guest for SPE London's Conference Gala Dinner, which takes place at the world-famous Claridge's hotel in Mayfair on June 5.

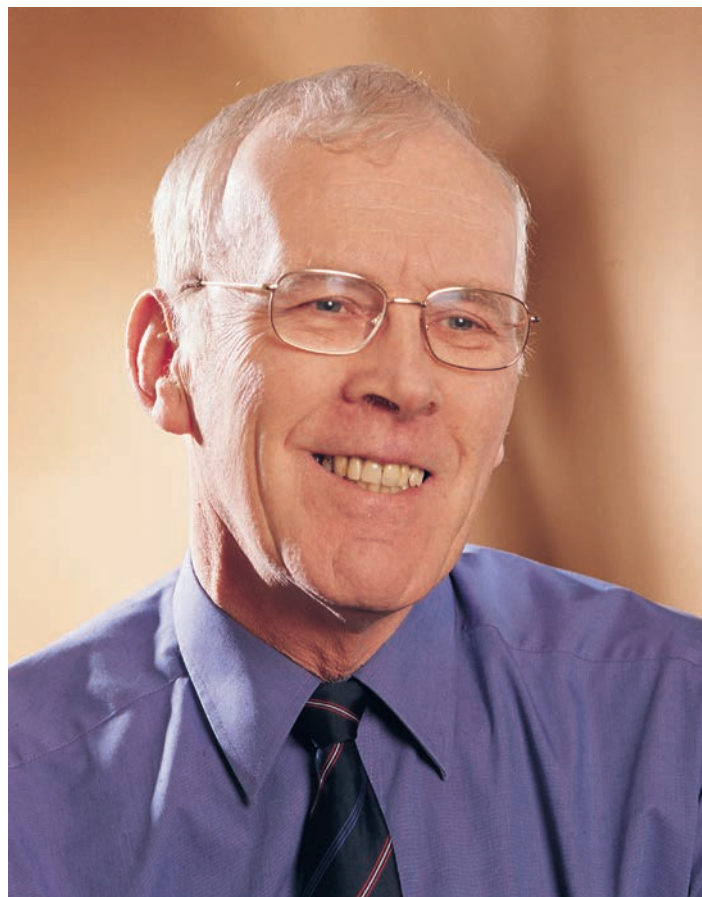
Jones, who is a regular guest on Mock the Week, Live at the Apollo and has appeared on Michael McIntyre's Comedy Roadshow, will be providing the laughs at the highlight of the London chapter's event calendar. The dinner brings together SPE members and guests for a night of festivities. Tickets are already being snapped up.

To book, contact www.katemcmillan.co.uk or katespe@aol.com 07736 070066



Eyes on the £200bn prize

The oil and gas industry in the North Sea has experienced a number of landmarks in its illustrious history, and one of its leading figures may have just delivered another.



At the end of February this year, Sir Ian Wood published his final report on a new strategy for Maximising the Economic Recovery from the UK Continental Shelf (MER UK), having been commissioned by Secretary of State for Energy and Climate Change, Ed Davey MP.

Davey described the publication of Sir Ian's review as a 'seminal moment' in the history of Britain's oil and gas industry while political parties have endorsed its recommendations, that could deliver £200billion additional value to the economy by 2034.

Taking stock of the public reaction to the final report, Sir Ian admits to being very encouraged and believes the industry is already moving in the right direction.

"The most positive thing of all is that the industry is clearly now committed and appears to have accepted the principle that we need to collaborate significantly more in the UKCS, for everyone's benefit, if we are going to maximise economic recovery," he told SPE Review.

"The Government has accepted the main recommendations, but what has happened in the last three or four months is really quite significant. The interim report largely reflected the views of those we interviewed so it wasn't surprising that they felt able to buy-in to the concept of a new regulator, tripartite agreement and collaboration.

"What is encouraging is that recently they have begun to move ahead with some real enthusiasm to make this happen – and that's extremely positive for the UKCS."

For eight months, Sir Ian worked with Tom Wintle and Craig Watson from the Department of Energy and Climate Change and Mike Tholen from Oil & Gas UK, carrying out up to 100 interviews receiving more than 80 submissions, meeting regulators from across the world and speaking to a range of Government ministers and officials from across Whitehall and Scottish Government, plus other key stakeholders.

SPE Consultant listing

Dr Sib Akhtar – 35+ years experience, reverse production decline with field proven gas compression solutions, field studies & design of gas compression facilities for oil, gas and condensate fields, specialises in satellite integration and life extension of mature fields. Integrated Asset Modelling. Full Project Management service from concept design to commissioning. MSE (Consultants) Ltd.
› email: sib.akhtar@mse.co.uk › tel: + 44 (0)1372 700 760 › www.mse.co.uk

Maurice Cotterill – CEng, FIMMM – exHPHT expertise, well design, advanced casing/tubing analysis, studies/reviews › email: maurice.cotterill@sede.co.uk

Jeremy Eng – Consultant Petroleum Engineer – operations and asset management, full integration of geoscience to drilling, completion, stimulation and development
› email: jeng@nehydrocarbons.com › tel: +44 7544 468 187

Flowsure Ltd – Providing expert flow assurance services to the oil and gas industry. Sand face to facilities steady state and transient modelling, training, and peer reviews › tel: +44 (0)1224 900 560 › email: info@flowsure.com › www.flowsure.com
Dr Gareth Smith › MacKenzie Building, 168 Skene Street, Aberdeen AB10 1PE

Kwabena Kwakwa – Experienced, Applied Geomechanics Specialist
› mob: +44 (0)7989 383084 › email: kkwakwa@energy-tech.co.uk

Andrew J McHardy – CEng, FEI, Chartered Petroleum Engineer, SPE, PESGB, AIPN, Honorary University of Dundee Centre for Energy and Petroleum and Mineral Law and Policy › statutory well examination, well engineering control, well engineering & project management › Blue Skies Energy Resources Ltd › email: jobdone@bser.co.uk › www.bser.co.uk

Merlin ERD Ltd – Extended Reach Drilling consultants › Feasibility/Design/Training/ Rigsite support leading to Trouble-Free ERD, High Angle & Complex wells ... and we do Spitfire flypasts too! › tel: +44 (0)1738 627922 › email: iain.hutchison@MerlinERD.com › www.MerlinERD.com

Oleum Khao Ltd – First quartile Petrophysics, 30+ years' experience › field studies, well planning, peer assist/review, project management › tel: +44 (0)7852 554496
› email: info@oleumkhao.com › www.oleumkhao.com

Petrophase Ltd – Reservoir fluid studies, sampling/PVT programmes, PVT modelling, data QC, compositional gradients, contaminants, allocation, training
› tel: +44 (0)7771 881182 › email: info@petrophase.com › www.petrophase.com
› Brian Moffatt, 34 Oaklands Drive, Reading, Berks, RG41 2SB

Fabrice Toussaint – Petroleum & reservoir engineering solutions, well test analysis DFIT PITA DST CCT, WBS & rate deconvolution › tel: +44 (0)7861 770897 › email: contact@dinovapetroleum.com › www.dinovapetroleum.com › Dinova Petroleum Ltd, 74 Lambton Road, London, SW20 0LP

Weisenborn-Linskaill & Associates – UK/Netherlands/global upstream, integrating legal with business, commercial and technical expertise › tel: +44 (0)131 466 8653 (UK), +31 (0)703 873862 (Netherlands) › www.wl-associates.com

Haoran Zhang – BSc, MPhil, PhD – Over 28 years' experience: prospect evaluation, M&A, field development planning, reservoir engineering, simulation, reserves, peer reviews › tel: +44(0)7827 089527 › email: haoran@petengplus.com or info@petengplus.com › www.petengplus.com › PetEng Plus Limited, 28 Evergreen Way, Wokingham, Berkshire RG41 4BX

To appear in this listing, please write to Lorna Ord at Fifth Ring Ltd, St Mary's Court, 47-49 Huntly Street, Aberdeen, AB10 1TH, with: your contact details › up to TEN words describing your services for £10. Thereafter £10 per extra line of text › advance payment by cheque x the number of months you are booking a listing (cheque payable to Fifth Ring Limited).

An interim report was issued in November 2013 with four core recommendations for consultation:

- Government (HM Treasury and the new Regulator) and industry must adopt a cohesive tripartite approach to maximise the huge economic value and energy security opportunities that still lie off the UK shores.
- The creation of a new arm's-length regulatory body in charge of effective stewardship and regulation of UKCS hydrocarbons. With broader skills and capabilities, the new Regulator should play a vital role in promoting collaboration and removing barriers to encourage more efficient recovery of UKCS hydrocarbons.
- The new regulatory body to be given additional powers to facilitate the implementation of MER UK and to encourage and influence collaboration in the industry.
- The Regulator, working with industry, should develop and implement strategies to under-pin delivery.

A prerequisite for the review was that industry should also give a clear commitment to collaborate and demonstrably work to the MER UK strategy.

Sir Ian's final report outlined six sector strategies to take forward covering exploration, asset stewardship, regional development, infrastructure, technology and decommissioning.

He said: "I see this as a watershed opportunity to ultimately reshape the regulatory environment, extend the life of the UKCS and bring at least £200 billion additional value to the economy over the next 20 years. We need to step up our game to maximise the recovery of our hydrocarbon reserves and attract more investment."

His interim report highlighted the challenges now facing the UKCS: there are now more than 300 fields; new discoveries are much smaller; many fields are marginal and very interdependent; and there is strong competition for ageing infrastructure. In short, the UKCS is a patchwork of interconnected and interdependent operations.

There is also growing competition from many international offshore regions. At the same time, the present regulatory function in the Department of Energy and Climate Change has halved over the last 20 years and now lacks the broader capability and resources to perform the much more demanding stewardship role required.

Sir Ian added: "The proposals and limited new powers are much more about stronger and better stewardship, establishing standards and procedures for collaboration and dispute resolution, as opposed to more regulation. The development of the UKCS must continue to be led by the operators, who provide the significant investment of funds, expertise and experience."

The new Regulator's role will be licensing, supervision and stewardship, low in bureaucracy, highly skilled, experienced, strong and pragmatic.

Sir Ian wants the more knowledgeable and better informed Regulator, working closely with HM Treasury, to help inform fiscal decisions to meet the new challenges arising from maturity, and the opportunities from frontier areas and new plays to take us closer to the 24bn boe prize potentially to come.

His respect for the people charged with bringing the oil to shore remains extremely high. He said: "Engineers have played the prime role in the North Sea from the very beginnings. I think the challenge for engineers is that we have got to do things better and differently. It is not just going to be enough to do things better."

"Engineers are some of the key players and we have to start adjusting our thinking. The whole focus has been on how do we get the best out of this group but we need to consider how we start talking to each other more. It has got to be a number of new things and new thinking and I am hopeful that what has happened in the last three or four months indicates that if we can get a new and good regulation team running this, I think there is every chance we will have significant progress."



Delivering High Quality Training to the Energy Industry

www.nautilusworld.com

Nautilus is part of the RPS Group

Visit us at

DEVEX 2014
Conference & Exhibition


6 - 7 May 2014
Aberdeen

Stand No. 29

Nautilus runs over 40 Engineering courses worldwide, ranging from Resource Evaluation to Production Operations and everything in between.



for more information contact:

Emma Vaks (e.vaks@nautilusworld.com)



The Geological Society
serving science & profession

Corporate Supporter:

Convenors:

Pete Armitage
BP

Alan Butcher
FEI Natural Resources

Anita Csoma
ConocoPhillips






Cathy Hollis
University of Manchester

Rob Lander
Geocom

Jenny Omma
BP

Richard Worden
University of Liverpool

Conference Sponsors:

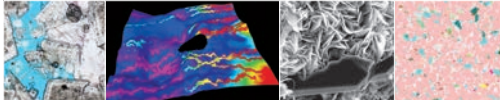






Registration Now Open

Reservoir Quality of Clastic and Carbonate Rocks: Analysis, Modelling and Prediction

28-30 May, 2014

The Geological Society, Burlington House, Piccadilly, London



Porosity and permeability exert a fundamental control on the economic feasibility of a petroleum accumulation and need to be quantified from basin access to mature production. Quantitatively reporting the mineralogy and pore space characteristics of reservoir rocks is vital in establishing the controls on reservoir quality. Only by doing so it is possible to build predictive capability, essential to successful geological modelling and cross-disciplinary integration. This issue is becoming ever more critical with exploration and production of petroleum in increasingly challenging conditions and from less conventional reservoirs.


Despite the importance to the industry of understanding the controls on porosity and permeability of reservoirs, fundamental issues lack consensus. Reservoir quality is controlled by interdependent sedimentary and diagenetic factors, including sediment provenance and weathering, depositional environment and climate, compaction, recrystallisation and dissolution, authigenic mineral growth, petroleum charge and structural deformation.

This conference seeks to address the factors and processes controlling rock properties of clastic and carbonate rocks as well as showcase novel analytical techniques and demonstrate diagenetic modelling capability. Delegates from both academic institutions and industry are encouraged to attend and contribute in order to represent the range of current reservoir quality research.

Themes

- Provenance and environment of deposition
- RQ in the sequence stratigraphic framework
- Clay mineral diagenesis in clastic and carbonate rocks
- Quartz diagenesis in clastic rocks
- Carbonate diagenesis in clastic rocks
- Near surface diagenesis as a control on reservoir quality in carbonate systems
- Porosity modification in the burial realm
- Fluid-rock interactions
- Petrophysical RQ characterisation and upscaling
- Application of RQ analysis for petroleum exploration and production
- Porosity upstides - predicting anomalously good reservoirs
- RQ of unconventional reservoirs
- Computer modelling of diagenesis
- Experimental approaches to understanding RQ
- Analytical techniques
- Geomechanical and structural controls
- Using RQ to improve rock physics models
- Modern environment, outcrop and subsurface analogues

For further information please contact:
Laura Griffiths, The Geological Society, Burlington House, Piccadilly, London W1J 0BG.
Tel: +44 (0)20 7434 9544 Fax: +44 (0)20 7439 8975



At the forefront of petroleum geoscience

www.geolsoc.org.uk/petroleum

DEVEX 2014

“Adding Value by Accelerating Activity” Session Programme

6th & 7th May 2014, Aberdeen Exhibition and Conference Centre, Aberdeen, Scotland

	Tuesday 6th May 2014 Gordon A	Tuesday 6th May 2014 Gordon B
All Day	Commercial Exhibition - Kindly Supported by CNR International and ConocoPhillips	
07:30 — 09:00	Registration Refreshments and Breakfast Rolls in BoydOrr Exhibition Hall	
09:00 — 09:30		Chairman's Welcome Keynote Speaker Pete Jones, MD, TAQA Bratani Limited
09:30 — 09:55	Session 1A Field Case Studies New Field Discovery by Combining Basic Geological Principles with Advanced Seismic Imaging in the Irish Sea <i>Gavin Ward, Centrica</i>	Session 1B Innovations Analyzing the Correlations in Generalisation of the Reservoir Information in a Well Completion Design Optimization using ICD's along the Horizontal section of a Wellbore <i>Morteza Akbari, Baker Hughes Inc.</i>
09:55 — 10:20	Integration of 4D Seismic Data and Petrophysical Surveillance Data to Support Production Allocation on GannetD <i>Cliff LoveLock, Shell UK Ltd</i>	Novel Workflow to Optimise the Design of Annular Flow Isolation in Advanced Wells <i>Mojtaba Moradi Dowlatabad, Heriot Watt University</i>
10:20 — 10:45	Tea and Coffee in BoydOrr Exhibition Hall	
10:45 — 11:10	Interactive Well Planning for The Appraisal of a Fractured Oil Field: An Example of Data Acquisition, Integration and Successful Testing of the Clair Ridge <i>Robin Cooke, BP</i>	Introducing High Temperature and High Pressure Sand Control Technology with Fluid Loss Prevention <i>Bradley Kellogg, Baker Hughes Inc.</i>
11:10 — 11:35	Targeting Tern Late Life Opportunities <i>Adriana Comanescu, TAQA</i>	Using Wellbore Deformation To Optimise Drilling Performance <i>Juan Tovar, Innovative Engineering Systems</i>
11:35 — 12:00	Tea and Coffee in BoydOrr Exhibition Hall	
12:00 — 12:25	Progressing Machar Field Development with Acid Fracturing from an LWI Vessel <i>Jim Briggs, BP</i>	Realtime Monitoring of Pore Pressure using an Effective Basin Model Approach <i>Arkady Madatov, Ikon Science Limited</i>
12:25 — 12:50	Back to Basics: Integration of Data and Conceptual Modeling Underpins Successful Re-development of a Compositional Brownfield <i>Devinder Singh Arora, Nexen CNOOC UK Ltd</i>	Developing an Innovative Nano-Coated, Smart-Material to Optimise Efficiency of Oilfield Completion Applications <i>Nicholas Carrejo, Baker Hughes Inc.</i>
12:50 — 13:40	Lunch in the BoydOrr Exhibition Hall	
13:40 — 14:05	Session 2A Views of the Future Main Lessons from an AML Distinguished Lecture Tour: Secrecy about Technology Doesn't Pay off for Operators <i>Ton Loermans, Consultant</i>	Session 2B Petrophysical Solutions Collaboration Between Major Competitor Service Companies for Optimum Cement Bond Log Acquisition <i>Dann Halverson, BP</i>
14:05 — 14:30	Unlocking Offshore Heavy Oil - A Case Study of the Bentley Field, UKCS Block 9/3b <i>Barry Brennan, Xcite</i>	Investigating Measured Cement Bond Against Theoretical Placement in the Brent Field <i>Diana Cristancho, Shell UK Ltd</i>
14:30 — 14:55	Tea and Coffee BoydOrr Exhibition Hall	
14:55 — 15:20	The Future of the North Sea - How to Tackle the Operational, Organisational and Strategic Challenges Facing the Industry <i>Daniel Cole, McKinsey & Company</i>	Adding Value to Petrophysical Appraisals from Rapid, Non-destructive Magnetic Susceptibility Measurements <i>Arfan Ali, Shell UK Ltd</i>
15:20 — 15:45	Enhanced Oil Recovery by Water Alternating Gas (WAG) Injection: The Opportunity and the Challenge <i>Mehran Sohrabi, Heriot Watt University</i>	Cross discipline use of the Modular Formation Dynamics Tester in the North Sea <i>John Costaschuk, BP</i>
15:45 — 16:10	Tea and Coffee BoydOrr Exhibition Hall	
16:10 — 16:35	Simulation of Carbonated Water Injection: Challenges and Solution <i>Mahmoud Jamiolahmady, Heriot Watt University</i>	Quadrupole LWD Measurement in Large Borehole and Slow Formation Shear Velocity: A Successful Introduction of the LWD Multipole Tool for Large Borehole Size in the North Sea <i>Marcelo Cecena, Schlumberger</i>
16:35 — 17:00	FEED, Modelling and Monitoring for Carbon Capture and Storage <i>Peter Roberts, AGR</i>	Freedom to Experiment Accelerated PNS Development <i>Ton Loermans, Consultant</i>
17:00 — 18:30	Networking Reception in BoydOrr Exhibition Hall - Kindly Supported by Total	

Supported by:



ly organised by:

PES GB

AFES Aberdeen Formation Evaluation Society

Department of Energy & Climate Change

REGISTER NOW!

www.devex-conference.org

Technical Programme kindly supported by:



	Wednesday 7th May 2014 Gordon A	Wednesday 7th May 2014 Gordon B
All Day	Commercial Exhibition - Kindly Supported by CNR International and ConocoPhillips	
08:30 — 09:00	Refreshments and Breakfast Rolls in BoydOrr Exhibition Hall	
09:00 — 09:30		Keynote Speaker Crawford Anderson VP UK Geomarket, Baker Hughes
	Session 3A Reservoir Characterisation	Session 3B Applied Technologies
09:30 — 09:55	Checking Complex Geomodel and Simulation Workflows <i>Mark Hayes, RPS Energy</i>	Integrated Petrophysical Approach for Shale Gas Reservoirs <i>Richard Arnold, Baker Hughes RDS</i>
09:55 — 10:20	Bittern: Demonstrating the Use of Integrated Surveillance Data to Understand Waterflood Behaviour in a Layered Reservoir <i>Calum Hunter, Shell UK Ltd</i>	JARR: Helping to Identify "Sweet Spots" in UK Shale Gas Basins <i>Jonathan Imber, Durham University</i>
10:20 — 10:45	Tea and Coffee in BoydOrr Exhibition Hall	
10:45 — 11:10	Penguin A Field: A Simple Approach to Simulation in a Complex Reservoir <i>Ceri Griffith-Swain, Shell UK Ltd</i>	Modified P/z Approach to Address Dry Gas Reservoir Performance <i>Aninda Ghosh, ONGC</i>
11:10 — 11:35	Ensuring Fit for Purpose Geomechanical Models: Common Pitfalls and Solutions <i>Colin McPhee, Senergy</i>	A Thorough Investigation of Clean-up Efficiency of Hydraulic Fractured Wells Using Statistical Approaches <i>Mahmoud Jamiolahmady, Heriot Watt University</i>
11:35 — 12:00	Tea and Coffee in BoydOrr Exhibition Hall	
12:00 — 12:50	Attended Poster Session in BoydOrr Exhibition Hall	
11:50 — 13:20	Young Professionals' Event (Gordon B) - Kindly Supported by Maersk Oil	
12:50 — 13:40	Lunch in the BoydOrr Exhibition Hall	
	Session 4A Case Studies	Session 4B Applied Technologies
13:40 — 14:05	Using Well Test Analysis Techniques to Determine Reservoir Properties and Drained Volume from the First Successful Appraisal Well in the Northern Part of the Pelican Field <i>Michael Judt, TAQA</i>	The Technical Challenges and Origin of Hydrogen Sulphide (H ₂ S) in the Oilfields of the Moray Firth Basin of the UK North Sea. <i>Mike Cooper, 1st Subsurface Oilfield Management Limited</i>
14:05 — 14:30	Guillemot A P5: An Example of Subsurface Integration in Drilling and Delivering Bypassed Oil <i>Chris Davis, Shell UK Ltd</i>	Facies Interpretation and Modelling: an Integrated Workflow to Assist Well Planning <i>Liz Chellingsworth and Pete Kane, AGR TRACS</i>
14:30 — 14:55	Tea and Coffee in BoydOrr Exhibition Hall	
14:55 — 15:20	Corrib Field: Understanding & Modeling Impact of Chlorite on Reservoir Property Distribution <i>Kachi Onyeagoro, Shell UK Ltd</i>	The Impact of Salt Diapirs in Fan Lobe Architecture: A Case Study from the North Sea <i>Efthymios Tripsanas, Shell UK Ltd</i>
15:20 — 15:45	Impact of an Optical Permanent Downhole Monitoring System on Buzzard Field Production <i>Murat Kece, Nexen CNOOC Ltd</i>	Estimation of a Reservoir's Hydrocarbon-in-Place Volume Using a 'Design of Experiments' Method <i>Euan Macrae, Senergy</i>
15:45 — 16:10	Tea and Coffee in BoydOrr Exhibition Hall	
16:10 — 16:35	Optimising Wellpath Design to Maximise the Chance of Drilling Injected Sands: Examples from Gryphon Area <i>Guillaume Berthereau, Maersk</i>	Applying Gamma Ray and Azimuthal Density LWD Images in Well-to-Well Correlation and Homogeneous Reservoir Characterisation <i>Constantin Ciuperca, Weatherford</i>
16:35 — 17:00	Use of Integrated Subsurface and Production Data at Gannet C Field To Calibrate An Analytical Reservoir Model and Optimise Field Development Planning <i>Ibrahim Al Waili, Shell UK Ltd</i>	The Provenance of Lower Palaeocene (T10-T38) Sandstones in the Faroe Shetland Basin <i>Ceri Roach, Chemostrat Ltd</i>

Thursday 8th May 2014: Additional Events

10.00-12.00: Core Workshop at Iron Mountain Core Store, Dyce – Kindly Supported by ConocoPhillips

12.30-23.00: Banff/Macduff Field Trip and Social Dinner – Kindly Supported by CNR International

13.30-15.30: Core Workshop at Iron Mountain Core Store, Dyce – Kindly Supported by ConocoPhillips

Please visit the website for further information and to register.

The organisers reserve the right to amend the programme as necessary – see website for updates on programme timings or further details: www.devex-conference.org

Potential catastrophe on the horizon

Change required to prevent future disasters, industry warned.



A catastrophic disaster can – and will – happen again if the lessons of Macondo and other similar incidents are not learned and shared routinely, experts from the global oil and gas industry were told at a major SPE conference.

The stark warning was issued to delegates at SPE Aberdeen's Another Perspective on Risk conference in Aberdeen, which was organised to address the shocking number of incidents occurring in recent years, despite the horrifying images of the Deepwater Horizon.

Incidents at Frade in Brazil, Eagle Ford in Texas, Gullfaks in Norway and others in Angola were highlighted as evidence that valuable lessons had not been taken on board by the industry on a global level.

Speakers at the event – including Lord Cullen of Whitekirk, who chaired the public enquiry into the Piper Alpha disaster, and David Pritchard, co-chair of the Presidential Technical Commission for the Deepwater Horizon study group (US) – highlighted the fear of the workforce to voice safety concerns as being one of a number of factors restricting progress.

Mr Pritchard told the conference the industry had to 'do better' but that the number of incidents which had followed on from Macondo indicated that this was not happening.

Lord Cullen, in his keynote address, reiterated the lessons of the Piper Alpha disaster, when he said: "Safety awareness at all levels should avoid any tendency to tolerate, cut corners, forget or fail to report, investigate and take lasting corrective action. That assumes a general commitment to safety which enables employees to report what has happened without fear of recrimination."

The event was the first international conference of its kind in the world and was organised by SPE Aberdeen. It saw hundreds of delegates attend the Aberdeen Exhibition and Conference Centre.

SPE Aberdeen chair, Anthony Onukwu, led delegates in a minute's silence in remembrance of George Bartlett who died in a North Sea incident the previous week.

SPE Aberdeen's Another Perspective Committee chair, Ella Minty, who organised the event, said: "Some people may wonder why SPE Aberdeen chose a topic that, at least in the UK, is generally dealt with by other organisations. The answer is very simple: the time is long overdue for this matter to reach the public domain and, until now, it hasn't."

The panel session brought together safety experts including Mark Griffon, member of the US Chemical Safety Investigation Board; Les Linklater, team leader of Step Change in Safety, Susan Mackenzie, head of HSE Energy Division Hazardous Installations Directorate, Health And Safety Executive and Jake Molloy, regional organiser of the RMT union.

Speakers included Dr Tim Marsh, expert witness at the Safety Culture and Management of Change forums at the Cullen Inquiry; Lillian Espinoza-Gala, independent researcher and Member of Berkley University's Center for Catastrophic Risk Management (US); Jem Thomas, head of operations of Albany and consultant to the UK Government's Stabilisation Unit and Thomson Reuters; William Libby, director of key accounts for Control Risks and the US lecturer and author Loren Steffy.



Energy firms must rethink approach to stakeholders

The SPE Imperial College student chapter hosted Sir John Grant as part of the newly founded Imperial College Distinguished Lecture series.

Sir John spoke about the relationships energy companies have with their stakeholders – governments, other political groupings, NGOs, civil society, the media and local and regional communities.

He observed that governments face growing expectations from populations who are increasingly well-informed and educated; who expect more from those in office; and who are able to organise and make their voices heard on an unprecedented scale and at an extraordinary pace through the use of online and social media.

This has had a knock-on effect on oil and gas companies and re-drawn the relationships with everyone they work with, he added.

"It has never been more important for companies in the energy sector to build and maintain broad recognition that their businesses are legitimate and bring a positive contribution to countries where they work," said Sir John, executive vice president for Policy and Corporate Affairs at BG Group.

The much-awaited lecture, on February 11, attracted both staff and students from a range of departments within Imperial College. In particular, engineering students raised questions on various aspects of fracking within the UK, in order to understand the situation from a corporate point of view.

The talk was the second in the Distinguished Lecture series, with the first lecture describing the Queensland Curtis LNG project, given by the Deputy head of Production Technology at BG Group. The lecture series hopes to see other high profile speakers such as David Heslop, managing director at EnQuest, talking about the United Kingdom Continental Shelf (UKCS).

The SPE Imperial College student chapter would like to thank BG Group, BP, Schlumberger, Shell and Total, whose sponsorship made this event possible. For more information about the SPE Imperial College student chapter please visit our website at: www.imperial.ac.uk/earthscienceandengineering/SPE

Young Professionals urged to become petroleum sleuths

The SPE London YP committee ran the PVT Knowledge Day in February, which once again proved invaluable for those interested in Pressure Volume and Testing (PVT) analysis, writes Karl Beardsley.

The day began with a successful visit to the Expro Fluid Analysis Centre in Reading, followed by an interactive Q&A session that afternoon, conducted by Brian Moffatt of Petrophase at the BG Group offices, also in Reading.

The tour of the UKAS-accredited Expro Fluid Analysis Centre was very thorough and covered most aspects of Expro's extensive PVT sampling capabilities. Delegates had the opportunity to inspect first-hand many of the processes and specialised machinery used.

The tour was followed by a slide presentation at the nearby hotel, where Keith Sawdon, Sue Pearson and Neil Winkworth of Expro gave a presentation on the Why, Where, When and How to Use PVT analysis and conducted a Q&A session for attendees.

Brian Moffatt hosted the afternoon session. Brian's logical problem-solving skills and break down of complex problems to first principle theories was thought-provoking and was much enjoyed by everyone present.

Brian's talk centred on best practice for young SPE members in gathering and interpreting reservoir fluid data. He explained that historically, QC of PVT data would have focused on mass balance checks on laboratory studies. However, because of improvements in lab methods the focus now is more on the context of sampling; how flow conditions and drawdown during testing affect samples especially when petroleum is drawn from tight formations.

Brian commented: "I was impressed at the enthusiasm of the young SPE members and their interest in solving the problems in capturing and characterising reservoir fluids. I urged everyone to become 'petroleum sleuths' when interpreting data and look beyond the face value of the numbers. From the feedback I'm delighted we had so many takers."



SPE London Young Professionals visited Expro's Fluid Analysis Centre in Reading, gaining an insight on many of the process and machinery used



SPE London Young Professionals attending the PVT Knowledge Day at Expro's facility in Reading

SPE LONDON SECTION SPONSORS

Cripps & Sears, Dong Energy, Tullow Oil, OPC, Petrofac, Premier Oil, San Leon Energy, REW Dea, Afren, Leni Gas & Oil, Challenge Energy, OMV, Anadarko, Tullow Oil, Cripps and Sears, BP

Programme for London Conference takes shape

Keynote speaker Sami Iskander, chief operating officer at BG Group, will set the tone at the SPE London Annual Conference, when he discusses the global upstream opportunities landscape and investment trends in the oil and gas sector.

High level speakers and participants from finance, Government and the energy industry will gather at the Royal Institution in London on June 4-5, bringing together some of the influential and important figures who are involved in deciding investment policy.

Technical Programme

Wednesday, 4 June 0900-0910: Opening Address by Conference Chair Renu Gupta, Gupta Energy Ltd.

09.10-10.00 Keynote Session: Global Opportunities Landscape and Investment Trends. Session Chair: Renu Gupta, Gupta Energy Ltd. Keynote Speaker: Sami Iskander, Chief Operating Officer, BG Group.

10.30-12.30 Session 1: Opportunities Landscape - North Africa. Session Chair: Ramin Lakani, Halliburton. Speakers and Panellists: Alessandro Agostini, Head of Business Development, Edison. Eric Oudenot, Principal, Boston Consulting Group. Geoff Probert, Managing Director, Petroceltic. Panellist: Duncan Godsmark, General Manager North Africa Shale Operations, Anadarko.

13.30-15.30 Session 2: Opportunities Landscape: UK. Session Chair: Arnaud Mille, Centrica Energy. Speakers and Panellists: John Blaymires, Chief Operating Officer, IGas. Mike Tholen, Director of Economics, Oil and Gas UK. Rob Hull, Technology Manager, Halliburton. Panellist: Simon Toole, Head of Licensing, Exploration & Development, DECC.

16.00-17.30 Session 3: M&A Landscape and Partnership Models. Session Chair: Drew Powell, Gaffney, Cline & Associates. Speakers and Panellists: Valery Konyushenko, Director, Energy Investment Banking, Citi. Dr Marc Van Grondelle, Head of Global Joint Venture Practice, KPMG. Panellist: Alfredo Marti, Managing Director, Riverstone.

Thursday, 5 June 09.00-10.00 Keynote Session: Cost and CAPEX Trends in Upstream Oil and Gas; Managing Investment, Cash Flow, and Shareholder Expectations. Session Chair: Renu Gupta, Gupta Energy Ltd. Keynote Speakers: Richard Krijgsman, Chief Executive Officer, Evaluate Energy. Chris Bruijnzeels, Senior VP Operations, Lundin Petroleum.

10.30-12.30 Session 4: Due Diligence. Session Chair: Drew Powell, Gaffney, Cline & Associates. Speakers and Panellists: Drew Powell, Regional Director, Gaffney, Cline & Associates. Max Kendall, Director of Corporate Finance, Deloitte LLP. Linda Zwick, Principal Consultant, ERM. Panellist: David Sherrard, Reserve Advisor, Iona Energy Company (UK) Ltd.

13.30-15.30 Session 5: Appraising the Investment Opportunity. Session Chair: Robert Hodges, Ernst & Young. Speakers and Panellists: David Kirsch, Managing Director, Research and Advisory, Energy Intelligence. Ray Macsweeney, Director of Energy & Assets Advisory, Ernst & Young.

For more information on the conference visit www.spe.org/events/london

London upcoming events - 2014

Tuesday, April 29, 5-9pm at Geological Society, Burlington House, Piccadilly, London W1

- 17.00 - 18.30: Before dinner topic: From Models to Reality, Kes Heffer, MD, Reservoir Dynamics
- 18.30 - 19.30: Networking & Drinks
- 19.30 - 21.00: After-dinner topic: Clair Ridge Development: LoSal EOR, Enis Robbana, BP.

Tuesday, May 27, 5-9pm at Geological Society, Burlington House, Piccadilly, London W1

- 17.00 - 18.30: Before dinner topic: YP Technical Showcase: Unconventional Resources: Evaluation, Modelling, Prediction, 2-3 YP Speakers
- 18.30 - 19.30: Networking & Drinks
- 19.30 - 21.00: After-dinner topic: Back to basics in reservoir engineering, Martin Blunt, Professor of Petroleum Engineering, Imperial College.

CE Seminars

Continuing the Journey through the Glass Ceiling: Increasing the Numbers of Women in Senior Roles. Wednesday, May 21, 2014: Royal Institute, Albemarle St, London.

Making good decisions under uncertainty. Thursday, May 22, 2014: London Geological Society, Piccadilly.

Please, go to: <http://london.spe.org/events/> for more info on the events.

To book: www.katemcmillan.co.uk

Contact: Kate McMillan katespe@aol.com (07736 070066)



The three top award winners of £2,500 receive their awards. Pictured, from left – Nick Simmister, SPE Aberdeen chairman Anthony Onukwu, Maya Hussain, Richard Cooper

SPE Aberdeen bursaries

The Society of Petroleum Engineers (SPE) Aberdeen Section has awarded £18,000 this year as part of its annual student bursaries programme.

More than 100 full-time under-graduate and post-graduate students attending Strathclyde, Dundee, Heriot-Watt, Robert Gordon and Aberdeen universities applied for this year's SPE Aberdeen bursaries.

The three top awards of £2,500 were presented to Richard Cooper, studying MEng Mechanical and Offshore Engineering at Robert Gordon University, Aberdeen, Nick Simmister, an MSc Integrated Petroleum Geoscience student at Aberdeen University and Maya Hussain, studying MSc Petroleum Engineering at Heriot-Watt University, Edinburgh.

A further 21 students were awarded £500 bursaries each to support their studies.

Shankar Bhukya, chair of SPE Aberdeen's Student Development Committee, said: "This year's bursary applications were of a high standard, boding well for the future of the oil and gas industry. The winners were recognised not only for the quality of their written submissions, but also for their industry involvement through professional societies such as SPE."

The three highest bursary award winners were presented with their awards by SPE Aberdeen chairman, Mr Anthony Onukwu, at an Aberdeen Section event on Feb 26.

Mr. Onukwu said: "In 2014, our 40th anniversary year, SPE Aberdeen's commitment to supporting students remains strong. The oil and gas industry still has a long future ahead and we will continue to offer students with the help and advice that they need in order to pursue a successful career in this field."

Aberdeen upcoming events – 2014

23 April

BP Learnings from North Sea Enhanced Oil Recovery Projects – past, present and future.
Presenter: Euan Duncan, BP
6.00 for 6.30pm to 8.30pm. Presentation and networking buffet.
Aberdeen Douglas Hotel, 43-45 Market Street, Aberdeen AB11 5EL

16-18 June

SPE European Artificial Lift Forum
Pre-conference short course and two-day conference and exhibition. Exhibition and sponsorship opportunities.
Booking for delegates – Early Bird discount

Details and link to book on www.spe-uk.org

Green shares insight on completions



Annabel Green

Advanced completion technology was the topic of February's SPE Aberdeen dinner presented by Annabel Green, product line director at Tendeka.

Ms Green told the well-attended meeting that subsea and drilling technologies continue to advance at a rapid rate. She said that North Sea-based companies have a legacy of delivering advanced completion technologies, and it is important that they continue to develop new solutions for extended reach wells, brownfield and marginal field developments and multi-lateral wells.

At Tendeka, Ms Green is responsible for the development and commercialisation of wireless technologies. She holds a degree in mechanical engineering, several patents and has co-authored a number of SPE papers in the fields of completion technology and sand management.



Advanced completion technology was the topic of February's SPE Aberdeen dinner presented by Annabel Green

SPE Heriot-Watt Student Chapter kicks off 2014 in fine style

The new semester in 2014 began with a bang for the SPE Heriot-Watt Student Chapter (HWSC), when it hosted a formal Robert Burns-themed dinner for students at the Heriot-Watt Institute of Petroleum of Engineering (IPE).

The sell-out dinner welcomed 200 guests on January 17, at the Ghillie Dhu and proved to be an enjoyable evening, kicking-off with a dramatic piping-in of the haggis display complete with bagpipes, a recital of Robbie Burns's poetry and addressing of the haggis. This was followed by a keynote speech from Crawford Anderson, managing director of Baker Hughes.

Following dinner, there was another inspirational speech given by Ian Phillips, Business Development Director at Pale Blue Dot Energy Limited and Director of SPE Aberdeen section. As a Heriot-Watt alumnus, he was especially honoured to be addressing the current MSc Petroleum Engineering students. The evening ended with an energetic ceilidh.

The SPE HWSC would like to thank Baker Hughes (Gold Sponsors for 2014) and the IPE for kindly sponsoring this event.

Oil & Gas training

Upcoming courses 2014

Introduction to Oil and Gas E&P Non-Technical Language
London 19 May
Aberdeen 30 June

Reservoir Engineering for Other Disciplines Part 1 & 2
London 20–21 May
Aberdeen 1–2 July

Integrated Field Development Planning
London 7–10 July

Decision making in the Upstream Sector
London 3–4 July

Oil and Gas Lifecycle Costing
London 3–4 July

Petroleum Economics and Risk Analysis
London 1–2 July


Introduction to LNG and the Value Chain
London 20 May

Talk to us about bespoke training

esanda


For more information and bookings go to

training@esandaengineering.com
esandaengineering.com





The Geological Society
serving science & profession

In conjunction with:



Corporate Supporter:

Convenors:

Conrad Childs
University College
Dublin

Caroline Gill
Shell

Bob Holdsworth
Durham University


Chris Jackson
Imperial College
London

Tom Manzocchi
University College
Dublin

John Walsh
University College
Dublin

Graham Yielding
Badley Geoscience

Conference Sponsors:

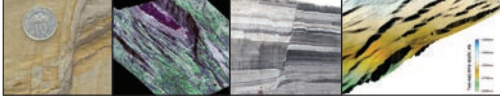


Registration Now Open

Geometry and Growth of Normal Faults

23–25 June 2014

The Geological Society, Burlington House, Piccadilly, London



The past few decades have seen major advances in our understanding of many aspects of the kinematics of normal fault systems. The analysis of high quality 3D seismic datasets of faulted volumes and detailed outcrop studies, combined with complementary geomechanical modelling, have provided much improved constraints on both the nature and growth of faults and associated fault zones. Recent research progress has benefited from the importance of faulting in a variety of application areas, such as the groundwater, minerals and petroleum industries. In a conference convened on the 25th anniversary of the Geological Society's 1989 'Geometry of Normal Faults' conference, it is intended that the full range of technical issues associated with the growth of normal faults, together with their practical applications, will be covered. The conference is in memory of Juan Watterson, one of the pre-eminent scientists in the field of 3-D fault analysis and modelling.

Themes:

- 3D geometry and kinematics of normal faults
- Internal structure and growth of fault zones
- Deformation within the volume surrounding normal faults
- Fault growth on earthquake through to geological time scales
- Links between the ductile and brittle expression of faults
- Stress- and strain-based methods for analyzing normal fault systems
- Numerical modelling of the geometry and growth of normal fault systems
- Practical application of fault analysis techniques

Confirmed Invited Speakers:

Joe Cartwright - University of Oxford

David Ferrill - Southwest Research Institute, Texas

Haakon Fossen - University of Bergen

James Jackson - University of Cambridge

Andy Nicol - GNS Science, Wellington

David Sanderson - University of Southampton

Janos Urai - RWTH Aachen University

Scott Wilkins - Anadarko

A fieldtrip to the Bristol Channel will follow the meeting (26th–27th June).

For further information please contact: Laura Griffiths
The Geological Society, Burlington House, Piccadilly, London W1J 0BG.
T: 020 7432 0980 or email: laura.griffiths@geolsoc.org.uk

At the forefront of petroleum geoscience

www.geolsoc.org.uk/petroleum

UPSTREAM

DOWNSTREAM


ENGINEERING & PROJECTS

RESEARCH & DEVELOPMENT

CORPORATE

HEALTHCARE

NICHE AREAS




ارامكو السعودية
Saudi Aramco

9.55AM

DEVELOPING MY POTENTIAL IN A COMPLEX AND CHALLENGING ENVIRONMENT.

5.55PM

DEVELOPING MY RETURN ON THE COURT WITH SOME FRIENDS.



OPPORTUNITIES IN PETROLEUM ENGINEERING

A role in Petroleum Engineering & Development at Saudi Aramco won't just provide you with the opportunity to apply the very latest technology to the world's largest known and most complex reserves. The fact is you'll also enjoy a lifestyle that's every bit as stimulating as your career.

As a global leader in the energy industry, we have the resources to cater to your every need. So whether you want to progress your career on projects of unrivalled scale and complexity, or explore a wealth of activities – on your own, with colleagues or family – it's safe to say that with Saudi Aramco, you'll have the chance to do it all, and more besides.

To find out more and apply, please visit our website.

DREAM BIG at www.jobsataramco.eu/spe14

www.spe-uk.org

SPE Review April 2014 11

Jack-Up Your Skills



Well Engineering Competency Programme

The WEC programme is a mentored distance learning Well Engineering Competency Programme. Two programmes are available, one for Drilling Engineers and one for Completions Engineers. Candidates are typically in their first years as a graduate engineer or are more experienced engineers who don't have any formal drilling or completion qualifications. The programmes are based on the member completing 35 self-study modules, practical experience with their employing company and attendance at training courses. The programme lasts 24 months, culminating in final exams.

The two programmes can be joined to create a three year combined programme.

Access to a team of Mentors with significant experience in the industry is available throughout the programme, as is access to WikiWell, the technical web based information resource for the WEC programmes.

Environment, Health and Safety Programme

Due to be launched later this year, the EHS competence programme for HSE professionals and other staff involved in the HSE area of the drilling and offshore industries.

To find out how these programmes can benefit your company and your engineers or to request a demo pack please Email: WECSales@fp-g.com or call Tel: +44 1224 638580.

Fearnley Procter Group

Quality Control - Process Assurance - Engineering - Training - Accreditation & Publications

