



Newsletter

Volume 6, Issue 1

March 2015

President's Message

Welcome to the March 2015 Newsletter. It's difficult times for the hydrocarbon industry again. The price of Brent crude plummeted to less than \$50 a barrel in January 2015 (although it is recovering) and the price of coal fell to under \$60 (£39) per tonne. Job losses are being experienced in the North Sea sector where the multi-national companies and contractors are downsizing. It has been claimed by industry sources that no new projects in the North Sea are profitable with oil below \$60 a barrel. Of course lack of investment threatens the future of the oil and gas industry and to that effect George Osborne's March 2014 Budget has included tax cuts worth £1.3 billion for North Sea oil exploration and to support continued production in older fields.

There are various reasons for this dramatic reduction in oil prices - weak demand in many countries due to poor economic growth, surging US production from the fracking boom, and other new producers have led to oversupply. Added to this is the fact that Saudi Arabia is determined not to cut production as a way to prop up prices. Geopolitical forces are at play but history reminds us however that the price of oil is volatile and will undoubtedly bounce back. Let's hope that this downturn is not protracted as the North Sea oil and gas industry is vital to the economy of Scotland and the UK.

In similar circumstances, the coal industry is in turmoil due to the reduction in coal prices. When the Scottish industry collapsed two years ago, coal prices were around £53 per tonne; they now stand at £39 per tonne. Hargreaves Services who acquired assets from ATH Resources and Scottish Coal after the collapse have stated in the national press that they plan to cut their Scottish production forecast from two million tonnes to one million tonnes for the next financial year. Hargreaves are the major producer of surface mined coal in the UK and have stated that at the current coal price, a nine year low, its thermal coal production operations are loss making. The plunge in oil prices along with a relatively mild winter has also reduced the need for power stations to burn coal.

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YPLC 2015

For the fourth time the Department of Earth Sciences, St Andrews University hosted the Scottish Heat of the YPLC. Six competitors entered the competition this year, but one had to withdraw on the day due to a job interview. This year we had entrants from Heriot Watt University, Maptek of Edinburgh and three from Earth Sciences at St Andrews University and with each of them selecting a different topic for their presentation, the competition proved to be an interesting and entertaining one. With the high quality of competition, any one of the five competitors would be worthy of going forward to the National finals. Support came from an audience of about twenty, consisting of members, retired members, students and lecturers providing the competition with a real live atmosphere.

Candidates and their Titles in alphabetical order:

Thomas Baker, University of St Andrews
Mining the Red Planet: Ni-Cu Sulphide Deposits on Mars

Alexandra Kuznetsova, Heriot-Watt University
Geological Realism in History Matching and Reliable Reservoir Prediction

Craig Martin, University of St Andrews
Io: Jupiter's Tortured Moon

Tanya Patel, University of St Andrews
Working the Blue Seam: The Tanzanite Mines of Merelani

Carles Xandri Sola, MAPTEK, Edinburgh
The Function of GMP Software in the Mining Industry

All of the competitors put up a great display of presentation and in depth knowledge of their chosen subject, giving the judges a very difficult job, but in the end Tanya Patel came first and will represent Scotland at the National Finals in London on Wednesday, 22 April, where we all wish her the best. The winner received £250, second place (Craig Martin) received £150 and third place (Carles Xandri Sola) received £100. The other two competitors (Alexandra Kuznetsova and Thomas Baker) received £25 and all competitors will receive certificates. The winner collects his certificate at the National Final.

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President's Message cont'd

As a result it planned to focus on mining projects that produce higher value speciality coal for the domestic heating and industrial markets. Job losses however are imminent with the necessity to cut costs.

On a more pleasing note, in the New Year we have received three excellent technical presentations. In January Dr Peter Schultheiss of Geotek gave a talk on *Pressure core analysis: historical use in gas hydrate investigations and its applicability for other unconventional oil and gas resources*.

In February we had our annual joint meeting with the Edinburgh Geological Society. Dr Diarmad Campbell, Chief Geologist Scotland – British Geological Survey (BGS) gave a presentation entitled *Making better use of the ground beneath our cities; the Glasgow experience is that it is better to ASK*. Both evenings were well attended with over 60 people present in Edinburgh.

In March the inaugural joint meeting with the Institute of Quarrying was held in Stirling. Dr Alan William Bowey and Michael Tavern from Grontmij gave a presentation on *The Construction of Wind Turbines in Adverse Ground Conditions*. This was beamed to a much larger audience than usual thanks to the internet. A webinar link allowed members to view the presentation live from Ayrshire and various locations in the north of Scotland.

The final meeting before the summer break is the RW Thomson lecture. We are honoured that Professor Paul Younger FREng, Rankine Chair of Engineering, Professor of Energy Engineering (Systems Power and Energy) at Glasgow University will present a thought provoking lecture entitled *Energy: Can we really have it all - secure, low-carbon and cheap?* This will be held at Garvock House, Dunfermline on Wednesday, 1 April 2015. Professor Younger is an excellent speaker and I can't think of a more topical debate at present, so I'm sure the evening will be well worth attending.

Finally, I would like to thank all those involved in the sustained effort to promote and sell copies of *Hidden Riches*. Sterling work has gone into this book and it really is a fascinating read.

Mark Friel

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Oil and Gas Division Update

Since the last edition of the newsletter companies working in the Oil and Gas sector have been taking action to adjust to lower oil and gas prices. Typical actions have included reducing day rates for contract personnel, releasing staff, re-negotiating contracts and reducing capital spend. Industry has clearly been taking action to become more efficient and in response the UK Government has taken action to reduce the tax burden on the Oil and Gas Industry while also continuing to implement the recommendations made in the Wood Report to increase oil and gas recovery from UK waters.

Concurrently new legislation has been prepared to put the requirements of the European Union Directive on Offshore Safety into UK law. The UK government is attempting to streamline legislation to help UK business become more competitive and is operating a policy of 'one in two out', i.e. for each new piece of legislation two existing pieces of legislation are removed from statute. From July 2015 the UK Oil and Gas Industry will have a year to implement the new legislation and will have fewer UK legislative instruments to comply with. The UK is recognised as having a world leading legislative framework for oil and gas following the legislation introduced after the Piper Alpha tragedy. The European Union requirements have been closely modelled on the existing UK legislation so changes to UK practices will be incremental rather than transformational.

The UK Government continues to support the development of shale oil and gas with the second test well in Lancashire pending County Council approvals. A number of articles have been published in the IOM3 *Materials World* magazine on shale gas operations in the US. It is worth noting that the UK has a more robust regulatory framework than the US with UK operators setting more stringent requirements, reference the UK Onshore Operators website www.ukoog.org.uk for more information. In Scotland, the operators of the Grangemouth refinery have taken a significant position in Scottish onshore shale resources and are linking development of these resources to the future of Scotland's petrochemical plant. All in all these are transformational times for the Oil and Gas Industry.

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Oil and Gas Division Update cont'd

The IOM3's Oil and Gas Division is seeking to provide the public with relevant information. On the website www.iom3.org you will find articles, educational material and links. Please take a look as the IOM3 website is being re-launched at the end of March.

Nexen CNOOC Ltd are hosting a Division technical presentation on the 13 May in their Aberdeen office. The presentations aim to address the topical issues of integrity and UK law, including well integrity requirements for onshore wells. A flier for the presentation will be issued in April.

If you would like to get involved with the Division please contact any of the Board members.

Steve Bedford, Oil & Gas Division Chairman

Governance

The governance arrangements for The Mining Institute of Scotland are set out in the company's Articles of Association. Currently, the six directors are drawn from the President, Vice-Presidents and immediate Past Presidents. This arrangement has served us well but recently there is a reluctance for members to come forward and accept nomination to Vice-President. Consequently, the number of directors will reduce over time. Council are considering amendments to the Articles of Association that determine the appointment of the directors so as to sustain the company into the future. A resolution will be put before the next AGM.

David Seath, Secretary

AN INSTITUTE EVENT IS THE PLACE TO MEET FRIENDS AND COLLEAGUES BOTH OLD AND NEW, WHY NOT JOIN WITH US?

CALENDAR OF EVENTS

TECHNICAL MEETINGS

THE DATES FOR YOUR DIARY IN 2015 ARE:

1 APRIL 2015 – 6.00PM AT GARVOCK HOUSE HOTEL,
DUNFERMLINE

Energy: Can we really have it all – secure, low-carbon and cheap?

SPEAKER: PROFESSOR PAUL YOUNGER, GLASGOW UNIVERSITY

Video-conferencing links will **NOT** be available for this event

SOCIAL EVENT

5 MAY 2015 – 12.00NOON AT LOCHSIDE HOTEL, NEW CUMNOCK
Retired Members' Lunch (Ayrshire)

YPLC 2015 cont'd

The winner of the National Final will then represent the UK at the World Final which this year is being held in Ireland.

Our thanks to the competitors for their efforts and preparations. Also to Jim Wishart who took over the role as chief judge this year, ably assisted by David Seath and John McManus and to the Department of Earth Sciences, St Andrews in hosting the event.

Allan J A Thomson



Competitors: (left to right) Carles Xandri Sola, Alexandra Kuznetsova, Tanya Patel, Thomas Baker, and Craig Martin



Allan Thomson (on the left) with competitors and some of the audience

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