

**SPE**  
workshop

# Adding Value to Mature Fields & Late Life Assets - Going Beyond

30 SEPTEMBER - 1 OCTOBER 2019  
KUALA LUMPUR, MALAYSIA



## Who Should Attend

Professionals involved in:

- Operations
- Drilling and Completions
- Well Intervention and Production Enhancement
- Asset Development and Planning
- Business Planning
- Value Engineering
- Technology and Innovation
- Digitalisation
- Artificial Intelligence
- Reservoir Management and Surveillance
- Asset Management
- Commercial Decision Making
- Investors and Venture Capital



The prolonged depressed oil and gas price scenario has had a significant impact in delaying investments for new developments and the chances of finding sizable development opportunities. Focus has shifted to lower capital intensive activities and maximising value creation from existing and mature fields. At the same time, the industry has also been extending production from late life fields while reducing risks and liabilities through innovative production and decommissioning strategies. Learnings from present activities can be adopted to lower risk exposure of future developments.

The current situation has re-energised operators and contractors towards further developing technologies and work methods that specifically maximise economic recovery from mature and late life fields. We will continue to see improvements in production efficiency, production enhancement activities and idle well restoration, as well as innovation in handling increased water and gas from reservoirs. Innovative development, operational synergies and clustering approaches, together with partial or full asset decommissioning strategies are among the key focus areas that will continuously add value to existing assets and Near Field Exploitation (NFE) opportunities.

The objective of this workshop is to look at what we are doing, to share knowledge on cost-effective methods to improve production, and to look forward to what more can be done. Embracing digitalisation, Artificial Intelligence (AI), deploying attractive commercial and partnership models are potential breakthroughs. Besides technological advancements, this workshop aims to enlighten oil field practitioners to understand commercial considerations that drive business decisions, which include cost reductions through lower cost operations, decommissioning strategies, and to create innovative fiscal terms which benefit all parties.

This workshop is designed to bring together people from the host government, operating companies, service providers and thought leaders to share best practices, ideas, and plans while collaborating cohesively to further add value to mature and late life fields.

## Session Highlights

Panel Session - Adding Value to Mature Fields & Late Life Assets	Increasing Production and Lowering Costs through Innovative Ways	Strategising Decommissioning and Facilities Simplification	Near Field Exploration (NFE) Opportunities in Mature Field
Innovative Commercial and Partnership Models Mature Field Operating	Model and Asset Life Extension	Digitalisation and Technology	Operatorship Shifts – Case Studies

## Technical Programme Committee

### CO-CHAIRS

#### Nazrin Banu Shaikh S Ahmad

Discovered Resource Arrangements,  
Malaysia Petroleum Management  
**PETRONAS**

#### Ahmed Radzif

Head of Commercial & Strategy  
**EnQuest Petroleum Developments Malaysia Sdn Bhd**

### COMMITTEE MEMBERS

#### Noorbaizura Hashim

General Manager  
**BeicipFranLabAsia**

#### Suresh Sinnappu

Country Lead Malaysia  
**Baker Hughes, GE company**

#### Michael Newman

Head of Upstream Ventures /  
Director of Petroleum Engineering  
**Dialog Sdn Bhd**

#### Razien Ali

Country Manager  
**Halliburton**

#### Ariff Irfan Zainai

Senior Manager  
Production Delivery  
(Peninsula Malaysia Oil)  
**PETRONAS**

#### Jenani Thilagalingam

Asset Promotion,  
Discovered Resource Arrangements,  
Malaysia Petroleum Management  
**PETRONAS**

#### Mohd Nasahie Akbar Ali

Head (Planning and Control)  
Asset Decommissioning  
**PETRONAS**

#### Pauzyiah Abdul Hamid

**PETRONAS**

#### Siti Normaizan Hassan

Head  
Petroleum Engineering  
Sarawak Oil  
**PETRONAS**

#### Thakerngchai Sangvaree

Reservoir Engineering Manager  
Thai Onshore Petroleum  
Development Department  
**PTT Exploration and Production  
Public Company Limited**

#### Farroukh Abdul Aziz

PSC Manager  
Assets - Malaysia  
**Sapura OMV**

#### Ghazaly Bakar

Production Technologist/  
Senior Manager  
Uzma Artificial Ift  
**Uzma Engineering Sdn Bhd**

### CHAIRPERSONS

#### Rahim Masoudi

Chief Technical Officer, Custodian - Reservoir Engineering,  
Resource Development & Management,  
Malaysia Petroleum Management, Upstream Business,  
**PETRONAS**  
Member, SPE Asia Pacific Regional Technical Advisory Committee

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Contact us at [spekl@spe.org](mailto:spekl@spe.org) to arrange your group.

[go.spe.org/20WM07W](http://go.spe.org/20WM07W)

## Workshop Objectives

This workshop provides a platform for sharing experience, knowledge, successes and challenges, learnings and ideas to further advance redevelopment of mature and late life fields. It will give an opportunity to understand the interaction between technological focus and value creation.

Opportunity to learn new ideas and techniques, both technical and commercial that drive future value and extend the life of mature and late life fields down to the decommissioning stage. Networking with industry colleagues and innovators through the various presentations, panel sessions and group discussions.

### WORKSHOP STATISTICS



10+

hours of peer-to-peer networking opportunities



30+

hours of knowledge sharing and technical discussion



30

expert-led technical discussion topics



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- Demonstrate thought leadership in your area of expertise and interest at both local and international levels

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## PRELIMINARY WORKSHOP SCHEDULE



### MONDAY, 30 SEPTEMBER 2019

0800 - 0850 Arrival of Delegates and Registration

0850 - 0900 Safety Announcement by Hotel

0900 - 0930 **Session 1: Welcome and Introduction**

Co-Chairs: Nazrin Banu Shaikh S Ahmad, **PETRONAS**; Ahmed Radzif, **EnQuest Petroleum**

0930 - 1000 Group Photo/Coffee and Tea Break

1000 - 1200 **Session 2: Panel Session - Adding Value to Mature Fields and Late Life Assets**

Session Managers: Nazrin Banu Shaikh S Ahmad, **PETRONAS**; Ahmed Radzif, **EnQuest Petroleum**

1200 - 1300 SPE Luncheon

1300 - 1500 **Session 3: Increasing Production and Lowering Costs through Innovative Ways**

Session Managers: Noorbaizura Hashim, **BeicipFranlabAsia**; Ghazaly Bakar, **Uzma Engineering**

The depressed oil price has spurred a new wave of innovation in oil and gas industry. When a barrel of oil fetched \$100 or more, energy companies were focused on drilling wells and pumping crude oil as fast as they could. However, with oil price settling around \$50 a barrel these days, companies are focused on efficiency; getting the most petroleum for the least amount of money. And many are turning to advanced technology or innovation for help. This session will focus on innovative approaches to reduce cost for mature assets to sustain field life including technology, well types, business model, and resource management. This session also aims to address topics on improving recovery through innovative activities in production enhancement and optimisation, and tertiary recovery methods.

1500 - 1515 Coffee and Tea Break

1515 - 1715 **Session 4: Strategising Decommissioning and Facilities Simplification**

Session Managers: Mohd Nasahie Akbar Ali, **PETRONAS**

Abandonment of upstream oil and gas facilities is rapidly becoming one of the emerging business requirement for the industry in the region. Volatility and uncertainty of crude oil price on the other hand, has forced the industry to be more agile in its decommissioning planning, in order to respond to market dynamics in a timely and efficient manner. This is evident in the approaches adopted by industry players, in their decommissioning strategies and facilities simplification. Such an approach is crucial since decommissioning brings very minimal return to the owner. This session will discuss the various roles of industry players in managing decommissioning work during this challenging time, while striving to minimise the impact to the industry at the same time.

"In the middle of difficulty lies opportunity." -Albert Einstein

1715 - 1900 **Session 5: Near Field Exploration (NFE) Opportunities in Mature Field**

Session Managers: Thakerngchai Sangvaree, **PTTEP**; Siti Normaizan Hassan and Aizuddin Khalid, **PETRONAS**

Maximising hydrocarbon production at a high-level from a mature field is always a challenge. In this circumstance, the subsurface team tends to pick optimisation activities such as artificial lift, waterflood, and infill drilling. However, these activities tend to either maintain production or ramp-up production for a short period of time. Recoverable volumes from these activities still could not sustainably increase production to another level.

To boost up production to another level, success in new field discovery and accelerating discovered resources to reserves and production seems to be the favourable option since it brings new resources into a system. This session will focus on best practice approaches to monetise near field resources to prolong the development of mature fields. The discussion will focus not only on technical perspectives but also mindset and working culture issues. These are as follow:

- Prospect identification, evaluation, and ranking
- Appraisal and development strategies starting from data acquisition to monetisation
- Clustering and production tie-in methodologies
- Cost management and efficiency
- Integration between exploration and development teams
- Working culture and mindset

1900 onwards SPE Group Dinner

### 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 **Hanna-Rose Abdul Jalil** at [hajalil@spe.org](mailto:hajalil@spe.org) by **30 August 2019**.

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.

0830 - 1030 **Session 6: Innovative Commercial and Partnership Models**

Session Managers: Jenani Thilagalingam, **PETRONAS**; Razien Ali, **Halliburton**

As more fields approach the tail-end of the production lifecycle and lose attractiveness, the formulation of new partnership models is crucial to sustain the appeal of late-life assets (LLA). This session will explore the various ways through which innovative partnerships and commercial arrangements are aligned with investors' expectations to generate interest in LLA, starting with contrasting differences in operating environments of traditional assets and LLA, followed by discussions on available avenues to innovate commercial terms. This session will address some of the following topics:

- The success of other basins in generating interest in LLA
- Regulatory challenges and opportunities to encourage involvement
- Revamping the fiscal terms of LLA to increase economic attractiveness
- The relevance of a new breed of lean, highly specialised E&P players

## 1030 - 1045 Coffee and Tea Break

1045 - 1245 **Session 7: Mature Field Operating Model and Asset Life Extension**

Session Managers: Michael Newman, **Dialog**; Ariff Irfan, **PETRONAS**

The reduction of field production, due to declining subsurface potential and operating beyond the facilities' design life, presents safety and business challenges for the oil and gas industry. The business-as-usual operating model may lead to opportunity losses from these mature fields, largely contributed by a shorter economic life. Mature fields need to operate differently from when the production levels were high. Operators must be efficient and remain safe in maximising hydrocarbon recovery from declining fields, as well as lowering and optimising production costs. This session will focus on new thinking, approaches, and enablers to be considered by upstream oil and gas industry players during mature and late life operations, as well as asset life extension, with guidance from the Matured Field Operating Model (MFOM) Guideline, which was initiated and developed by PETRONAS.

## 1245 - 1345 SPE Luncheon

1345 - 1545 **Session 8: Digitalisation and Technology**

Session Managers: Suresh Sinnappu, **Baker Hughes, a GE company**; Pauziyah Abdul Hamid, **PETRONAS**

Many producing assets globally have reached the mature phase of development, which leads to many issues and challenges that affects the productivity and economic viability of these fields. Some of the challenges include well integrity, flow lines, and facilities; production bottlenecks due to the shift in gas, oil and water ratios; erosion/corrosion; increased sand production and handling costs; high chemical consumption and treatment costs; and obsolete monitoring and control systems that are incompatible with new technologies. Field operators are faced with the commercial decision, whether to sell the asset to a low-cost operator, reinvest in the asset, or incur the cost of decommissioning.

Additionally, in the era of digitalisation, technologies such as AI and advance analytics still fall short. Harvard Business Review surveyed thousands of companies about how their companies utilise AI and advanced analytics, and the results show that only 8% of firms engage in core practices that support widespread adoption. Most firms are running ad-hoc pilots and applying advanced analytics or AI, in just a single business.

Hence, to maximise the benefit for all late life asset stakeholders, this session will discuss the above challenges by addressing some of the following topics:

- Innovative, yet cost-effective technological solution to address improvements in production efficiency, production enhancement activities, and idle well restoration
- Siloed work vs. interdisciplinary collaborations
- Accountability transition from analytics team at development stage to business unit on execution
- Long-term portfolio (-3 years) of initiatives across different time horizons for maximum value vs. low scalability short-term quick wins
- Decision-making transition from experience-based and leader-driven to data-driven and front-line at the point of insight

## 1545 - 1600 Coffee Break

1600 - 1800 **Session 9: Operatorship Shifts – Case Studies**

Session Managers: Ahmed Radzif, **EnQuest Petroleum**; Farroukh Abdul Aziz, **Sapura-OMV**

This session will allow operators to share real world experience of taking over and managing mature and late life fields. You will hear from our panel on how the deals were done, as well as transition issues and the ongoing challenges they face. Commercial structures, and personnel issues, knowledge and data management issues and challenges to operate, grow and extend field life with innovative ideas and a new thinking, will be discussed.

- The session will explore experiences of various operators who have taken over mature and late life assets both in the region and other parts of the world
- The case studies will address key issues such as manpower challenges, integrity and maintenance, exploitation and further development, knowledge and data challenges as well as regulatory and governance issues
- The session will allow parties to share and exchange experience, learnings and best practices to better navigate the process of acquiring, managing and further improving mature field and late life assets

1800 - 1830 **Session 10: Workshop Summary and Closing Remarks**

Co-Chairs: Nazrin Banu Shaikh S Ahmad, **PETRONAS**, Ahmed Radzif, **EnQuest Petroleum**

**SPONSORSHIP SUPPORT INFORMATION**

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**

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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 **Hanna-Rose Abdul Jalil** at [hajalil@spe.org](mailto:hajalil@spe.org).

**GENERAL INFORMATION****DOCUMENTATION**

- Proceedings will not be published; therefore, formal papers and handouts are not expected from speakers.
- Work-in-progress, new ideas, and interesting projects are sought.
- Note-taking by attendees is encouraged. However, to ensure free and open discussions, no formal records will be kept.

**WORKSHOP DELIVERABLES**

- The committee will prepare a full report containing highlights of the Workshop and the report will be circulated to all attendees.
- Powerpoint presentations will be posted online and provided to attendees after the Workshop. Provision of the materials by Discussion Leaders will signify their permission for SPE to do so.

**COMMERCIALISM**

In keeping with the Workshop objectives and the SPE mission, excessive commercialism in posters or presentations is not permitted. Company logos must be limited to the title slide and used only to indicate the affiliation of the presenter.

**ATTENDANCE CERTIFICATE**

All attendees will receive a Workshop attendance certificate. This certificate will be provided in exchange for a complete Attendee Survey Form.

**CONTINUING EDUCATION UNITS**

This Workshop qualifies for SPE Continuing Education Units (CEU) at the rate of 0.1 CEU per hour of the Workshop.

**TRAVEL/VISA**

Attendees are advised to book their airline tickets early. All travellers must be in possession of passports valid for at least six (6) months with proof of onward passage. Contact your local travel agent for information on visa requirements.

**DRESS CODE**

Business casual clothing is recommended. The Workshop atmosphere is informal.

**REGISTRATION FEE**

- Registration fee ONLY includes all workshop sessions, coffee breaks and luncheons for the registrant.
- Accommodation is NOT included. SPE will provide details of recommended hotels upon receipt of your registration.

**REGISTRATION POLICY**

- Registration fee MUST be paid in advance for attending the Workshop.
- Full fixed fee is charged regardless of the length of time the registrant attends the Workshop, and cannot be prorated or reduced for anyone.

# REGISTRATION FORM

SPE WORKSHOP:  
**Adding Value to Mature Fields & Late Life Assets - Going Beyond**  
 30 September – 1 October 2019 | Kuala Lumpur, Malaysia



ATTENDEE INFORMATION					
SPE Member	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Membership Number		
First Name			Last Name/Family name		
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<p><b>Do you wish to be considered a Discussion Leader (10-15 minutes presentation)?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, please indicate the subject/topic on which you would like to present:</p> <div style="border: 1px solid black; height: 30px; width: 100%;"></div>					
<p><b>Please state your Technical Discipline (Select one ONLY):</b></p> <p> <input type="checkbox"/> Completions      <input type="checkbox"/> Drilling      <input type="checkbox"/> Health, Safety and Environment      <input type="checkbox"/> Management and Information  <input type="checkbox"/> Production and Operations      <input type="checkbox"/> Reservoir      <input type="checkbox"/> Projects, Facilities and Construction                 </p>					
<p><b>Please state your expectation for the Workshop, so that we can tailor a portion for the Workshop to answer attendees' concerns</b></p> <div style="border: 1px solid black; height: 30px; width: 100%;"></div>					
<p><b>By registering to attend this event, you consent to allow SPE to store and process the information submitted above and to provide you with information about this event.</b></p> <p><b>I would like to receive updates on products, services and events from SPE.</b> <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, your information will be used in accordance with SPE Privacy Policy and you can unsubscribe at any time by sending your request to <a href="mailto:spekl@spe.org">spekl@spe.org</a>.</p>					

REGISTRATION CATEGORY						
Description		Fee Per Person			Tick (✓)	Amount (USD)
		Super Early Bird by 2 Aug 2019	Early Bird by 6 Sept 2019	Standard by 6 Sept 2019		
Workshop	Member	USD 1,500	USD 1,600	USD 1,700		
	Non-Member	USD 1,700	USD 1,800	USD 1,900		
<b>TOTAL AMOUNT (USD)</b>						

**TERMS & CONDITIONS**

**Registration Fee**

- Fee includes workshop sessions, workbook, certificate, daily luncheons and coffee breaks.
- Fee DOES NOT include accommodation. SPE will provide details of recommended hotels upon receipt of your registration.
- Registration of participant will only be confirmed upon registration and receipt of full payment or an acceptable employer's letter of guarantee.
- All outstanding payments must be received on or prior to the date of the event for participants to be allowed to attend. SPE reserves the right to cancel the registration if no payment is received prior to or on the date of the event.
- Full fee is charged regardless of the length of time the Participant attends the event and cannot be pro-rated.

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- Fee are made free and clear of, and without any deduction or withholding for and on account of, any taxes, duties or other deductions. Any such deduction or withholding, if required by the laws of any country are the sole responsibility of the Participant.

**Cancellation Policy**

- A processing fee of USD150.00 will be charged for cancellation received thirty (30) days or more prior to the first day of the workshop.
- Registration cancelled between fifteen (15) days to twenty-nine (29) days prior to the first day of the event will be refunded 25% of the registration fees.
- Registration cancelled fourteen (14) days or less prior to the first day of the workshop will not be eligible for a refund.
- Participant who failed to attend will not be eligible for a refund.
- Cancellation must be notified in writing to SPE.

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**Disclaimer**

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SPE Contact:  
**Society of Petroleum Engineers**  
 Suite 12.01, Level 12, Menara IGB  
 Mid Valley City, Lingkaran Syed Putra  
 59200 Kuala Lumpur Malaysia  
 Tel: +60 3 2182 3000 Fax: +60 3 2182 3030  
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