Sign up before 16 December 2016 for Super Early Bird Discount!

Society of Petroleum Engineers

**SPE Workshop:**
*Mature Field Redevelopments: How to Stay Relevant for the Foreseeable Future?*

13 – 14 February 2017 | Kuala Lumpur, Malaysia

Group Registrations Available: Contact us at spekl@spe.org to arrange your group

**Who Should Attend**
- Reservoir Engineers
- Production Engineers
- Production Surveillance
- Production Technologists
- Asset Managers
- Engineering Advisors
- Reservoir Management Specialists
- Technology Providers
- Researchers
- Geoscientists

The current low oil price and the gradual economic recovery has resulted in many development projects and initiatives being suspended. Nevertheless, operators are continuously looking to create superior value through subsurface/surface optimisations and innovations. Re-development of existing fields to “scrape the barrel” is becoming a preferred choice to developing new ones. The need for operators and the service industries to work collaboratively in facing this tough situation will result in better efficiencies with optimised results. Learning of lessons and value improvements generated through strategic collaborations and new technologies need to be identified quickly.

This workshop will provide a platform for engineers and managers to share their best practices and risk mitigations as well as to brainstorm the latest innovative development schemes that work in today’s economic environment. Integrated developments, simplified processes, cost optimisations and phased developments are some of the areas where collaboration can bring increased value. Improved applications of fit-for-purpose technologies and multiple-field usage of facilities will ensure maximised return on investments. This workshop will bring together people from operating companies, service providers, researchers and engineering end-users to focus on how design, planning, optimisation and execution are managed to ensure redevelopment projects meet their financial and technical objectives.

**Session Highlights**

Interactive sessions will cover diverse topics such as:
- Overview: Integration of surface and subsurface to rejuvenate assets – Are we creating value?
- Holistic approaches to mature field redevelopments in Asia Pacific
- What’s new in emerging industries’ trends and technologies?
- Surface facilities optimisation
- Production optimisation and well productivity enhancements
- How to stay relevant for the foreseeable future?

[www.spe.org/go/17WM07](http://www.spe.org/go/17WM07)
value improvements generated through strategic collaborations, and workable strategies to improve project maturity and execution.

The objective of this workshop is to provide a platform for staying abreast and sharing best practices and technical knowledge with subject matter experts and peers through panels and breakout group discussions. The programme discusses learning of lessons and value improvements generated through strategic collaborations, and workable strategies to improve project maturity and execution efficiency to extract more oil from producing fields.

**Workshop Objectives**
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**Preliminary Workshop Schedule**

**MONDAY, 13 FEBRUARY 2017**

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<th>Time</th>
<th>Session Details</th>
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<td>0800 – 0850</td>
<td>Arrival of Delegates and Registration</td>
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<tr>
<td>0850 – 0900</td>
<td>Safety Announcement by Hotel</td>
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<tr>
<td>0900 – 0930</td>
<td>Welcome and Introduction</td>
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<tr>
<td>0930 – 1000</td>
<td>Keynote Address</td>
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<td>1000 – 1030</td>
<td>Group Photos/ Coffee Break</td>
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<tr>
<td>1030 – 1230</td>
<td>Integration of Surface and Subsurface to Rejuvenate Assets – Are We Creating Value?</td>
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<tr>
<td>0900 – 1100</td>
<td>Session 1: Keynote Address</td>
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<td>Session 2: Overview Integration of Surface and Subsurface to Rejuvenate Assets</td>
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<td>1300 – 1330</td>
<td>Luncheon</td>
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<td>1330 – 1515</td>
<td>Session 3: Panel Session – Holistic Approaches to Mature Field Redevelopments in Asia Pacific</td>
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<td>1515 – 1545</td>
<td>Session 4: What’s New in Emerging Industry Trend and Technologies?</td>
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<td>Session 5: Poster Session</td>
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<td>1615 – 1630</td>
<td>Coffee Break</td>
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**1330 – 1530**

Session 3: Panel Session – Holistic Approaches to Mature Field Redevelopments in Asia Pacific
- Session Chairs: Juhaidi Jaafar, PETRONAS
- Azman Abdul Razak, PETRONAS

This panel session will discuss and debate game-changing and guiding principles, together with real case examples on how mature fields have undergone major redevelopment projects recently and are reaping the benefits of using a holistic approach to improve productivity and asset value. While facing challenging commercial aspects such as huge investments, low oil price, high OPEX and aging facilities; with careful planning and close monitoring, the fields were given a new breath and lease of life. Improved efficiency, effective (while being flexible with techno-commercial de-risking approaches) development strategies and new monetisation potentials, as well as innovative technology applications with the right petroleum arrangements are among the key enablers in redevelopment of such complex assets. Lessons learnt from complex mature field redevelopment and EOR-related projects in Asia Pacific will also be shared and discussed.

Coffee and Tea Break

Session 4: What’s New in Emerging Industry Trend and Technologies?
- Session Chairs: Robert Do, Zedi Abhinav Charan, McKinsey & Company

The confluence of digitising technology in the oil and gas industry and the emerging trend of IoT (Internet of Things) has been driving quantum changes in every aspect without exception. With unprecedented advancement in data management, interpretation, analytics and control technologies; upstream operators can now implement game-changing strategies with optimal usage of emerging technologies and deliver economic value. As an example, advanced completions are replete with downhole gauges and surface smart sensors.
- Best practices for technology integration from field to office
- How to use technology to enhance data management and analytics – are we squeezing what we can from big data?
- Establishing data governance and ownership processes

**1230 – 1330**

Luncheon
Preliminary Workshop Schedule

TUESDAY, 14 FEBRUARY 2017

0900 – 1100
Session 6: Surface Facilities Optimisation
In the current low oil price environment, it is challenging to further develop/expand existing facilities’ operations with reduced OPEX and CAPEX as set performance indicators. Creative measures have to be considered in order to make the most out of existing facilities without sacrificing production. Surface facilities optimisations to sustain or even increase production through sharing of common facilities, optimisation in sparing philosophies, review of current facilities operating envelope against design intent, and plant optimisation and best practices in asset rejuvenation are among the ways to achieve this. In the case of reserve addition and/or production increase that necessitate facilities upgrade, maximum usage of existing facilities have always been considered. However, a balance between brownfield modification against new facilities installations need to be achieved as although brownfield modification seems to be less CAPEX-intensive of the two options, the scoping of brownfield modification can be quite a challenge to be defined at the front-end stage of the project and the scope tends to get bigger as the project matures to execution. The low oil price situation has also seen situations where field operations begin to experience unfavourable OPEX or UPC, where operator has to consider either decommissioning the facilities or continuing production at a loss. This session intends to further discuss lessons learnt and new ideas for existing surface facilities optimisations in view of sustaining or even increasing production, with a focus on operation on the low oil price environment and its impact to surface facilities operations.

1100 – 1115
Coffee Break

1115 – 1315
Session 7: Production Optimisation and Well Productivity Enhancements
Session Chairs: Cheol Hwan Roh, PETRONAS Carigali Sdn. Bhd.; Mohd Fai扎实c Mahdar, EnQuest Petroleum Development Malaysia
Mature fields come with complex challenges to continue survival when most companies aim to lower down operating cost in the anticipated prolonged low crude price situation. Under constrained operating expenditure, more focus is spent on exploiting existing well stocks by finding the right cost-effective production enhancement and improved production optimisation strategy for existing active wells. However, idle well restoration efforts are likely minimised as what is left are the hard and costly opportunities. Those active but un-optimised wells should also be given more focus to increase field output as well as to prevent them from going idle.
- How much effort is actually made by operators to re-validate long-time shut-off idle strings when we all know that reservoirs are very dynamic?
- Could it be possible that insufficient subsurface data such as contact logging, improper well diagnostic and lack of network modelling to understand production constraints continue to hinder operators from establishing valid subsurface understanding?
- Will the chance of success for any production enhancement and idle well restoration works be improved by pursuing simple slick line basic activities?
- Do we need to re-evaluate old well test data by revalidating high gas-oil-ratio possibly artefacts records due to misleading gas lift gas cycling? This session will also aim to capture more possibilities in exploiting current wells (including the latest data acquisition approaches available) to offset predicted production field decline and develop a better understanding to help de-risking future high capital workover or infill drilling. The whole idea is to investigate well issues with low cost interventions and acquire new data, eventually restoring production and increasing reserves economically in mature fields.

Lunch

1315 – 1415
Session 8: Innovative Applications and Emerging Technologies for Mature Field Life Extension
Session Chairs: Keith Collins, Vestigo Petroleum; Yasser El-Yamany, Schlumberger
The application of new technology is one of the hallmarks of the ever-evolving oil and gas industry. We are witnessing rapid deployment of technology advances in other industries: rockets have landed vertically on floating barges, autonomous vehicles are being introduced into our cities, solar roof panels are being deployed, etc. So what are we doing in the oil and gas industry to apply new technologies to the challenges we face? This session will provide a forum to showcase the applications of new technologies to either reduce costs and/or increase production in mature fields. Case histories will be presented detailing the technology, including its application and benefits realised in the field, to increase awareness of what is being done to address challenges identified in the earlier sessions. Up to eight different surface and downhole technologies will be presented during the session from a range of companies, both small and large.

1415 – 1615
Coffee Break

1615 – 1730
Session 9: Workshop Summary
Co-Chairpersons: Juhaidi Jaafar, PETRONAS; Keith Collins, Vestigo Petroleum

Poster Solicitation & Information

All participants are encouraged to prepare a poster for the Workshop. Presentations on both research and field experience are welcomed. Posters, including unconfirmed/partial results, are to be presented at an assigned time and are open for discussion. Posters will be on display for the entire Workshop period.

When preparing your poster:
- Avoid commercialism. No mention of trademarks/product name
- Poster size should be approximately 0.8m x 1.2m (W x H) or size A0 in portrait layout
- Identify topic by title, affiliation, address, and phone number
- Include a brief abstract that summarises the technology to be addressed
- Make the display as self-explanatory as possible
- Place the information in sequence: beginning with the main idea or problem, method used, results, etc. (Draw a plan keeping the size and number of illustrations in mind)
- Keep illustrations simple by using charts, graphs, drawings, and pictures to create interest and visually explain a point
- Use contrasting colours
- Use large print for narrative materials. (We suggest a minimum of 24 points or 3” high letters for the title)

Note that the Workshop Programme Committee will review all poster abstracts/materials prior to display, and reserves the right to refuse permission to display any poster considered to be commercial in nature.

If you are interested to participate, please email your proposed topic with a short abstract (between 200-300 words) to SPE Event Coordinator, Jing Shuang at jshuang@spe.org by 13 January 2017

The Society of Petroleum Engineers (SPE) is a not-for-profit organisation. Income from this event will be invested back into SPE to support many other Society programmes. When you attend an SPE event, you help provide even more opportunities for industry professionals to enhance their technical and professional competence. Scholarships, certification, the Distinguished Lecturer programmes, and SPE’s energy education programmes Energy4me are just a few examples of programmes that are supported by SPE.
Sponsorship support of the event helps offset the cost of producing workshops and allows SPE to keep the attendance price within reach of operation-level individuals, those who benefit most from these technical workshops.

Supporters benefit both directly and indirectly by having their names associated with a specific workshop. While SPE prohibits any type of commercialism within the workshop room itself, the Society recognises that supporting companies offer valuable information to attendees outside the technical sessions.

SPONSORSHIP CATEGORIES
Sponsorship categories are offered on a first-come basis. Please contact SPE to enquire and verify the availability of categories. Existing supporters have the opportunity to renew the same level of support for annual workshops.

SPONSORSHIP BENEFITS
In addition to onsite recognition, SPE will recognise sponsors on the SPE website and in all printed materials for the workshop. Based on the category selected, supporting companies also receive logo visibility on promotional workshop items.

FOR MORE INFORMATION
For a detailed list of available sponsorship opportunities, including benefits and pricing, contact Jing Shuang at jtham@spe.org
REGISTRATION FORM

SPE Workshop: Mature Field Redevelopments:
How to Stay Relevant for the Foreseeable Future?
13 - 14 February 2017 | Kuala Lumpur, Malaysia

Society of Petroleum Engineers

SPE Member: ☐ Yes ☐ No

Membership No. ______________________________________________

Name: ___________________________________________________________________________________________________________________
(First / Forename)   (Middle)   (Last / Family Name)

Position: __________________________________________________________________________________________________________________

Company: _________________________________________________________________________________________________________________

Address: __________________________________________________________________________________________________________________

Town/City: ______________________________ Zip/PostalCode:_______________________________ Country: _________________________________

Tel:____________________________________ Fax:________________________________________ Email: ____________________________________

Would you be willing to give a brief (10-15 minutes) presentation _______(Yes/No)? If yes, please attach the topic with a short abstract of your proposed presentation. One of the Programme Committee members will contact you to discuss your presentation.

Important: Registrants for SPE Workshops are accepted on the basis of information submitted by each registrant.

Technical Disciplines (Check One)
☐ Drilling
☐ Compleitions
☐ Management and Information
☐ Projects, Facilities and Construction
☐ Health, Safety, Security, Environment and Social Responsibility
☐ Production and Operations
☐ Reservoir Description and Dynamics

Primary Responsibility (Check One)
☐ Drilling ☐ Economics ☐ Geology ☐ Geophysics ☐ Management
☐ Operation ☐ Production ☐ Reservoir ☐ Surveillance ☐ Other: ____________________

List background and experience. (Use additional paper if required).

List your expectation for the Workshop, so that the committee can tailor a portion of the Workshop to answering attendees’ concerns. (Use additional paper if required).

Registration Fees
Please tick appropriate box

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<th>Workshop (13 - 14 Nov)</th>
<th>Super Early Bird Registration BY 16 December 2016</th>
<th>Early Bird Registration BY 13 January 2017</th>
<th>Registration AFTER 13 January 2017</th>
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<tbody>
<tr>
<td>SPE Member</td>
<td>☐ US$ 1,500.00</td>
<td>☐ US$ 1,600.00</td>
<td>☐ US$ 1,700.00</td>
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<tr>
<td>Nonmember</td>
<td>☐ US$ 1,700.00</td>
<td>☐ US$ 1,800.00</td>
<td>☐ US$ 1,900.00</td>
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To find out more about group registrations, please contact us at spekl@spe.org

Note: Fee includes workshop sessions, workbook, certificate, daily luncheons and coffee breaks. Registration fees do not include accommodation.

Payment by Telegraphic Transfer
☐ Telegraphic Transfer (Bank details will be provided on the tax invoice).

Payment by Credit Card
Credit Card Payment will be in U.S. Dollars only
☐ American Express ☐ MasterCard ☐ Visa ☐ Diners Club

Card Number ____________________________ Expiration Date (mm/yy) ________ / ________

Security Code (3 digits on back of card / 4 digits on the front of Amex)

Credit Card Billing Address & Zip/Postal Code

Name of Card Holder

Signature

Note: Forms will not be processed and space cannot be guaranteed unless accompanied by payment for total amount due.

Cancellation Policy:
a) A processing fee of USD150.00 will be charged for cancellation received thirty (30) days prior to the first day of the workshop.
b) 25% refund will be made for cancellation received between twenty nine (29) - fifteen (15) days prior to the first day of the workshop.
c) No refund on cancellation received fourteen (14) days prior to the first day of the workshop.
d) No refund will be issued if a registrant fails to show up on-site.

This form may be used as a company invoice.
Mail completed registration form with remittance and any supporting material to:

Society of Petroleum Engineers
Level 35, The Gardens South Tower, Mid Valley City
Lingkaran Syed Putra, 59200 Kuala Lumpur, Malaysia.
Tel: 60.3.2182.3000    Fax: 60.3.2182.3030
E-mail: spekl@spe.org