

SPE review

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

issue 266 | December 2012 / January 2013



Society of Petroleum Engineers
Aberdeen and London Sections

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FIRST CLASS IDEA!



Pupils from Aberdeen's Dyce Academy were the delighted winners of the first SPE ICoTA Energy Apprentice schools competition, held in conjunction with the organisations' 18th Well Intervention Conference and Exhibition (Aberdeen Exhibition and Conference Centre, 14-15 November).

The competition, designed to improve awareness of career opportunities within the industry and to search for the creative thinkers of tomorrow, challenged the youngsters to come up with an idea that carries the industry into the next century, improving the extraction of North Sea oil. Dyce Academy's winning idea, the 'Catalyst in Well Regeneration' project, could in theory allow oil companies to extract significantly more oil from existing wells and was praised by the judges for its originality and potential practicality. After demonstrating the concept with a video of their lab experiment and results the team claimed that between 75-95% of reserves could be extracted.

Each of the Dyce pupils was presented with an iPad and their school received £500 to spend on equipment. The team competed against pupils from Cults, Kemnay and Westhill Academies. Kemnay Academy were Highly Commended by the judging panel for their downhole ROV idea that proposes to improve access to oil in reservoirs. (continued on page 7)

Leading well intervention forum showcases best-in-class examples of innovation and collaboration – pages 6-7

GROUCHO CLUB GET-TOGETHER

London's young professional oil and gas community gathered at The Groucho Club, an exclusive members-only venue, for an informal Winter Social which brought together YPs from both the SPE and PESGB, and encouraged professionals to network among themselves and with students currently studying an oil and gas-related degree.

The October event was generously sponsored by McKinsey & Company. Dan Cole, a Senior Consultant with the firm, says: "It was great to see the young professional groups in the SPE and PESGB thriving, with everyone catching up with old friends and making new contacts."

SPE YP London Chair Nick Curum and Social Lead Maya Hussain welcomed attendees at the start of the evening. Guests were briefed on the different events run by SPE London Section. The now famous 'SPE-ed Dating' made a 2012

return, and the evening ended with a raffle with prizes presented by Susana Medina. The winner of the Red Letter Day experience was Lumi OlatOlumide Ajayi.

For information on more London events, visit: www.spe-uk.org, or follow SPE YP London at their LinkedIn group for the latest news.

Email yplondon@spemail.org to find out how you can volunteer and be part of the SPE experience.



SPE review

The Society of Petroleum Engineers (SPE), a not-for-profit professional association of 104,000+ members from more than 123 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 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.

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The copy deadline for the February 2013 issue is **21 January 2013**, with publication scheduled for **6 February 2013**.

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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.

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SPE PEOPLE



A Fresh Perspective



A Fresh Perspective is led by SPE Aberdeen's Another Perspective gender diversity group and shares inspirational career stories from women in the UK oil and gas industry.

| | |
|------------------------|--|
| Name: | Rosemary Nhera |
| Qualifications: | BEng (Hons) Chemical and Process Engineering |
| Employer: | Fluor Ltd, Farnborough, UK |

Why did you choose engineering as a career?

I have a very inquisitive mind and love problem-solving, so engineering seemed like the best fit for me. I also enjoy variety in my day-to-day activities, so I was attracted to the wide range of career opportunities which engineering offers.

Have you always been interested in the oil and gas industry? What's the attraction?

I grew up in a mining environment, in Zimbabwe, so I had no idea about the oil and gas industry until my university lecturers introduced it to me. I was attracted to the industry because I believe energy is the foundation of all economic activity and to be part of something so significant is highly satisfactory. I really feel like I'm making a worthy contribution to the world.

Tell us about your current role

I'm 11 months into my Graduate Process Engineer role and I'm currently working on a design for an Upstream gas processing facility. I've had the opportunity not only to improve my technical skills, but also to think of some of the wider issues, such as environmental impact and legal aspects of the project. I love the fact that I'm constantly learning.

What has your employer/SPE given you and what do you think you can give back?

My employer has shown me what a huge impact engineering has in our world and also the responsibility that comes with it. Our innovative ideas really can shape the future, especially when it comes to addressing the energy challenge. The SPE has exposed me to invaluable learning and personal development opportunities, and I think the best thing I can give back is my time and whatever little experience I have at this stage to help others at work and in the SPE.

What are your thoughts on working in a male-dominated industry?

From the last two years of secondary school and through university my classes had males in the majority and this has continued in the work environment. I am quite comfortable with it and had never really thought about it until the recent media spotlights on women in the workplace. I guess there is always room for improvement but I have always viewed myself as an equal and so far have not encountered any problems.

What's your advice to young professionals?

Grab every opportunity, learn as much as you can from those around you and work hard. One of my favourite verses from the Bible says: "You who are young, make the most of your youth. Relish your youthful vigour. Follow the impulses of your heart. If something looks good to you, pursue it." (Within good reason of course.)

TECHNICAL MEETINGS

ABERDEEN

LONDON

EDINBURGH

Aberdeen

SPE Aberdeen's first evening meeting of the year, on **23 January**, at the **Douglas Hotel**, will feature guest speaker **Tobben Tymons, of Archer**, who will discuss **'Keeping wells healthy: how accurate diagnosis of well integrity issues is key to successful and efficient repair'**.

The presentation will include: background and statistics on key integrity issues; an overview of technical innovations and solutions; operator-approved case studies linking innovation to successful operations, and a Q&A session.

Tobben Tymons is Archer's Marketing Manager Wireline Eastern Hemisphere. A graduate of the University of Reading, he holds a BSc in Physics and Computer Science. He began his career as a Research and Development Engineer with Sondex, in 1997, and has 15 years of experience in the field of well integrity, specialising in downhole diagnostics and solutions. In his current role with Archer, Tobben is part of a group who provide specialist well integrity services throughout the eastern hemisphere.

London

On **29 January**, at the **Geological Society, Piccadilly**, SPE London's evening meeting will begin with a presentation by **Jon Perry, of Environmental Resources Management (ERM)**, on **'Attaining 'Privilege to operate' in the Arctic: understanding the environmental, social and political risks in a rapidly evolving system – the Greenland example.'**

Despite recent drilling results off West Greenland, interest in this frontier Arctic province remains high, with further licences due to be awarded in the Greenland Sea in 2012-13. Jon will explain that recent experience of undertaking Environmental and Social Impact Assessments for seismic, site survey and drilling operations, has revealed the complexity of gaining not just permitting approval, but also the importance of achieving 'Privilege to Operate' in an area where considerable social, environmental and political risks all come together in an arena which is already highly challenging from a technical and logistical perspective.

Jon Perry is a Partner at ERM, specialising in International Impact Assessment work for oil and gas companies. He works primarily within Europe, Africa and the Middle East, covering both onshore and offshore operations across the life cycle of oil and gas operations. Although he qualified as a Geophysicist, he has been an Environmental Consultant for the last 17 years, working for oil and gas clients ranging from super-majors to small independents, as well as NOCs, lender organisations and industry bodies.

ERM is a leading global provider of environmental, health, safety, risk and social

consulting services and sustainability related services. Over the past five years ERM has worked for over 50% of the Global Fortune 500, delivering innovative solutions for business and selected government clients and helping them understand and manage the sustainability challenges that the world is increasingly facing.

Following the networking buffet, **Chris Burns, of Gaffney, Cline and Associates (GCA)**, will discuss **'Shale Gas and its Potential Market in Europe'**.

Chris says: "Currently around 58% of US natural gas production comes from 'unconventional' resources such as shale, with this forecast to rise to 70% by 2035. Perhaps understandably, given the higher spot gas prices, there has been considerable recent interest in replicating the US unconventional gas boom in Europe. Notwithstanding the technical challenges that must be overcome, we examine the potential uses for European shale gas, and the potential challenges and pitfalls faced by operating companies and government agencies in bringing the resource to the market."

Chris Burns is a Senior Geoscientist with GCA, based in London. He has nine years' industry experience in geological and geophysical interpretation, including recent projects in North Africa, the Gulf of Mexico and Poland. Chris has an MSci degree from Royal Holloway, University of London, and has spent much of his past two years with GCA working on unconventional oil and gas projects, including knowledge transfer from North America to Europe.

GCA is a global energy consultancy specialising in petroleum reservoir evaluation, commercial and strategic advice and economic analysis. Gaffney, Cline's client base ranges from the smallest start-up to the largest major, and includes governments, ministries, national oil companies, banks and transnational financial institutions.

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/El members, £44 non-members, £19 unemployed members, £5 students booking by Friday 25 January (£19 after).

Edinburgh

On **5 February**, at **Senergy**, 6th Floor, 102 Westport, Edinburgh EH3 9DN, SPE Distinguished Lecturer **Simon Stromberg, of Senergy**, will present **'The impact of data reliability on the decision making process'**. Advance booking essential. Students – please book through your Student Chapter.

Bookings for Aberdeen and Edinburgh meetings: www.rodgerandco.com; tel: 01224 495051; spe@rodgerandco.com. Further information at: www.spe-uk.org.

RGU Student Chapter Inauguration provides inspirational career advice

Around 60 SPE Aberdeen members attended the inauguration of the Robert Gordon University SPE Student Chapter for 2012-13, in November.

The event was launched by Faculty Sponsor Ibiye Iyalla, who highlighted the Chapter's vision and objectives and invited all students to participate in the various activities that will be organised throughout the session.

SPE Aberdeen Section Chair Anthony Onukwu then presented the Section's vision and objectives, shared his career experience, and highlighted the benefits of being a member of the SPE. The inauguration followed, with the new Chapter officials announced as: Lalit Bhamare (President), Folarin Tubi (Vice President), Ogor Peters (Treasurer), Rotimi Olaleye (Social Secretary) and Dhinelle Cedenio (Secretary). Lalit outlined his objectives for the academic year, emphasising that opportunities for giving back to the community will be explored. He also pledged to liaise with the SPE Aberdeen Section to provide avenues for mentorship and career support programmes for the student members.

The second half of the evening featured three impressive presentations by SPE members. Maria Isabel Trujillo-Vergara and Yanti Kamaruddin discussed 'Liquid loading in gas wells', focusing on two North Sea case studies and describing technologies that ConocoPhillips is applying in the UK. Razzak Al-Gurnawi, of Maersk Oil, gave a careers talk, 'Young graduates in the oil and gas industry', in which he shared his own career

experiences and provided general tips for writing CVs. Razzak inspired the audience with his motivation, passion and dedication – clearly key attributes for his successful career development. He also mentioned the importance of networking with other professionals and how it can benefit and orientate an individual's student and career path. The talks were concluded by Jai Chainani, Chair of SPE Aberdeen Young Professionals, whose interesting presentation, 'Introduction to SPE Young Professionals' made the comparison between his career development before and after being a member of the SPE. Jai also encouraged the audience to participate in YP events, which provide another opportunity to network.

The event closed with some refreshments and the chance for the students to put their new networking tips into practice!



Inauguration ceremony (l-r): Anthony Onukwu, Lalit Bhamare, Rotimi Olaleye, Ogor Peters, Dhinelle Cedenio, Folarin Tubi

LONDON

OCTOBER TECHNICAL MEETINGS

Expert presentations on cost-effective oil recovery solutions and the reservoir engineering challenges associated with CO₂ storage, engaged a large and diverse audience of industry professionals and students at SPE London's evening technical meeting, in October.



Sacha Sarshar, co-founder and Chief Technology Officer of Caltec, is the co-patentee of more than 14 patents on the subject and has won several awards, including the prestigious Award for Innovation from the British Royal Society.

He began his presentation, **'Declining Production: how best to recover the remaining oil?'**, by

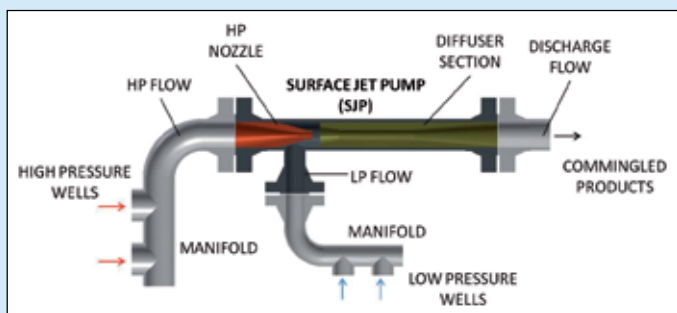
explaining that oil and gas covers 58% of the world's energy supply and demand and that this will change little, as predicted demand for oil and gas by 2030 is expected to be 54% of the total sources of energy.

He followed this with a brief history of the discovery of oil – in Titusville, Pennsylvania, USA, in 1859, and in Iran, in Masjed-i-Sulaiman (MIS), in May 1908 – explaining that many fields worldwide have reached maturity after 40-50 years of production, with the exception of some, for example the MIS field, which is still producing 104 years on!

The total rate of recovery from many mature fields without the aid of a variety of production-boosting systems is limited to 25-35% of the total recoverable reserves, he said. *"Leaving the remainder of this valuable source of energy in the reservoir is sheer waste. It is the duty of the present generation to maximise recovery from such fields, as, should these fields be abandoned prematurely, further recovery from them in future will become uneconomical, as new infrastructure will be needed to enable the production to resume with the aid of new technology."* He mentioned that by using a combination of boosting systems at surface, downhole and at reservoir level, a total rate of recovery of 60-65% has been achieved, and reaching targets of 70-80% is desirable to prevent wastage of this valuable source of energy.

A variety of enhanced oil recovery (EOR) and improved oil recovery (IOR) techniques are helping to extend the life of mature fields. Sacha explained that surface mounted boosting systems are generally of lower cost, compared to IOR and EOR solutions, and are well worth considering on their own or in combination with EOR and IOR techniques. A further challenge facing many mature fields is that if the use of IOR and EOR solutions to maintain production and increase total recovery is not considered in the early stages of production, justification to invest large sums during later life of the field is difficult. At this stage surface mounted production enhancement systems will be of much lower cost with less risk of failure.

One of the simplest and cost effective, yet surprisingly often overlooked, systems to enhance production is the surface jet pump (SJP) system – a simple, passive device with no moving parts, which only requires a source of high pressure (HP) fluid as the motive flow. The energy from an



available HP source is used to reduce back pressure on the low pressure wells, or to boost the pressure of LP gas or liquids. It is incredibly versatile and the numerous applications for the SJP, at individual wells, manifold or even pipeline level, include:

- Revival of liquid loaded wells
- Boosting the pressure of LP gas
- Preventing LP gas flaring

- Boosting production of LP oil and gas wells
- De-bottlenecking compressors, eliminating intermediate compressors
- Preventing HP wells imposing back pressure on LP wells.

Capital cost is very low and is recovered from the additional production within a few weeks. There is generally no operating cost involved. Sacha explained that there are some 100 excellent field examples worldwide where the SJP system has operated successfully, enhancing production on its own, or in conjunction with IOR and EOR solutions.

In conclusion, he stressed the need for governments to offer tax incentives to operating companies to encourage them to invest further in improving recovery near end of field life and to leave some of the undeveloped new fields for future generations!

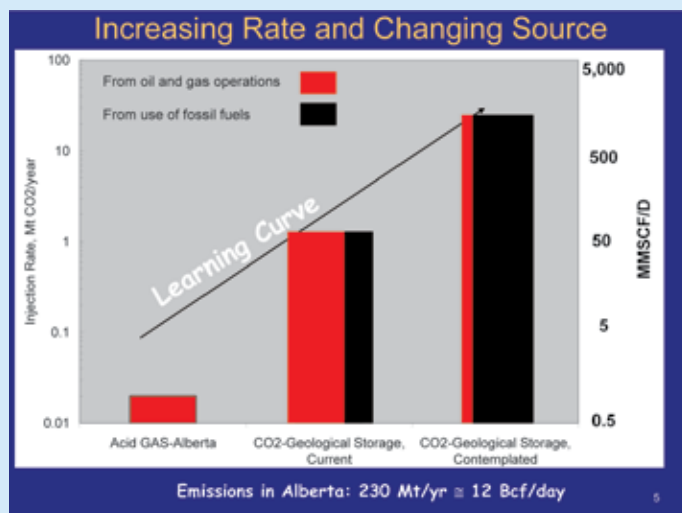
In his after-dinner presentation, **'Geological Storage of CO₂ – Reservoir Engineering Considerations'**, SPE Distinguished Lecturer Mehran Pooladi-Darvish, VP Engineering at Calgary-based Fekete Associates Inc, offered a valuable subsurface insight into the real-life issues and challenges experienced by CO₂ storage projects in Alberta, Canada.

His discussion centred on the fact that while the pressure and compositional effects focused on by Reservoir Engineers in petroleum reservoirs hold the same importance for the geological storage of CO₂, particular challenges could arise with regard to the latter as a result of large volumes and limited reservoir characterisation.

Mehran began with an analogous scenario, referring to the results of more than 40 acid gas injection projects (into previously oil and gas producing formations and aquifers) in Alberta over the past 30 years. Among these projects there were four instances of unexpected breakthrough and two of reservoir over-pressurisation. He also presented two CO₂ storage project case studies, demonstrating the various challenges associated with pressure, composition and reservoir characteristics.

His key observations with regard to pressure were that the pressure plume was always tens of times larger than the CO₂ plume, and that injection in one reservoir could affect injection in another reservoir because of pressurisation of a common aquifer, as evidenced in one of the over-pressurisation examples that Mehran presented. This could be of implication when/if multiple storage projects are considered in one aquifer.

In terms of compositional effects, Mehran observed that: what is produced (or leaked) is not necessarily equal to what is injected; breakthrough of CO₂ may suggest subsequent breakthrough of H₂S (or SO₂), and that CO₂ injection in sour aquifers leads to the presence of H₂S in the gas plume.



YOU'RE WELCOME:

At the October meeting, SPE London welcomed a number of first-time visitors, including these MSc and first-year Petroleum Engineering students from London South Bank University, Imperial College London and University College London.



He said that one important problem associated with reservoir characterisation is that reservoir characterisation obtained during primary production may not be sufficient for understanding and predicting CO₂ displacement of the reservoir fluids (in all the cases of unexpected breakthrough that he reviewed, the flow paths identified during primary production of the reservoirs were insufficient in determining the flow paths taken by the displacing stream of acid gas). Another important problem is related to scarcity of the information where injection is being considered. He reviewed a couple of cases where CO₂ injection is to occur in a producing reservoir and because of concerns about early breakthrough, the injection is to occur far from the existing wells. He observed that the prediction of CO₂ flow in the porous medium

therefore remains challenged, even in depleted reservoirs, and that, in aquifers, questions regarding the integrity of the caprock and the compartmentalisation are of additional concern for CO₂ storage.

Finally, he pointed out that the acid gas volumes and injection rates were very small in comparison with those of current and planned CO₂ storage projects. As such the implications associated with such pressure and compositional effects could be of more impact. He suggested that pilot studies (eg starting with small volumes) and reservoir monitoring and modelling may be used to reduce the risk. (See slide.)

A report on SPE Aberdeen's October meeting will appear in the February issue.

Kate is Young Technician of the Year

Kate MacGregor, a regular attendee at SPE Aberdeen meetings, has won a national Technician of the Year award after completing an HND in Petroleum Engineering at Adam Smith College, Kirkcaldy.

Kate, from Frickheim, in Angus, received the award from the Institute of Materials, Minerals and Mining, after being nominated by the College and supported by her employers, Subsea Engineering and Technical Services Limited. Kate was also recognised in 2011, when she was awarded a scholarship by Shell for her commitment to her studies, through the College's Adam Smith Foundation.

"It's a great honour to win the Technician of the Year Award and I am very grateful to Adam Smith College, my former lecturers and to my current employer for all their support and for putting me forward," she says.

"I'm really enjoying my current job which involves instructing divers, creating dive plans and planning general subsea engineering work for the oil platforms and subsea oil industry. Long term I hope to continue in this field and take all the opportunities that are open to me."

Kate's former lecturer, Bill Hutchison, has this to say about his star student: *"Every now and then it is an educator's privilege to come across a very hardworking, self-effacing student who has set rather too modest personal goals which are clearly not allowing them to blossom to their full potential. Kate is one such case and it is so rewarding to see her developing into a very valuable member of the oil and gas industry who, I am sure, will go on to make a major contribution in her area of chosen specialism."*



ADVERTISING FEATURE

The Green Economy; Re-use, Recycle... Re-wheel...

Is it time to Re-think your mature assets? Use Integrated Asset Modelling to extend life

Centrifugal gas compressors are extensively used in oil and gas production systems providing the external power to maintain production as reservoir pressures and energy levels decline. These compressors were originally designed to maintain plateau production but are totally unsuited for operation in the post plateau phase and need to be redesigned or re-wheeled.

Compressor re-wheeling becomes unavoidable when the process conditions change to such an extent that the plant completely fails to function; if the plant operates it does so inefficiently at much reduced availability and the asset becomes un-economic, leaving much oil and gas unrecovered. There are many mature assets in the North Sea and all over the world that are operating under such conditions. A compressor re-wheel is a low cost, low risk opportunity to improve the profitability of such an asset; Integrated Asset Modelling provides a methodology to find the best NPV solution provided it is conducted with proper care.

Re-Wheeling Methods

There are two ways to carry out a compressor re-wheel.

In the first option the re-wheeling is delayed until such time that the plant fails to operate, shuts down and produces absolutely no income. The cost of re-wheeling is justified to restore production as quickly as possible, however small it may be. Because compressor re-wheels have a long lead time, the OEM is under pressure to expedite the delivery of the re-wheel compressor, while an engineering contractor is mobilised for its fast track execution to restore some production. This provides no opportunity for re wheel optimisation.

In the second option, the operating company commissions a re-wheeling study pre-emptively, to look at alternative design options long before the current compressor design becomes inoperable. Usually the consultant is given the task of developing re-wheeling options and determining the

production rates that would deliver over time. The consultant determines the costs, schedule, and the practicability of the options as well as the shutdown periods required.

For simple assets it is easy to determine the most cost effective option.

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The Integrated Asset Model (IAM) allows the effect of the interaction between the wells and the proposed compressor design over time to be analysed and optimised. IAM is very useful for comparing the alternative compressor designs over the life of the asset and enables the true value of the compressor re-wheel optimisation to be established over the life of the field. This prevents selecting the lowest capital cost of re-wheeling and favours the best NPV.

Many more mature oil and gas assets can be made profitable with intelligent use of re-wheeling. Demand for oil and gas continues to rise and with oil prices showing no sign of flattening and few new oil and gas discoveries, the focus remains on exploiting mature assets. Compressor re-wheeling offers a very attractive, cost effective option.

To obtain a survey of your production facility for the potential benefits of a re-wheeling please contact Richard.Baldwin@mse.co.uk or contact Jessica Paige on 01372 700760.

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MSE

Leading well intervention forum showcases best-in-class examples of innovation and collaboration

A record attendance of around 320 UK and international delegates and its largest-ever exhibition helped to make the **18th SPE ICoTA European Well Intervention Conference and Exhibition** a memorable and highly successful event.

Preceded by a one-day short course learning opportunity, the event – themed ‘Delivering More for Less’ – featured a dynamic technical conference and technology showcase which helped to share innovations, learnings and best practice across the well intervention community.

ICoTA's 2012 Innovation Award was won by Oilenco for their ‘soak sleeve and syringe’ technology, while the final of the first SPE ICoTA schools competition – ‘The Energy Apprentice’ – was played out against the busy event backdrop. The participating schools, together with a party of engineering students from Adam Smith College, Kirkcaldy, also attended the exhibition, making valuable contacts with service companies and operators for developing their careers within the oil and gas industry and helping to close the shortfall in skilled technicians vital to moving the industry forward.



Callum Munro, of BP, who chaired the event, says: “The conference really demonstrated that within the well intervention arena we have the best developers, service companies and operators working in collaboration, while understanding the needs and capabilities of all parties. We were delighted by the larger presence of operators at this year’s event; indeed, the conference was opened by Mike Dyson, of BG Group, who engaged the audience with BG’s global

strategy and their strong mantra as an ‘applied innovator’ for technology in the business. The exhibitors also demonstrated their wide-ranging talent in a diverse array of innovative stands, from the giant ‘smart phone’ allowing instant access to a company’s range of products, capabilities and designs, to an ultra-high-pressure set of slick-line BOPS earmarked for well interventions in the deep waters of the Gulf of Mexico.”

“I presented a paper at the conference on a scale removal case using coiled tubing, where 7.5 tons of hard scale (Barium Sulphate) were removed from the wellbore using a turbine motor and a jetting tool, in combination with a multi-cycle circulation valve. It was good to share the case study with other well intervention people, particularly since I’ve been in my role only five years and there are so many experienced professionals here. A lot of people came around to ask me for more information afterwards.” **Evelyn Leal, Well Intervention DESC Engineer, Schlumberger**



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Perceptions Photography.



"This event represents the flagship exhibition for Omega Completion in our annual conference calendar. The contributors and attendees are always highly targeted.

It's a great place to discuss the latest challenges our operating company clients face and how Omega Completion technology developments can help to address those challenges.

We walk away from the conference happy with the quality of conversations we've had and with good things to follow up on." **John Donachie, Corporate Development Manager, Omega Completion Technology Ltd.**

"The feeling from our team was that this year's event was the best yet. Each year we have noticed the exhibition increasing in size and quality. There was a great look and feel to the exhibition hall and as usual the event provided plenty of opportunity to reunite with industry friends and colleagues. I also had the pleasure of mentoring two teams in the Energy Apprentice competition for schools. Engaging with senior secondary school pupils in this way is a great avenue to influence perceptions about the oil and gas industry and identify the many career opportunities it offers. I was fascinated to see what fresh minds are capable of coming up with when confronted with a real industry challenge – each team turned conventional thinking on its head when presenting their creative proposals, and that impressed the judging panel immensely." **Kelly Murray, Chief Operating Officer, Red Spider and ICoTA European Chapter Committee member.**

FIRST-CLASS IDEA! (from page 1)



The four school teams are joined by some of their industry mentors and supporters (l-r): Colin Black (OPTIMA and SPE Europe Board member); Kelly Murray (Red Spider) and Ross Lowdon (Schlumberger and SPE Schools Career Guidance Committee Vice Chair).

"It's been a challenging process but really worthwhile and made us really think about the opportunities available in the energy industries." **Dhruv Makwana, Dyce Academy**

"The Energy Apprentice challenge has been a great experience for me. I learned a lot about the problems the oil industry faces and what they have to do to get around them. It has made me consider a career in the oil industry. I especially enjoyed the SPE ICoTA convention and hope to be attending more of them in the future." **Hali Joji, Westhill Academy**

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Aberdeen

Oil & Gas Project Management – Simplified!

YP FOCUS

A full house welcomed Marizu Nwokoma (Facilities Engineering Manager, Chevron Upstream Europe) to the 'Project Management Simplified' event, organised in November by volunteers from SPE Aberdeen Young Professionals.

Having joined Chevron in 1996, after graduating from the University of Lagos in 1994 with a BSc in Chemical Engineering, Marizu has held a number of engineering and supervisory positions in the facilities and project areas.

Using language and analogies that everyone could understand and relate to, Marizu whittled down the complexities of project management to a few simple points. Building around the idea of stakeholder alignment, his presentation explored the keys to success, methods and phases of management, as well as assessment reviews. Marizu kept the audience engaged with interactive segments, and questions to keep students on their toes. Networking and a buffet followed the hour-long presentation.



The event was a fantastic success, leaving both students and Young Professionals with food for thought.

"An excellent practical take on project management principles. The students weren't the only ones who benefited!" Razzak Al-Gurnawi, SPE YP Student Development Officer, Maersk Oil.

"I loved it. It was a great summary of a rather broad, complex topic." Gayatri Sivakumar, former Secretary of the University of Aberdeen Student Chapter.



Fun and networking high on YP agenda

A knockout social event organised by SPE YP Aberdeen saw a grand turnout of professionals and students competing against each other while networking and having fun.

The lively event, at Codona's Sunset Boulevard, attracted a mix of new and familiar faces from the Section's vibrant YP and Student Chapter communities, who spent the evening showing off their brilliant (and not so brilliant) bowling skills while getting the chance to network with like-minded professionals.

YP Chair Jai Chainani says *"The message is clear: YPs want more fun-filled social networking events where they can relax and engage with other professionals. This year's Committee plans to deliver exactly that."*



Trialling SPE's energy4me resource for Scottish schools

By Fiona Saunders, Science Curriculum Development Officer, Aberdeen City Council

At the request of SPE Aberdeen, a small group of local teachers worked with Satrosphere Science Centre to develop SPE International's **energy4me** global resource for Scottish primary schools. They took the original resource, developed in the USA, and adapted it to fit in with the Scottish Curriculum for Excellence.

Five lessons were developed and trialled by the teachers and their classes, to ensure that they were pupil-friendly. A launch event was held at Satrosphere in September, where three of the lessons were shared with other teachers from Aberdeen City.

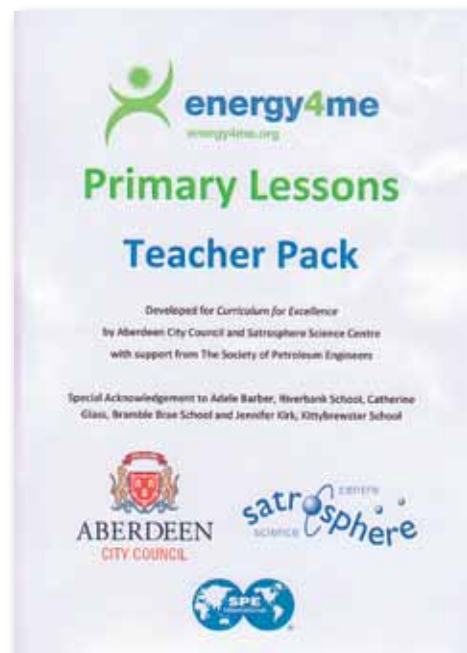
Fish, Fossils and Fuels demonstrated, with the use of jelly sweets and slices of bread, how fossils are formed by compacting. A core sample can then be taken, using an apple corer, showing the layers and the presence or absence of fossils in a sample.

It's a Gas is difficult to demonstrate in a day, so we had pre-prepared examples. A mixture of organic and inorganic substances mixed with a little water, are placed in a bottle with a balloon stretched over the neck. The bottle is left in a warm place for up to a week and the balloon starts to inflate with the production of gas.

Seeping Stones allows pupils to see the difference between porous and non-porous stones. They gather a variety of rocks and stones together, then drip water on to them to investigate the difference in porosity.

The teachers who attended the launch event left enthused about the lessons developed and were keen to try them out with their classes. The general feeling was that this made a difficult topic easier to teach and that, in future, they would be embracing, rather than avoiding, the subject!

Resource packs, sponsored by the SPE, were issued to the teachers who attended on the day.



SPE Aberdeen 4th European Well Abandonment Seminar

18 April 2013, Aberdeen Exhibition and Conference Centre

This bi-annual event has been well attended in the past and the fourth – organised by a group of professionals with insight into the challenges of well abandonment – promises to be even better! Oil & Gas UK and DECC will provide an overview of the abandonment (and suspension) of wells, including current updates on UK & Norwegian regulations. Case studies and specific challenges will be outlined by a range of operators and service providers from the UK and Norway.

Seminar Chair Graeme Rae, of Talisman Energy, says: "Such events are great networking opportunities and help drilling, completions, project, well integrity, environmental and commercial personnel to gain a deeper insight into the challenges and solutions. Sharing experiences and solutions makes everyone's job easier and helps them avoid some of the pitfalls in well abandonment and suspension. This one-day event will take the form of presentations, with plenty of time to network. There is also an exhibition opportunity for companies to showcase their capabilities, as well as the opportunity to sponsor specific parts of the event."

Following the Seminar, a half-day interactive workshop will be held to deepen participants' understanding as to how the regulations are applied to a variety of well types and abandonment techniques.

For details of exhibition and sponsorship opportunities, please contact jane.mcclure@rodgerandco.com

SPE Aberdeen Another Perspective Seminar

6 March 2013

Another Perspective is planning its second leadership seminar, on the subject of 'Unleashing the potential in our careers'. Sponsorships opportunities available – please contact alexandra.stacey@rodgerandco.com

Volunteers needed for new SPE Drilling Automation Seminar

In the second week of October 2013, SPE Aberdeen plans to hold a one-day Drilling Automation seminar which will look outside our industry at what is now possible, inside to see what progress has been made to date, and also take a futuristic view of what may yet be. The seminar will be supported by the SPE Drilling System Automation Technical Section (DSATS).

Volunteers are needed to help take forward this exciting new event. The organising committee's remit will be to collect abstracts/presentations, decide on a programme and spread the word among potential delegates.

If you would like to help, please contact alexandra.stacey@rodgerandco.com. There will also be an associated exhibition and sponsorship opportunities – more details from jane.mcclure@rodgerandco.com.



London Section
Continuing Education

13
February

LONDON

Technical Seminar – 'Redeveloping the North Sea'

Venue: London Geological Society

With ageing facilities and challenging operating environments under a tightened safety and fiscal framework, what are the opportunities to increase recovery in the North Sea? What about new prospects to be developed through existing hubs? Let's hear from the experts about opportunities that exist in one of the world's most developed oil and gas provinces.

HSE Consideration
Refurbishing Ageing Facilities
Subsea Wells
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Tailoring Organisation & Mindset to the Challenge



Tickets:

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£35 student

Secure advance booking, please email katespe@aol.com

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FORTHCOMING EVENTS

LONDON

- 29 January (5-9pm) (Before dinner): 'Attaining 'Privilege to operate' in the Arctic: understanding the environmental, social and political risks in a rapidly evolving system – the Greenland example', Jon Perry (ERM) (After dinner): 'Shale Gas and its Potential Market in Europe', Chris Burns (Gaffney, Cline and Associates)

VENUE: Geological Society, Piccadilly, London

- 13 February: Technical Seminar – 'Redeveloping the North Sea'

VENUE: Geological Society, Piccadilly, 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 Mo_Mansoori@nexeninc.com

ABERDEEN

- 23 January: 'Keeping wells healthy: how accurate diagnosis of well integrity issues is key to successful and efficient repair', Tobben Tymons (Archer)

VENUE: 6.30pm Douglas Hotel, Market Street, Aberdeen

EDINBURGH

- 5 February: 'The impact of data reliability on the decision making process', SPE Distinguished Lecturer Simon Stromberg (Senergy)

VENUE: Senergy, 6th Floor, 102 Westport, Edinburgh EH3 9DN

For details of all SPE Aberdeen and Edinburgh events, please visit: www.spe-uk.org 'Aberdeen Events' or contact Rodger and Co (see p9)

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Merry Christmas

The Directors and staff of OPC wish all our clients and consultants a Happy Christmas and a prosperous 2013.

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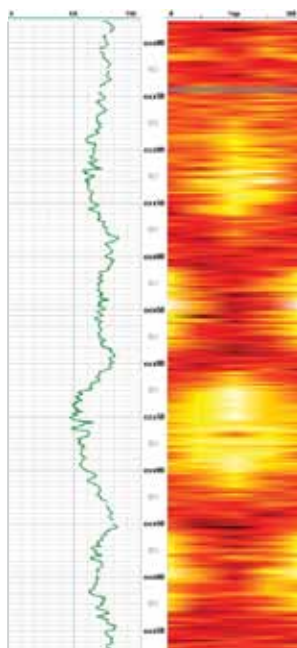
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