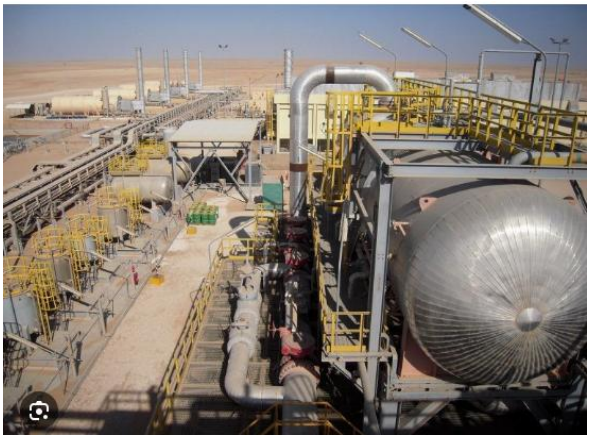
SPE IMPROVED OIL RECOVERY CONFERENCE

IOR 2026

Enabling IOR: Proven and Emerging Strategies for Maximizing Recovery

SC- 05 - Enabling IOR Projects – Economic Strategies for Successful IOR Deployment
One-Day Intensive and Enjoyable Course



Unlock full value of mature and developing reservoirs through smart Improved Oil Recovery (IOR) project planning. This one-day course equips petroleum engineers, project managers, and technical teams with the economic, regulatory, and operational insights needed to envision, initiate, plan, and execute successful IOR projects.

Learn how time value of money, NPV, IRR, and payout shape risk and management decision-making. Understanding when IOR project redevelopment early or late-life may make the most economic sense. Navigate land, unitization, and fiscal regime challenges (Royalty/Tax vs. PSC). Through real-world case studies—waterflooding, steam flooding, CO_2 flooding, and unconventional/tight oil IOR technology—you'll master phased execution thinking and strategies to reduce and manage risk while optimizing future project efficiencies and returns.

Who Should Attend:

Petroleum engineers, asset managers, reservoir engineers, and technical decision-makers with five or more years of experience looking to enhance their understanding of economic evaluation and development strategy for improved oil recovery (IOR) projects. Ideal for professionals to aid transition from type well planning or infill drilling to more complex redevelopment IOR opportunities in mature or marginal fields.

Course Content:

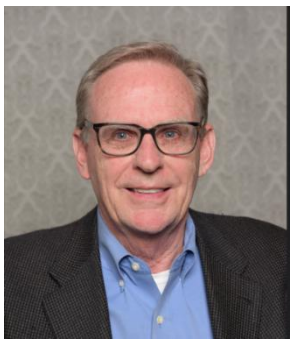
- Foundations of petroleum project economics: time value of money, IRR, NPV, payback, and the Rule of 72 – *What management may look at for assessing IOR projects?*
- Land, fiscal regime, and regulatory considerations (e.g., unitization, royalty/tax, PSC frameworks)
- IOR project cost structure, cost models, and risk profiles vs. conventional drilling projects
- Economic modeling considerations of waterfloods, CO_2, steam, polymer, and hybrid projects involving well workovers, infill well drilling and/or Horizontal well drilling.
- Case studies for carbonate and sandstone reservoirs, fractured systems, and analog-based field redevelopments

- Phased development strategies, project phase timing, and uncertainty management
- Integration of operational learnings and analog benchmarking to improve decision quality
- Reserves recognition and risk assessment
- Practical project modeling in Excel for project evaluation and for consideration of various IOR approaches to maximizing NPV and EURs.

Learners Will Be Able To:

- Apply sound economic principles to frame, screen, compare, and integrate IOR technologies
- Build or refine simple economic models suitable for phased development decision-making and comparing continued operations performance against various IOR options/pace
- Interpret and use analog field performance to validate and ground truth redevelopment plans and expectations
- Identify key technical and commercial levers that influence project risk/viability
- Recognize the land, permitting, and regulatory frameworks that influence project feasibility and execution timing
- Understand how different fiscal regimes (Royalty/Tax vs. PSC) may affect project economic indicators, risk, and phasing decisions
- Support project approvals and partner alignment with credible economic justification and project investment framing

Instructor
Ed Behm, P.E.
Petroleum Engineer & Asset Development Specialist



Ed Behm is a seasoned petroleum engineer with over 40 years of experience (38 years at Occidental Petroleum), where he specialized in Improved Oil Recovery (IOR) project development across global assets. His career includes hands-on leadership in steam flooding projects in California and Oman, CO_2 EOR projects in the Permian Basin, and waterflooding and horizontal drilling projects in Alaska, Colombia, California, Oman, the Permian, and elsewhere in the U.S.

At Occidental, Ed taught a widely respected internal course on petroleum economics, reserves, and risk management for subsurface and land teams/managers. Since retiring from Oxy in 2019, Ed directs a bespoke IOR-focused project development company and continues to contribute to the industry through his involvement with SPE, the University of Houston, and the University of Tulsa. Recent work includes CCUS initiatives in the Permian, horizontal drilling and cyclic gas injection projects in tight oil reservoirs, and advanced field optimization in Oman.