



NEWSLETTER February 2011

Message from the LPS President:

Good to see so many of you at the New Technology seminar. I hope you enjoyed the excellent programme of talks and renewed your LPS membership. If you have not yet renewed please use the membership form in this newsletter and send it to Victoria.

The programme for the “Infatuation with Saturation – Water Properties and Water Saturation” seminar on the 17th March has been finalised. If you have ever fretted over which shaly sand model to use or the correct intercept on a Pickett plot, this is the seminar for you. See this newsletter for the programme and a registration form.

As well as our seminars we are planning a full programme of monthly evening lectures for 2011. These are held at the Geological Society and start at 6pm. They are free and include post-talk food and wine. I know at the end of the working day we all feel like getting home and relaxing but I would encourage you all to attend the meetings. The lecture topics are always very stimulating and hopefully the food wine and company are conducive to a good evening out. The next evening talk is next Monday, 7th February. Adriaan Gisolf from Schlumberger will be talking about “Real Time Integration of Reservoir Modelling and Formation Testing”

I would like to thank all of the companies that have sponsored the LPS for 2011. I also need to thank Baker Hughes and Schlumberger for sponsoring our Christmas party. Without our sponsors’ contributions the LPS would not be able to function. If your company would like to sponsor the LPS you will find details on how to get involved in this newsletter.

Hope to see you soon at one of our events.

All the Best

Adam

Adam Moss: LPS President



Dates for Your Diary

Wednesday 2nd February 2011, LPS University Open Day, South Bank University, London.

Monday 7th February 2011, LPS Evening Meeting, Geological Society, London Piccadilly. 6pm.

Adriaan Gisolf, SLB.

"Real-Time Integration of Reservoir Modelling and Formation Testing".

Monday 7th March 2011, LPS Evening Meeting, Geological Society, London Piccadilly. 6pm.

Thursday 17th March 2011, LPS One-Day Seminar, Geological Society, London Piccadilly.

"Infatuation with Saturation" - Water Properties and Water Saturation.



London Petrophysical Society
Registered Charity Number 1020083
A Chapter of SPWLA

Call for Sponsors:

Would you please consider sponsoring the LPS?

Over the years the LPS has gratefully received the support and sponsorship from many wonderful companies within the industry. Would your company please consider being a sponsor of our work during 2011?

The LPS is a registered charity (1020083), and it exists to promote, for the public benefit, education and knowledge in the scientific and technical aspects of formation evaluation. We do this through our newsletter, our website (www.lps.org.uk), evening technical meetings and technical seminars, as well as our University Open Days.

The LPS provides significant financial support to students and universities in the form of Bursaries for students, and Grants for students and university departments. The scheme is named after Iain Hillier, who served on the LPS committee for many years and made an outstanding contribution to its work. During 2010 we paid out over £9000 in the form of grants, bursaries, student prizes, student travel costs and the university open-day.

We have a programme of evening technical meetings for 2011 and we will hold a number of one day technical seminars on subjects as varied as New Technology, Formation Water and Saturation, and Pore Pressure. Students can attend our seminars and meetings free of charge and we will pay reasonable travel expenses for students.

The LPS organizes an annual University Petrophysics Open Day. The purpose of these Open Days is to bring together industry and academia, and to give students a feeling for just what Petrophysics is and what it is that Petrophysicists do. The 2011 Open-day will be held at London South Bank University in February. Over the years these have been held at Imperial College, London (2004 and 2009), Manchester University (2005 and 2010), Leicester (2006), Royal Holloway (2007), and Durham University (2008).

Our sponsors provide a significant element to the funding for these activities. For £750 per year you can have your logo on our website (www.lps.org.uk) with a link to a URL of your choice and you also can place an advertisement in the Market Place section of the website and in our monthly newsletter free of charge.

Please contact Mike Millar, LPS Treasurer, c/o BG Group, Thames Valley Park Drive, Reading, RG6 1PT

Tel: 0118 929 3430;
Email: mike.millar@bg-group.com



Next Evening Talk:

**“Real-Time Integration of Reservoir Modelling and
Formation Testing”**

Adriaan Gisolf - Schlumberger

The increasing complexities of newly discovered reservoirs coupled with the increasing cost of field development mandate significantly improved and timely work flows for reservoir evaluation. In this presentation a workflow is demonstrated where a fluids model is used to predict data for a wireline formation sampling and testing tool (WFT), with emphasis on downhole fluid analysis (DFA). The fluid model incorporates “conventional” Equation of State modeling as well as breakthroughs in asphaltene science to describe the heavy-end distributions of reservoir fluids. In this process, current reservoir understanding is tested by direct measurement in real time.



**London Petrophysical Society
One-day Seminar**

**“Infatuation with Saturation”
Water Properties and
Water Saturation**

**Thursday 17th March 2011
At the Geological Society, London**

Objective

**A series of presentations to review the current approach and thoughts on
water properties and water saturation**

Presentations on:

- “Forties Water Salinity”**
- “Dramatic Variations in Oil Zone and Aquifer Water Compositions in Forties and Gyda Fields”**
- “Water Salinity Changes Across the Prudhoe Bay Field”**
- “10,000 years BC. Shaly Sand Water Saturation Interpretation Without Core Data”**
- “Variable R_w Azerbaijan”**
- “ R_w in Oil Legs”**
- “SP and Variable Water Salinity”**
- “Using Dielectric and Magnetic Resonance measurements to determine water saturation”**
- “NMR Fluid Identification”**
- “Formation Damage and Water Injection – an Overview”**
- “Formation Waters as Scale Inhibitors: The Benefits of Scale Deposition in the Reservoir”**
- “Impact of Reservoir Fluids Analysis on selection and optimization of Production Chemicals”**

Confirmed Speakers From:

**BG, BP, Baker Hughes, Chevron, Independent Consultants
JPL Caltech, Schlumberger and Senergy**

**Registration Cost: £150 for LPS/PESGB/AFES/SPE Members,
£175 for Non-members (LPS is not VAT registered)**

For further information and registration details please visit www.lps.org.uk or e-mail: ian.draper@bakerhughes.com

Infatuation with Saturation Thursday 17th March 2011 Agenda

| Time | | Presenter | Company | Title |
|--------------|-----------------------------|------------------|-------------------------|---|
| 09:00 | Registration | Ian Draper | LPS | |
| 09:20 | Introduction | Adam Moss | LPS | |
| 09:30 | Keynote | Derek Thomas | Independent | Forties Water Salinity |
| 10:00 | | Max Coleman | JPS Caltech | Dramatic Variations in Oil Zone and Aquifer Water Compositions in Forties and Gyda Fields |
| 10:30 | | Dick Woodhouse | Independent | Water Salinity Changes Across the Prudhoe Bay Field |
| 11:00 | Coffee | | | |
| 11:30 | | Simon Stromberg | Senergy | 10,000 years BC. Shaly Sand Water Saturation Interpretation Without Core Data |
| 12:00 | | Ian Pigram | BP | Variable Rw in Azerbaijan |
| 12:30 | | Simon Clinch | Chevron | Rw in Oil Legs |
| 13:00 | Lunch | | | |
| 14:00 | | Mike Millar | BG | SP and Variable water Salinity |
| 14:30 | | Jim White | Schlumberger | Using Dielectric and Magnetic Resonance measurements to determine water saturation |
| 15:00 | | Geoff Page | Baker | NMR Fluid Identification |
| 15:30 | Tea | | | |
| 16:00 | | Mike Byrne | Senergy | Formation Damage and Water Injection – an Overview |
| 16:30 | | Ross McCartney | Oilfield Water Services | Formation Waters as Scale Inhibitors: The Benefits of Scale Deposition in the Reservoir |
| 17:00 | | George Murphy | Baker | Impact of Reservoir Fluids Analysis on selection and optimization of Production Chemicals |
| 17:30 | Wine & Savouries | | | |

Job Advertisement:

**Imperial College
London**

Job Title **Research Officer in Reservoir Conditions Experimentation**
Department/Division/Faculty **Department of Chemical Engineering and Department of Earth Science and Engineering**
Advert

Salary £40,220 - £48,790 per annum

All appointments will normally be made at the bottom of the salary range

South Kensington Campus

Fixed term appointment until 31 December 2012 in the first instance.

The greatest scientific and technological challenge of this century is how to provide energy to a growing global population, while avoiding dangerous climate change. Part of this endeavour is the development of clean fossil fuel technology, including carbon dioxide (CO₂) capture and storage, in combination with novel methods of enhanced oil recovery. Supercritical CO₂ (scCO₂) relative permeability with in-situ saturation and the monitoring of reservoir rocks data is vital but is a poorly understood piece of the puzzle, requiring a long-term strategy. We are looking for someone with the ability to take on this challenge.

You are invited to join Imperial College's largest research project, secured through long-term industrial funding. The project is funded through major long-term support from Qatar Petroleum and Shell International for the Qatar Carbonates and Carbon Storage Research Centre (QCCSRC). You will join a large interdisciplinary team in the QCCSRC working on all aspects of carbon storage. QCCSRC is enabling Imperial College London to expand its research into Clean Fossil Fuels significantly - aimed in particular at improving the energy efficiency of oil and gas recovery, closely coupled with reducing greenhouse gas emissions through advanced carbon capture and storage technologies. The Centre is a collaboration between the Department of Earth Science and Engineering and the Department of Chemical Engineering. This position covers the technical aspects of reservoir condition experimental design, operation and knowledge transfer including the day-to-day functionality of equipment within a broader work package of understanding carbonate reservoir pore/fracture-scale physics and chemistry.

QCCSRC has a number of reservoir-condition (high temperature/high pressure - HTHP) experimental setups in addition to more conventional thermophysics and rock core analysis equipment. A major item of equipment, yet to be fully designed, is an HTHP scCO₂ relative permeability rig including in-situ saturation measurement through the use of a medical CT scanner. It is our intention that the Research Officer's primary role will be to take the lead role in co-ordinating the design and implementation of this new cutting edge relative permeability rig with in-situ saturation monitoring. There is likely to be interactions with stakeholders regarding equipment design in the Netherlands and Qatar that may require prolonged visits.

Experience in research and experimentation relevant to the oil and gas industry and or carbon sequestration, particularly design, construction and operation of high temperature and high pressure apparatus are essential.

Informal enquiries can be made to the QCCSRC Programme Manager, Dr Iain Macdonald via email: i.macdonald@imperial.ac.uk or via Telephone on 020 75945587.

Priority consideration will be given to staff at risk of redundancy

Committed to equality and valuing diversity. We are also an Athena Silver SWAN Award winner, a Stonewall Diversity Champion and a Stonewall Top 100 Employer 2010.

Closing Date

28 February 2011 (midnight GMT/BST)

How To Apply

Our preferred method of application is online via this website. Please download the following application form and save to your computer. Once completed, please upload your application form prior to submitting your application.

[Administrative and Support application form](#)

Should you have any queries please contact:
June Talbot – j.talbot@imperial.ac.uk