

# COURSE OVERVIEW DE0500 Screening of Oil Reservoirs for Enhanced Oil Recovery

# Course Title

Screening of Oil Reservoirs for Enhanced Oil Recovery

# Course Date/Venue

November 10-14, 2024/Boardroom, Warwick Hotel Doha, Doha, Qatar

CEUS

Course Reference DE0500

Course Duration (30 PDIIs) Five days/3.0 CEUs/30 PDHs

# **Course Description**









This practical and highly-interactive course includes real-life case studies and exercises where participants will be engaged in a series of interactive small groups and class workshops.

This course is designed to provide participants with a detailed and an up-to-date overview of oil reservoirs for enhanced oil recovery screening. It covers the reasons and various processes of enhanced oil recovery; the displacement fundamentals; the phase behavior and the miscible recovery process; the polymer flooding as well as chemical/micellar/surfactant flooding; the thermal processes; and the interpretation of carbon dioxide flooding.

Upon the completion of this course, participants will have an understanding of the various processes used for improved oil recovery. You will learn why oil is left in the reservoir after various recovery processes no longer produce economic quantities and what additional processes are available to recover this oil. You will learn how to do a preliminary evaluation to determine which processes might be suitable for a specific reservoir.



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# Course Objectives

Upon the successful completion of this course, each participant will be able to: -

- Apply and gain an in-depth knowledge on screening of oil reservoirs for enhanced oil recovery processes
- Discuss enhanced oil recovery including definitions, reasons and various processes
- Define and explain the displacement fundamentals
- Interpret the phase behavior and illustrate the miscible recovery process
- Explain and discuss polymer flooding as well as chemical/micellar/surfactant flooding
- Illustrate and analyze thermal processes
- Explain and interpret carbon dioxide flooding

# Exclusive Smart Training Kit - H-STK®



Participants of this course will receive the exclusive "Haward Smart Training Kit" (**H-STK**<sup>®</sup>). The **H-STK**<sup>®</sup> consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.

### Who Should Attend

This course provides an overview of all significant aspects and considerations of screening of oil reservoirs for enhanced oil recovery for engineers who will be evaluating reservoirs that are nearing primary depletion and for managers and supervisors who will make the final decisions on the recommendations of enhanced oil recovery projects to upper-level management.

### Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, Stateof-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

- 30% Lectures
- 20% Practical Workshops & Work Presentations
- 30% Hands-on Practical Exercises & Case Studies
- 20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

### Course Fee

**US\$ 8,500** per Delegate. This rate includes H-STK<sup>®</sup> (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.



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# Course Certificate(s)

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

## Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -

The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units** (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

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**BAC** British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.



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### Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



Mr. George Basta, MSc, BSc, is a Senior Reservoir Engineer with extensive experience within the Oil & Gas, Refinery and Petrochemical industries. His wide expertise covers in the areas of Reserve Calculation, Reservoir Engineering, Petroleum Engineering & Reservoir Management, Sandstone & Fractured Carbonate Reservoir, Reservoir Productivity, Enhanced Oil Recovery (EOR), Thermal Enhanced Oil Recovery (TEOR), Reservoir Pressure Maintenance (Water Flooding), Reservoir Modelling, Reservoir

Surveillance, Steam Flood Reservoir Management, Integrated Carbonate Reservoir Characterization. Applied Reservoir Engineering & Management, Reservoir Surveillance & Management, Applied Production Logging & Reservoir Monitoring, Reservoir Management, Reservoir Geomechanics, Reservoir Engineering, Reservoir Characterization, Reservoir Characterization, Reservoir Fluid Characterization & Management, Fractured Carbonate Reservoir, Reservoir Geophysics, SCAL, Rocks & Fluids Properties, Production & Injection, Heavy Oil Recovery, Well Production Engineering, Well Modelling, Nodal Analysis, Well Data Results Interpretation, Well Tests, Enhancing Well Productivity, Injection Logging, Original Hydrocarbon in Place (OHIP), Reserve Estimation, Reserve Evaluation, Steam Injection, Polymer Injection, Steam Pulsing Injection (SPI), Cyclic Group Steaming of Wells (CGSW), Quality Management System, Volumetric Analysis, Monte Carlo Techniques, Material Balance and Decline Curve Analysis (DCA). He is also well-versed in PVTi, PVTP, PVTsim, PETREL Software, MBAL Software, Prosper Software, CMG, OFM, Saphir/Ecrin, Advanced Excel, EORgui, IMEX, Thermal STARS, EXOTHERM, Eclipse, KAPPA Software and PETEX.

During Mr. George's career life, he has gained his thorough and practical experience through his various positions as the **Reservoir Surveillance Engineer**, **QA/QC Engineer**, **Field Engineer**, **Reservoir Surveillance Petroleum Consultant Engineer** and **Senior Instructor/Lecturer** for various companies like OPEC (Offshore Protection Engineering Company), Scimitar Production Egypt Ltd and the Business Development in Africa and MENA Regions.

Mr. George has a **Master** and **Bachelor** degrees in **Petroleum Engineering**. Further, he is a **Certified Instructor/Trainer**, an active member of the Society of Petroleum Engineer (**SPE**) and Canadian Society of Petroleum Geologists (**CSPG**). Moreover, he published various books and scientific journals and has delivered numerous trainings, courses, seminars, conferences and workshops globally.

### **Accommodation**

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.



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<u>Course Program</u> The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1:	Sunday, 10 <sup>th</sup> of November 2024
0730 - 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
0830 - 0930	Introduction to EOR
	Definitions • Reasons for EOR • Various Processes
0930 - 0945	Break
0945 – 1100	Displacement Fundamentals
1100 – 1230	Displacement Fundamentals (cont'd)
1230 – 1245	Break
1245 – 1420	Displacement Fundamentals (cont'd)
1420 - 1430	Recap
1430	Lunch & End of Day One

Day 2:	Monday, 11 <sup>th</sup> of November 2024
0730 - 0900	Phase Behavior
0900 - 0915	Break
0915 – 1100	Phase Behavior (cont'd)
1100 – 1230	Phase Behavior (cont'd)
1230 – 1245	Break
1245 – 1420	Miscible Recovery Processes
1420 – 1430	Recap
1430	Lunch & End of Day Two

#### Tuesday, 12<sup>th</sup> of November 2024 Day 3:

0730 - 0900	Miscible Recovery Processes (cont'd)
0900 - 0915	Break
0915 – 1100	Miscible Recovery Processes (cont'd)
1100 – 1230	Polymer Flooding
1230 – 1245	Break
1245 – 1420	Polymer Flooding (cont'd)
1420 – 1430	Recap
1430	Lunch & End of Day Three

Day 4:	Wednesday, 13 <sup>th</sup> of November 2024
0730 - 0900	Polymer Flooding (cont'd)
0900 - 0915	Break
0915 – 1100	Chemical/Micellar/Surfactant Flooding
1100 – 1230	Chemical/Micellar/Surfactant Flooding (cont'd)
1230 – 1245	Break
1245 – 1420	Chemical/Micellar/Surfactant Flooding (cont'd)
1420 - 1430	Recap
1430	Lunch & End of Day Four



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Day 5:	Thursday, 14 <sup>th</sup> of November 2024
0730 - 0930	Thermal Processes
0930 - 0945	Break
0945 – 1100	Thermal Processes (cont'd)
1100 – 1200	Carbon Dioxide Flooding
1200 – 1215	Break
1215 – 1345	Carbon Dioxide Flooding (cont'd)
1345 – 1400	Course Conclusion
1400 – 1415	POST-TEST
1415 – 1430	Presentation of Course Certificates
1430	Lunch & End of Course

Practical Sessions This practical and highly-interactive course includes real-life case studies and exercises:-



Course Coordinator Jaryl Castillo, Tel: +974 4423 1327, Email: jaryl@haward.org



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