

**Annual Run Based on Popular Demand!**

# **PETROLEUM ENGINEERING FOR OTHER DISCIPLINES**

**Provide an overview of the fundamental operations  
in exploration, drilling, production, processing,  
transportation, and refining oil and gas.**

**27<sup>th</sup> – 31<sup>st</sup> July 2015 – HCM | Vietnam**

**2<sup>nd</sup> – 6<sup>th</sup> November 2015 – Kuala Lumpur | Malaysia**

**7<sup>th</sup> – 11<sup>th</sup> December 2015 – Perth | Australia**

**“One of the best course I’ve attended”**

**Murphy Oil – Deputy Planning Manager**

**“Very experienced trainer”**

**Carigali HESS – Business Planning**

**“All you need to know about petroleum engineering is here”**

**GM upstream technical services - Petronas**

**“Very useful to bridge between technical & non-technical team!”**

**Logistic coordinator – Petrofac**

**“Thumbs up. Very interesting!”**

**Shared Service manager - PCPP OPERATING COMPANY**

---

Media partners:

**WorldOils**

**PetroPLAZA**

**VungtauHR®**  
Vi công đồng phát triển

**PTIT FOCUS**  
<http://www.ptit.org>  
Gateway to Thailand Petroleum and Petrochemicals

**OilVoice**



## Program Overview

The outlook of the oil & gas industry continues to play a strong and vital role in the region economy as government, regulators and major players are increasing their activities from upstream to downstream to fulfill the energy demands. With huge budget and investment shifting into the industry, there is a great amount of opportunities for everyone to taste profits, however, one must know what they are dealing with. Challenges like risk evaluation, recent technologies, field development, production and talent development are some of the fundamental concepts to master in Petroleum engineering.







This 5-day course is intended for professionals with a non-petroleum engineering degree, who currently work in/with, or wish to work in/with, the Petroleum Industry or simply wish to learn about this major industry.

The course will address the story of oil from its origin to the end user. The objective is to provide an overview of the fundamental operations in exploration, drilling, production, processing, transportation, and refining of oil and gas. Participant will have a well-balanced knowledge of petroleum engineering. Furthermore, participant will be able to appreciate their role in the industry as well as others and perform their job more efficiently, have more meaningful and educated communication with other colleagues, be more efficient/ effective in meetings and discussion.

Participant coming from non-petroleum industry will learn about industry different elements and how they work. This will enable them to have a more efficient conversation with their clients (oil industry), evaluate risk, gain trust/respect from their clients, advise them better and more effectively, understand relevant abbreviation and terminologies.

The training starts from basic level and aim to give good understanding without being too technical.

### PROGRAME CONTENTS

 <b>Geology</b>	Learn about the mechanism involved and conditions required for hydrocarbon reservoir formation and techniques used to find them.
 <b>Drilling</b>	How to access and evaluate hydrocarbon reservoir while minimizing risks and maximizing the economy, casing design and cementing.
 <b>Production</b>	Learn about nodal analysis, well design and safety measure , wireline services, perforation , artificial lift, various production problems, workover, advanced well, etc
 <b>Reservoir</b>	Discuss reservoir fluids and rock, production mechanism, primary and secondary recovery, enhanced oil recovery techniques (EOR), fluid sampling and laboratory testing, reservoir simulation.
 <b>Processing</b>	Learn about oil & gas processing (separating water, oil & gas), dehydration, water treatment, offshore developments, environmental impact.
 <b>Flow Assurance</b>	Avoiding interruption to economical and safe production from reservoir to end user, asphaltene, wax , hydrates , scale , corrosion , emulsion.
<b>Additional Topics</b>	EOR, intelligent pigging, well testing , high pressure high temperature reservoir, minimizing the emission of greenhouse gases to atmosphere

### Attend this course to Master:

- Understand all main aspect and learn a well – balance knowledge of Petroleum Engineering.
- Better appreciate the connection among various sections, industry role and communicate more efficiently.
- Better visualize the different elements, how it works, evaluate risks, gain trust/ respect and be able to advice the relevant industry more effectively.
- The relevant abbreviations and terminologies.
- Create more opportunities and execute more efficiently.
- Gain valuable insights on the Petroleum industry with recent developments that impact the industry process.

## This program is intended

Professionals coming from other disciplines (Technical/Non-Technical) who wish to enhance their existing skills set and increase their understanding on fundamental operation of petroleum engineering to support their employment and career progression in the oil & Gas industry.

Legal – Accounting – Business Development Strategies –Service Providers to Oil & Gas industries - General Management (Chemical/Technology/Materials/Providers/Developers) -- Commercial – Finance – Finance & Administration - Government Agencies - Marketing & Publicity – Investment – Supply Chain – Logistic – Journalist – Tender / contract – Planning & Budgeting- Marine & Offshore – Engineering Services – Technical disciplines (Production, Drilling, Project, HSE, Exploration, E&I, Facilities, Researcher, Rotating)- instructor of other relevant topics who wish to know more about petroleum engineering.

<b>Introduction</b> <ul style="list-style-type: none"> <li>• A brief history</li> <li>• Origin of petroleum</li> <li>• Plate tectonics</li> <li>• Units in petroleum engineering</li> <li>• Overview of the industry</li> </ul> <b>Geology</b> <ul style="list-style-type: none"> <li>• Petroleum geology and geophysics</li> <li>• Fluid migration</li> <li>• Reservoir formation</li> <li>• 2, 3 and 4D seismic</li> </ul>	<b>Drilling</b> <ul style="list-style-type: none"> <li>• Drilling operations (onshore, offshore)</li> <li>• Rig components</li> <li>• Top drive</li> <li>• Formation pressure</li> <li>• Leak off test</li> <li>• Drilling problems</li> <li>• Coring</li> <li>• Casing design</li> <li>• Cementing</li> <li>• Cement log (CBL/VDL)</li> <li>• Directional drilling</li> <li>• LWD</li> <li>• MWD</li> </ul>	<b>Production</b> <ul style="list-style-type: none"> <li>• Field development (onshore, offshore)</li> <li>• Logging (open/cased hole)</li> <li>• PLT</li> <li>• Production technology</li> <li>• Inflow Performance</li> <li>• Vertical lift</li> <li>• Flow through chokes</li> <li>• Nodal analysis</li> <li>• Well completion</li> <li>• Downhole and surface components</li> <li>• Perforation</li> </ul>
<b>PETROLEUM ENGINEERING FOR OTHER DISCIPLINES (5 DAYS)</b>		
<b>Continue – Production</b> <ul style="list-style-type: none"> <li>• Intelligent wells</li> <li>• Wireline operations</li> <li>• Well intervention</li> <li>• Workover</li> <li>• Coiled tubing</li> <li>• Abandonment</li> <li>• Well Integrity Management</li> <li>• Artificial lift</li> <li>• Formation damage</li> <li>• Well test</li> <li>• Well stimulation</li> <li>• Sand control</li> </ul>	<b>Reservoir Engineering</b> <ul style="list-style-type: none"> <li>• Reserve estimation</li> <li>• PVT and phase behavior</li> <li>• Equation of State</li> <li>• PVT tests and reports</li> <li>• Properties of reservoir fluids (density, viscosity, IFT)</li> <li>• Reservoir rock properties</li> <li>• Production mechanisms (primary, secondary, EOR/IOR)</li> <li>• Material balance</li> <li>• Reservoir simulation</li> </ul> <b>Processing</b> <ul style="list-style-type: none"> <li>• Oil production</li> <li>• Processing and treatment</li> <li>• Gas production and processing</li> <li>• Gas/oil transportation</li> </ul>	<b>Flow assurance</b> <ul style="list-style-type: none"> <li>• Hydrates</li> <li>• Scale</li> <li>• Wax</li> <li>• Asphaltene</li> <li>• Corrosion</li> <li>• Slugging</li> <li>• Pigging</li> </ul> <b>Additional topics</b> <ul style="list-style-type: none"> <li>• Heavy oil</li> <li>• Unconventional reservoirs</li> <li>• CO<sub>2</sub> capture transport and storage</li> <li>• Digital fields</li> <li>• Refining</li> <li>• End products and their usage</li> <li>• Environment</li> </ul> <p>End of course</p>



PETRO1 provides Oil & Gas Trainings & Consultancy services ranging from Petroleum Engineering, Exploration & Production, Subsurface and business related activities in the oil & gas industry. We had successfully made impact to petroleum professional mainly the Top 50 Oil & gas players in the south East Asia Region.

- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>▪ Total E&amp;P</li> <li>▪ Petronas</li> <li>▪ Murphy Oil</li> <li>▪ JX Nippon</li> <li>▪ Scomi Oil</li> <li>▪ Hess E&amp;P</li> <li>▪ Saipem</li> <li>▪ Mubadala Petroleum</li> <li>▪ Bureau Veritas</li> <li>▪ Pertamina</li> <li>▪ UMW</li> <li>▪ Shell Eastern Petroleum</li> <li>▪ Maersk Drilling</li> </ul> | <ul style="list-style-type: none"> <li>▪ Petrofac</li> <li>▪ Keppel Corporation</li> <li>▪ Singapore refining Company</li> <li>▪ Salamander Energy</li> <li>▪ Binh Son Refining Vietnam</li> <li>▪ PTT Global</li> <li>▪ Newfield</li> <li>▪ Brunei Methanol</li> <li>▪ Technip</li> <li>▪ Premier Oil</li> <li>▪ Talisman</li> <li>▪ SK energy</li> <li>▪ Sapura Kencana</li> </ul> | <ul style="list-style-type: none"> <li>▪ SGS</li> <li>▪ Halliburton</li> <li>▪ Brunei LNG</li> <li>▪ Shell Chemical</li> <li>▪ Worley Parson</li> <li>▪ China university of petroleum Beijing</li> <li>▪ Thailoil</li> <li>▪ Star Petroleum</li> <li>▪ Jurong Shipyard</li> <li>▪ Petron</li> <li>▪ Roc Oil &amp; Gas ( Australia)</li> <li>▪ Genesis Oil &amp; Gas</li> </ul> |
|---|--|--|

## Principal Program Facilitator

### Bahman Tohidi Ph.D, Hydract Limited UK



- 30 years of experience and research interest in PVT phase behaviour and properties of reservoir fluids and CO<sub>2</sub>-rich system, gas hydrates and flow assurance.
- Director of centre for gas hydrates research (C-FAR) at institute of petroleum engineering, Herriot-watt University.
- Published more than 200 papers and holds 9 patents mainly in gas hydrates and PVT.
- SPE distinguished lecturer with his talk entitled, "Gas hydrates: Friend or Foes?".
- Extensive hands on experience as production engineering with major oil companies.
- Managed more than 300 relevant projects for various oil & gas companies: Total, BO, Statoil. Shell, Talisman, Chevron, INPEX, Tullow oil, Petronas, PETrobras, Dolphin Energy, Saudi Aramco, BG Group, DNO, schlumberger, Dana, DONG Energy, Halliburton, Cameron and others.

### Bahman Tohidi Ph.D. - PROFESSOR, HERIOT-WATT UNIVERSITY, MANAGING DIRECTOR, HYDRAFACT LIMITED

Oil & gas knowledge-based, spin-out company from Heriot-Watt University. It offers a comprehensive range of technical and scientific services in the fields of hydrates, flow assurance, PVT, phase behaviour and properties of reservoir fluids and CO<sub>2</sub>-rich systems

- Consultancy - offering a wide range of consultancy services both experimental and/or modelling.
- Software - HydraFLASH® is a state-of-the-art Hydrate and PVT software package. It has been ranked the best in two independent evaluations and is currently used by several major operators.
- New Technology - Commercialisation of IP - Hydract commercialises relevant IP (mostly developed at Heriot-Watt University). The latest example is HydraCHEK®, a device to monitor hydrate inhibition and safety margins by downstream measurement of hydrate inhibitor concentrations. More recently Hydract has developed a technology for removing Kinetic Hydrate Inhibitors (KHI) from produced water.
- Manufacture/supply of laboratory testing equipment - temperatures ranging from -90 °C to +350 °C and pressure up to 3,000 bars
- Managed more than 300 relevant projects for various oil & gas companies: Total, BO, Statoil. Shell, Talisman, Chevron, INPEX, Tullow oil, Petronas, PETrobras, Dolphin Energy, Saudi Aramco, BG Group, DNO, schlumberger, Dana, DONG Energy, Halliburton, Cameron and others.

Director of Centre for Gas Hydrate Research and the Centre for Flow Assurance Research (C-FAR) at Institute of Petroleum Engineering, Heriot-Watt University with several projects on various aspects of gas hydrates and flow assurance, and phase behaviour and properties of reservoir fluids and CO<sub>2</sub>-rich systems

- Leads Hydrate and Phase Equilibria Research Group at Institute of Petroleum Engineering, Heriot-Watt University.
- Research interests include PVT phase behaviour and properties of reservoir fluids and CO<sub>2</sub>-rich systems, gas hydrates, flow assurance, and reducing the emission of greenhouse gases.

His teaching activities included Petroleum Engineering and Production Technology, as well as offering several short courses to the industry (including; Flow Assurance and Gas Hydrates, PVT and Phase Behaviour of Reservoir Fluids, and Petroleum Engineering for other Disciplines). He has published more than 200 papers and holds 9 patents mainly in gas hydrates and PVT. He was SPE Distinguished Lecturer in 2004-2005 with his talk entitled, "Gas Hydrates: Friend or Foes?". Bahman is a Professor at the Institute of Petroleum Engineering, Heriot-Watt University and a visiting Professor at Qatar University. Bahman is a member of the Society of Petroleum Engineers and a member of the EPSRC (the UK Engineering and Physical Science Research Council) Peer Review College for 2006-2009 and 2010-2013 and former member of editorial board of Journal of Chemical Engineering Research and Design (2009-12).

Instructor, AIT and Production Engineer (National Iranian Oil Company) NIOC (1984-1991)

After graduation (BSc in Chemical Engineering from Abadan Institute of Technology, Iran), he joined National Iranian Oil Company (NIOC) in 1984 where he worked as Production Engineer as well as University Lecturer for seven years. Bahman Tohidi joined Heriot-Watt University in 1991 and graduated with a PhD in Petroleum Engineering in 1995 with his doctoral work on the phase behaviour of water-hydrocarbon systems and gas hydrates. He started his employment at Heriot-Watt University in January 1994 working in both Hydrate and Reservoir Fluids research projects.



## Previous Clients attended

Advanced Drilling fluids  
Baker Hughes  
Herriott – Watt University  
Petromar Angola  
Talisman-Energy  
OMV  
Petrofac Malaysia  
KPOC  
Murphy Oil

Asia Connecting centre  
Caerketton Ltd  
James Walker  
Rothschild  
TNK-BP  
Halliburton Energy Services  
Petronas Carigali  
Lundin Petroleum  
Petronas Research

ATP Oil & Gas Corporation (ATP)  
Crondall Energy consultants  
Kosmos Energy Ghana HC  
Maersk Oil and Gas  
Weatherford  
Petroliam Nasional Berhad  
Newfield Peninsula Malaysia Inc  
PCPP operating company  
Senergy

## Comments from past participants:

"All you need to know about petroleum engineering is here!"

"Videos and pictures were very useful to understand, the course was flexible to cover the discussion points we were interested in"

"The course gives in-depth knowledge for non-engineering specialists"

"Very informative; now I have much better understanding about Petroleum Engineering. Prof. Tohidi clearly has very extensive knowledge about the subject"

"Very high level of the teacher knowledge, a lot of information on each subject, every question answered to maximum extend"

"Very interesting course & make it easy to understand the petroleum engineering."

"Excellent Facilitator & Good Course"

"I liked the balance between theory and practice with films/videos"

"Very interesting and well presented. The course will definitely improve my understanding of the technical aspects which I discuss with various department specialists (wells, subsurface and projects in particular)"

"The practical application of the course materials to field was well done"

"The course give a lot of useful new learning which will definitely enhance my support/Role in my work"

"Good course. Well delivered."

"Highly recommended programme for those non- PE in the upstream business"

"Good subject & Good speaker"

"Very good and highly qualified and passionate facilitator"

"Excellent course. Covered in good detail most of the Petroleum topics that are important for me. In general, I thought the technical balance was just right, in that it challenged me and improved my knowledge"

"Videos were very useful to help understand difficult technological stuff "

"The course gave information on topics of exactly expected level. Not too much detailed and at the same time it is covering all major issues"

"The level of details - very digestible! Well taught. Easy to ask questions and questions were answered very well"

"Broad range of topics covered, drilling (Day 2) extensively useful & Days 4 & 5 (details on processing facilities) very thorough"

---

## REGISTER ONLINE

Now you can view our 2015 trainings and register online.

<http://www.petro1.com.my/training.aspx>

### Step for registering a course:

1. Please sign up as member.
2. Click "Course offering "and select the choice of your courses you like to attend.
3. Click "Register Now "
4. Fill up all requirement details (No of Participant, invoice attention person and payment method) and click submit.
5. A notification email with the subject "Course Reserved "will be sent to you.
6. To view all past attended courses and Invoices, please login into your member profile to view all history.

## Investment Packages

Petroleum Engineering for other disciplines	Early Bird Full 5 Days	Standard Price Full 5 Days
Vietnam – 27 <sup>th</sup> – 31 <sup>st</sup> July 2015		
Per Delegate	SGD 4299 ( )	SGD 4999 ( )
Kuala Lumpur   Malaysia – 2 <sup>th</sup> – 6 <sup>th</sup> November 2015 (GST 6% inclusive)		
Per Delegate	SGD 5299 ( )	SGD 6359 ( )
Perth   Australia – 7 <sup>th</sup> – 11 <sup>th</sup> December 2015		
Per Delegate	AUD 4999 ( )	AUD 5999 ( )
<b>TEAM DISCOUNT of 3 or more off 10%</b> - Team discount are applicable to early bird pricing. - The price above is inclusive of GST 6% (Only for Malaysia Venue)		

## Delegate Details

1. Name: \_\_\_\_\_ Mr ☐ Mrs ☐ Ms ☐ Dr ☐

Job Title: \_\_\_\_\_

Email : \_\_\_\_\_

Contact No: \_\_\_\_\_

Department: \_\_\_\_\_

2. Name: \_\_\_\_\_ Mr ☐ Mrs ☐ Ms ☐ Dr ☐

Job Title: \_\_\_\_\_

Email : \_\_\_\_\_

Contact No: \_\_\_\_\_

Department: \_\_\_\_\_

3. Name: \_\_\_\_\_ Mr ☐ Mrs ☐ Ms ☐ Dr ☐

Job Title: \_\_\_\_\_

Email : \_\_\_\_\_

Contact No: \_\_\_\_\_

Department: \_\_\_\_\_

Head of Department: \_\_\_\_\_

## Invoice Details

Invoice Attention to: \_\_\_\_\_

Company: \_\_\_\_\_

Industry: \_\_\_\_\_

Address: \_\_\_\_\_

Postcode: \_\_\_\_\_ Country: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Authorized  
Signature : \_\_\_\_\_

## REGISTRATION FORM

**REGISTER NOW**  
 CONTACT: kelvin  
 MAIN: +603 7727 3952  
 FAX: +603 7722 5278  
 Email: registration@petro1.com.my

### Payment by credit card

Please Debit my credit card:

☐ VISA ☐ MASTERCARD

Card Number: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

Security Code:       Expiry Date:

Named printed on card: \_\_\_\_\_

Signature: \_\_\_\_\_

### REGISTRATION DEADLINE

As an internationally operating training organization, PETRO1 would appreciate receiving registrations at least one (1) month prior to course commencement. Registrations after this date will be accepted provided that places are available. We strongly recommend early enrolment to avoid disappointment!

### GST input Tax claim (Malaysia Venue only)

Organization who have register under GST is allow to claim on any GST incurred (Known as input tax) on their purchase to the business.

### Payment Method

By cheque/ Bank Draft: Made Payable to PETRO1 SDN BHD  
 By Direct Transfer: Please quote invoice numbers on remittance advice.

ACCOUNT NAME : PETRO1 SDN BHD  
 BANK : HSBC Amanah Malaysia Berhad  
 ACCOUNT NO : 054 – 048061 – 701 (SGD)  
 SWIFT CODE : HMABMYKL

**All bank charges to be borne by payers. Please ensure that PETRO1 SDN BHD received the full invoice amount.**

**\* Credit card payment will include a charges 2.8%**

**Payment Policy:** Upon receipt of a completed registration form, it confirms that the organization is registering for the seat(s) of the participant(s) to attend the conference or training workshop. Payment is required with registration and must be received prior to the event to guarantee the seat. Payment has to be received 7 working days prior to the event date to confirm registration.

**Venue:** All of our training courses are held in 4 – 5 star venues.

The course fee does not include accommodation or travel cost. It's recommended to book the hotel room early as there are only limited room available at the discounted corporate rate.

### DATA PROTECTION

The information you provide will be safeguarded by Petro1 that may be used to keep you informed of relevant products and services. We take it seriously when it come s to protection of our client data.

**Cancellation & Substitutions:** Upon receipt of a completed registration form, it confirms that the organization is registering for the seat(s) of the participant(s) to attend the conference or training workshop. Should you be unable to attend, substitutes are always welcome at no additional cost. Please inform us as early as possible. Payment is non-refundable if cancellation occurs 7 working days prior to event commencement. However a substitute is welcome at no additional charges. If cancellation occurs 5 working days prior to the registration date and there is no substitute, the organizer reserves the right to charge 50% of the total investment from your organization.

PETRO1 SDN BHD is not responsible for any loss or damage as a result of a substitution, alteration or cancellation/postponement of an event. PETRO1 SDN BHD shall assume no liability whatsoever in the event this training course is cancelled, rescheduled or postponed due to a fortuitous event, Act of God, war, fire, labor strike, extreme weather or other emergency.

**Walk in Registration:** Walk-in participants with payment will only be admitted on the basis of seat availability at the event and with immediate full payment.

**Program Change policy:** The organizer reserves the right to make any amendments and/or changes to the workshop, venue, facilitator replacements and/or modules if warranted by circumstances beyond its control.