





# SPEREVIEW LONDON



- Letter from the Chair
- The Current State of Gender Diversity in the UK Energy Sector
- Eastern Mediterranean Gas
- PLUS: Events, Jobs

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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 143,000 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 global events, publications, events, training courses and online resources at www.spe. org, as well as local chapters such as the SPE London section. SPE London section publishes SPE Review London an online newsletter, 10 times a year, which is digitally sent to its 3000+ members. If you have read this issue and would like to join the SPE and receive your own copy of SPE Review London, 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

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#### **CONTACTS**

Communications: spelondon@spemail.org

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The Society of Petroleum Engineers encourages open and objective discussion of technical and professional subjects pertinent to the interests of the Society in its publications. Society publications shall contain no judgmental remarks or opinions as to the technical competence, personal character, or motivations of any individual, company, or group. Any material which, in the publisher's opinion, does not meet the standards for objectivity, pertinence, and professional tone will be returned to the contributor with a request for revision before publication.

## Information

Welcome back after the long, warm summer break!

At SPE Review London, we strive to provide knowledge and information to navigate our changing, and challenging, industry. We trust the September 2018 issue of SPE Review London will be useful, actionable and informative.

On page 5, Olga Bradulina the new SPE London Chair (who took up her post in September) offers her thoughts on the future development of the SPE London secton in a Letter from the Chair.

In the first of this issue's two features, 'The Current State of **Gender Diversity in the UK Energy Sector**' (page 7), **Beverley Smith** discusses the current status and plans for future developments in gender diversity in the UK energy sector.

The second of this issue's features 'Eastern Mediterranean Gas' starts on page 10, where Igor Bagno provides a report from the SPE London Business Development meeting in June.

Our regular features include: Meet the people 'Behind the Scenes', The SPE Review Editorial Board (page 3) and the new SPE **London Board** (page 12).

Make sure to keep up to date with industry events and networking opportunities, and the Job Board (thanks to Jared Hammond of oneoiljobsearch.com for providing the monthly job statistics), all on page 13.

And don't forget to check out our social media pages: Facebook, Twitter, and Linkedin.



https://www.spe-london.org/









## Behind the Scenes: SPE Review Editorial Board



Jonathan Ovens Chief Editor

- Ph.D in Physics at Cambridge University.
- Joined Shell in 1986. Reservoir Engineer hydraulic fracturing, pressure transient analysis and reservoir simulation.
- 1997 2012: independent consultant covering the North Sea, North Africa and the Middle East.
- Experience ranges from Exploration and Development planning through to Reserves Evaluation.
- 2013: Senior Reservoir Engineer at JX Nippon E&P (UK) Ltd.
- 2009 and 2015 served with SPE Europec Technical Committee.
- Member of the SPE London Board.



Josh Beinke Editor

- Graduated from University of Adelaide with degree in Petroleum Engineering.
- 10 years prior experience with Chevron Corporation, Origin Energy and Santos, including as Production Engineer on the Gorgon Field during First Gas.
- Following move to Europe in 2016, consulted on European and African

assets (specialising in data room and field development advisory).

• Now working out of Amsterdam as a Production/ Exploitation Engineer with Vermilion Energy.



Ffion Llwyd-Jones Designer

- Editor and business writer, with 15+ years experience in North America and the UK.
- Editor for several trade and consumer magazines (print and/online).
- Provides industry-related case studies, and detailed, research-driven B2B reports and technical white papers.
- Accomplished photographer, and videographer.
- Educated in Canada, and in the UK.
- Fluent in Welsh and English.
- BA (Hons) from The Open University.











The London Decision Quality Group, European Decision Professionals Network and Society of Decision Professionals are convening a multi-industry conference in London this year, under the theme.

### "Decision Quality: Making Good Outcomes More Likely"

Behavioural science suggests that human nature favours decisions that satisfy (eg just meets threshold targets) rather than those that optimise. Often, value gets left on the table and worse still, may get destroyed, particularly when risks & uncertainties are involved.

This conference provides you with access to the knowledge and experience of internationally recognized Decision Professionals, who can help you master practical approaches which deliver quality decisions, thus enabling you to optimise rather than just survive.



The conference is followed by a short course on "Leading Decision Quality"

sponsored by the Society of Decision Professionals.

**Location:** Geological Society London, Burlington House,

Piccadilly, Mayfair, London, England, W1J 0BD

**Dates:** Conference: 5th & 6th November 2

**Short-course:** 7th November 2018

**To Register:** http://www.edpn.org/wp/?page\_id=571







SDG





## Letter from the SPE London Chair



Olga Bradulina
SPE London Chair

Dear SPE London members and colleagues,

I hope you have had a very enjoyable break – the weather was great for us this summer in London!

Now the Section is getting ready to start another eventful operational year 2018/19.

Our busy calendar of events is currently being populated by our committees. We are planning to deliver a program card detailing these events to our members shortly – please visit our website to keep up-to-date with upcoming events. We are positive we can once again fulfil our primary purpose of knowledge sharing.

Some new and exciting updates within the structure of the Section are coming this year!

While we continue to deliver a great array of events for our members, we were getting feedback from senior professionals who felt they were lacking attention. While we have a dedicated committee serving the needs and interests of our younger engineers, our seniors seemed to have been forgotten.

In response, this year we have decided to set up a Senior Professionals (SP) Board Liaison, which may lead to creating an (SP) Committee. Senior professionals would be members aged 55 and older, and this initiative would seek to keep them engaged as they commence their career transition to retirement.

The benefits would be multi-fold: not only would it establish a strong relationship with Senior Professionals to allow the greater community to benefit from their expertise and network, it would also seek to address specific problems, such as age discrimination in the workplace or recruitment process. Does ageism still exist? And if so, how can we help stop it?

This presents an example of how feedback from our members can strengthen the effectiveness of our community and ensure that knowledge is retained for future generations of oil and gas professionals. We welcome feedback regarding our new initiative and other ideas which could help this section continue to flourish.

Feel free to contact us by e-mail: SPELondon@spemail.org or get in touch through our social media on Linkedin, Facebook and Twitter.

Kind regards, Dr Olga Bradulina SPE London Chairperson







## **SPE LONDON ANNUAL CONFERENCE 2018**

**Value Transformation in Energy** 

23 October 2018 London, UK

## Register Today

The SPE London Annual Conference is the perfect platform for bringing together the oil and gas community and the financial sector to enhance knowledge, discuss trends and challenges in the industry, and build connections with both finance and E&P professionals.

#### HEAR FROM ENERGY AND FINANCE EXPERTS INCLUDING:

#### \*KEYNOTE SPEAKER\*

John Moon, Managing Director and Head of **Morgan Stanley Energy Partners** 

Donato Azzarone, Vice President, ENI

Susan Cunningham, Senior Advisor, Darcy Partners

Torbjørn F. Folgerø, Chief Digital Officer, Equinor

Paul McConnell, Research Director on Global Trends, Woodmac

Drew Powell, Global Operations Director, Gaffney Cline

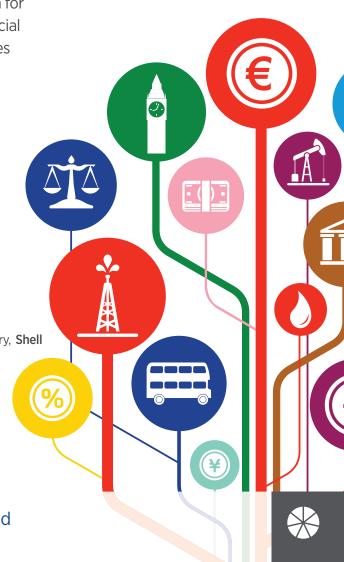
Gavin Rennick, President Software Integrated Solutions, Schlumberger

Julia Shur, General Manager for New Business Development & Deal Delivery, Shell

Anne-Sophie Corbeau, Head of Gas Analysis, BP

Emma Wild, Partner, KPMG

Floyd Wilson, CEO, Halcón Resources



## The Current State of Gender Diversity in the U.K. Energy Sector



**Beverley Smith** 

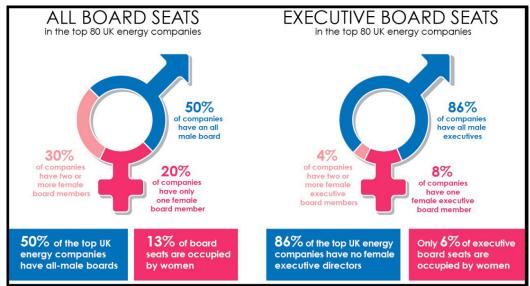
#### What is POWERful Women and what do we do?

POWERful Women (PfW) is a professional initiative to advance gender diversity within the energy sector of the United Kingdom (UK).

Our target is 40% of middle management and 30% of executive board positions to be female in the energy sector by 2030 and we enjoy considerable support with this from the Government's department of Business, Energy and Industrial Strategy.

We work to deliver our targets in three ways:

- Campaigning and reporting, such as the current state of play with gender diversity
- Supporting women in their careers, such as through mentoring and networking.
- Providing practical support to companies seeking to increase their gender diversity.



Each year, we publish statistics1 on the number of women on the boards of energy companies in the UK, and this year we were able to include gender pay gap statistics. Unfortunately, the data continues to look poor for our sector.

In 2018, we looked at the boards of 80 companies and found that 50% of these had all-male boards and 86% had no female executive board members at all.

Figure 1: Board Statistics from POWERful Women (2018)

#### What is the Government doing?

In recent years, the government has been actively engaged with promoting gender diversity to Britain's largest companies and they have three key initiatives in this space:

- The Davies report<sup>2</sup> was originally published in 2011 and set a target of 25% women on FTSE 100 boards by 2015. In 2015, with this target met, a more ambitious target was set of 33% women on FTSE 350 boards by 2030.
- The Hampton-Alexander report<sup>3</sup> in 2016 looked at the executive pipeline (the company executive committee and their direct reports) and set a bold target of 33% women for the FTSE100 by 2020.
- In 2018, for the first time, the government required all legal entities with more than 250 employees to publish their gender pay gap data. This not only showed the gap between the pay of the average man and the average woman, but also gave the percentages of women in each salary quartile. This data will now be reported annually and PfW will extract and publish the statistics for the energy companies on our website.

These initiatives are having an important positive effect on the inclusivity agenda within energy companies and, although many had already recognised that there was work to do in this space, the increased pressure from the government has

http://powerfulwomen.org.uk

<sup>2</sup> https://www.gov.co.uk/government/publications/women-on-boards-5-year-summary-davies-review

<sup>3</sup>  $https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/613085/ftse-women-leaders-hampton-alexanders-ham$ review.pdf

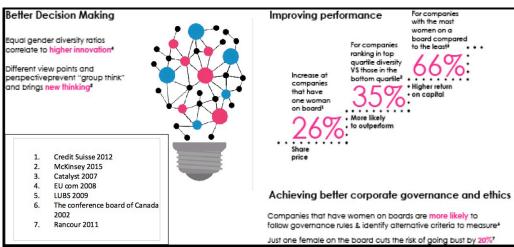
#### The Current State of Gender Diversity in the U.K. Energy Sector... continued

forced more to get involved and others to move more quickly.

The gender pay gap data collection exercise has shown those companies not already engaged just where their gaps are. Too many reveal very low percentages of women in the upper two salary quartiles meaning that it will be very difficult to increase gender diversity in the executive pipeline as envisioned by the Hampton-Alexander report.

#### What's the Opportunity?

Lots of work has been done over the past few years to try and quantify the value of women and diversity in general within an organisation (see Figure 2). The evidence is clear that improved diversity brings better results for business.



For example, companies ranking in the top quartile for diversity are 35% more likely to outperform compared to those in the bottom quartile according to McKinsey<sup>4</sup>, and just one woman on a board cuts the risk of going bust by 20%⁵ according to research by the University of Leeds Business School.

Figure 2: What is the opportunity and why does it matter?

#### The Future

Although the current state of gender diversity in the energy sector of the UK looks poor, there are definite signs of progress, with companies pledging to make improvements and the government setting ambitious targets for 2020. Among those companies making a difference in this space are Good Energy, a renewable energy supplier in the UK that has achieved 50% women on both its board and executive committee. Good Energy is one of eight companies on PfW's new Energy Leaders' Coalition, where the CEOs have made a public commitment to improve.

Probably the best example, however, is BHP, the world's second biggest mining company, which has announced an aspirational target of gender parity at all levels within their organisation by 2025. Interestingly, this happened after they observed that their assets with the best diversity figures also had improved safety and performance metrics.

It is vital that we keep up the scrutiny of gender balance within our sector and don't become complacent about progress. With the case for diversity becoming more compelling, I am hopeful that we are on the path to meeting targets and ensuring that the energy industry benefits from the pool of female talent waiting to be tapped.

- 4 https://www.mckinsey.com/business-functions/organizations/our-insights/why-diversity-matters
- 5 Women in the boardroom help companies succeed. Times article March 2009. Professor Nick Wilson LUBS
- 6 https://www.bbc.co.uk/news/business-37714591

Beverley Smith is a chartered geologist with more than 25 years of expertise in the oil and gas industry, predominantly with BG Group. She was Exploration Manager for BG in Algeria and Exploration and Development Manager in China, and was Vice President Exploration and Growth (Europe) until the company's merger with Shell in 2016. She has been Director of POWERful Women since January 2017.



## Introduction to Oil and Gas Exploration & **Production**

15th November 2018 Geological Society, Piccadilly, London





This one day seminar summarises the full life cycle of oil and gas fields, covering the basics in exploration, geoscience. drilling, operations, reservoir management and commercial terms. The speakers will also discuss key industry issues, followed by Q&A and networking.

#### Who is this for?

People working in financial and E&P environments, who are new to the petroleum industry, or want to know more about oil and gas projects

IT and Big Data Graduates Legal Staff Secretarial Recruitment Investors

**Analysts** Accountants Logistics **HSE** 

**Technical Assistants** 

Finance Staff

#### You will learn about:

- Key industry issues
- All stages of the E&P cycle
- M&A and Private Equity
- Fracking

This seminar is about communicating complex ideas to a non-technical audience... no prior experience needed!

#### **Tickets and Questions**



katespe@aol.com

https://www.spe-london.org/

£199 Early bird rate

£249 after 1 October



## Eastern Mediterranean Gas



**Igor Bagno** 

Igor Bagno, Senior Reservoir Engineer, Primera Reservoir Ltd provides an overview of presentations and discussions at the SPE London Business Development meeting in June 2018.

The 'Eastern Mediterranean Gas' SPE London Business Development meeting was held on 27 June 218. The focus was on exploration and development, with presentations on the regional focus, current projects and opportunities.

This region is currently a hot-spot for huge new gas discoveries, with further exploration and development planned. Large recent discoveries such as Zohr have intensified the competition for assets.

The Eastern Mediterranean region has diverse and complex historical, cultural and political issues that continue to delay the development and trade of gas. The meeting used three countries to represent the region as a whole: Egypt with a large and mature gas industry; Israel with a newer industry that has more recently started production; and Lebanon that is starting its long journey to gas production.



L-R: Rand Al-Obaidy, Adam Borushek, Steve Moore, Jessica Obeid, and Jing Xiao

Gas development in the region will change with the EastMed project, intended to connect Eastern Mediterranean resources to Greece via Cyprus and Crete, with a gas pipeline to transport 10 Bcm per year.

Rand Al-Obaidy from Gaffney, Cline & Associates called Egypt the "Golden Eagle" for its incredibly large resource volumes, high demand, existing infrastructure, and a variety of customers and investors ready for new activity in the oil and gas industry.

also mentioned She LNG export opportunities, combined with the domestic demand growth in Egypt, and the impact of the EastMed project on the business out-

look. Although Egypt forecasts surplus gas to 2022, past that point the country will need several new huge fields to maintain its current gas production rates.

Steve Moore from Energean Oil and Gas spoke about his company's history and strategy. It was established in 2007 to develop the Prinos field and its undeveloped satellites in Greece. Recent growth led to Energean's listing on the LSE in 2018 and inclusion on the FTSE 250 Index. Steve explained the development of the (offshore Israel) Tanin and Karish fields, and further growth opportunities in Israel.

Jessica Obeid from Chatham House described Lebanon's long-awaited licensing rounds, with the first wells expected to be drilled in early 2019. There have been no offshore discoveries yet and Jessica was frank about the geopolitical and commercial risks present. The majors like TOTAL and ENI are, however, ready to find the first offshore gas in the country.

The event was an excellent opportunity for networking, with the presentation room filled to capacity to continue discussions with the event's speakers over drinks. Everyone is looking forward to other similar events by SPE.

We would like to thank the event sponsor IHS Markit. The event organisers were Adam Borushek (RISC Advisory) and Jing Xiao (IHS Markit).



## SPE LONDON & IMPERIAL COLLEGE SHORT ONE-DAY COURSE: GETTING STARTED WITH DEEP LEARNING

Thursday, 11 October 2018

Deep Learning (DL) is already bringing game-changing applications to the petroleum industry, and this is certainly the beginning of an enduring trend. Many petroleum engineers are interested to know more about DL but are not sure where to start. This one-day course aims to provide this introduction.

The first half of the course presents the formalism of Logistic Regression, Neural Networks and Convolutional Neural Networks and some of their applications. In the afternoon, the environment associated with DL is discussed, from Python libraries to software repositories, important websites and big datasets available on the Web. The last part of the course is spent discussing the most promising subsurface applications of DL.

This course, aimed at petroleum engineers and geoscientists, requires basic knowledge of Probability, Regression and Linear Algebra.



**Professor Olivier Dubrule** is a Visiting Professor seconded by Total at the Department of Earth Science and Engineering at Imperial College London. He has spent most of his career developing new tools in relation with Geostatistics, Gaussian Processes and more recently Machine Learning. He is currently teaching the Machine Learning module of the MSc Advanced Computation Science and Engineering at Imperial College. Olivier has been the 2003 SEG/EAGE Distinguished Instructor, and has taught many courses through Professional Societies in the last twenty-five years. He has authored two books, one of which has been translated in Russian and Farsi.



**Lukas Mosser** is a PhD Student in Machine Learning. Since starting his PhD in October 2016, Lukas has published important papers on Machine Learning in major peer-reviewed publications such as Transport in Porous Media and Physical Review Letters E. He specializes in the development of methods based on Generative Adversarial Networks (GANs) in relation to subsurface applications. Lukas obtained numerous awards in the Machine Learning hackathons in which he recently competed.

#### AGENDA:

09.00-10.15: Supervised vs Unsupervised Learning, Regression, Logistic Regression. Basic theory and examples.

10.15-10.45: Break

10.45-12.15: Fully Connected Neural Networks and Convolutional Neural Networks. Basic theory and example

12.15-13.15: Lunch

13.15-14.30: Getting Practical: large existing datasets, websites, Python Deep learning libraries ...

14.30-15.00: Break

15.00 -16.45: Four Deep Learning Industry Applications.

16.45-17.00: Conclusion

#### Register now via Eventbrite

## **Meet the SPE London Board**

SPE is a non-profit professional society with 164,000 members in 143 countries. The SPE London Section, with average 2000 members and seven associated student chapters, is an active section with an aim to connect, engage and promote exchange of knowledge within London energy community of technical and commercial professionals. The SPE London Board is the policy-making and governing body consisting of volunteers who devote their time to oversee many of SPE London's administrative and operating responsibilities.



Olga Bradulina Chair



Carolina Coll **Past Chair** 



Miles Cudmore Director



Tim Lines **Programme Chair** 



Isabel Asenjo Women in Energy Chair



Secretary



**Adam Borushek** Cont. Education Co-chair



Patrick Davies Cont. Education Co-Chair



**Maxim Koteney** Comms Co-Chair



**Adrian Southworth Sponsorship** 



**Treasurer** 



Maria Astrid Centeno Student Chapter Liaison



**Abrar Pewekar** Young Professional Chair



**Anthony Perry** Director



**Jonathan Ovens** Director, Editor SPE Review



Director

#### **EVENTS: Upcoming events 2018**

#### 18-19 September 2018 (London, England)

**SPE Workshop: Petroleum Reserves and Resources Estimation** 

Members of the SPE Oil and Gas Reserves Committee and industry experts will gather in an open forum to discuss the revised classification, definitions and guidelines included in the 2018 SPE/WPC/AAPG/SPEE/SEG/ SPWLA/EAGE Petroleum Resource Management System, recently submitted for SPE board approval. For more information, and to register: https://bit.ly/2lotmcB

#### 25 September 2018 (London, England)

SPE Dinner Meeting: Al and Deep Learning

Three presentations of artificial intelligence and deep learning for the oil and gas industry. This is also an introduction to the one-day machine-learning course held in conjunction with Imperial College in October. For more information, and to register: https://bit.ly/2NaiDTm

#### 11 October 2018 (London, England)

SPE & Imperial College seminar: Getting Started with Deep Learning

Deep Learning (DL) is already bringing game-changing applications to the petroleum industry, and this is certainly the beginning of an enduring trend. Many petroleum engineers are interested to know more about DL but are not sure where to start. This one-day course aims to provide this introduction. For more information, and to register: https://bit.ly/2CUcG8x

#### 23 October 2018 (London, England)

**SPE London Conference** 

The program is designed for a mix of technical, commercial, and financial professionals and investors to address key topical issues that each stakeholder faces while making business, investment, and policy decisions. For more information, and to register: https://bit.ly/2IFLdvP

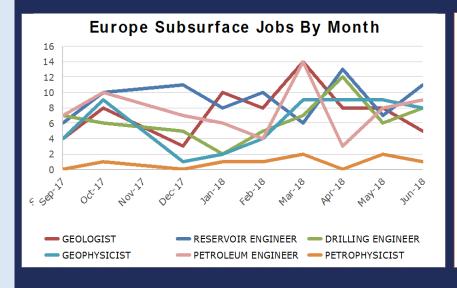
#### 15 November 2018 (London, England)

Seminar: Introduction to Oil and Gas, Exploration & Production

The 'Introduction to E&P' seminar provides an introduction to the full life cycle of oil and gas fields. In addition to covering the basics in exploration, geoscience, drilling, operations, reservoir management and commercial terms, speakers will bring out key issues faced by the industry.

For more information, and to register: https://bit.ly/2xb3Kpa

### PETROLEUM SUBSURFACE JOBS - EUROPE



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> **Reservoir Engineer** Stavanger, Norway

> > Geoscientist Aberdeen, UK

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To learn more and become a member, visit www.spe.org/join.

Join SPE. Stay relevant.

