

**Society of Petroleum Engineers
Distinguished Lecturer 2011-2012 Lecture Season**

How to Make a Magic Change and Get the Most Out of Your Oil Rim Reservoirs?

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Abstract:

Oil production from oil rim reservoirs has always been a challenge due to their thinly spread oil resources and complicated production mechanisms. Movement of oil/water and gas/oil contacts could be very sensitive to conventional production operation and cause detrimental early water/gas breakthrough. The low oil production volume and hence low recovery (typically less than 18%) make the oil rim field development economically less attractive. However, integration of state-of-the-art engineering approaches, innovative technical initiatives and new technologies can make a significant change in the oil rim reservoir development.

This presentation disseminates the applied fundamentals, critical elements and proven practices to maximize the hydrocarbon recovery in a successful and integrated oil rim developments. The presentation covers the reliable volumetric assessment and development concept (i.e., sequential or concurrent), robust and proactive reservoir management policy to advise on depletion strategies and production to control the conning and cusping of water and gas, utilizing new technologies, appropriate production technology advice to assist timely development decision making, best simulation and modeling approach for modeling the applied technologies (e.g., smart wells/completion, ICD/ICV, tracer, etc.) and complicated mechanism and dynamics involved in oil rim development. The recommended approach will be elaborated throughout the presentation and finally the success and value creation of the recommended methodology will be demonstrated in various real case studies.

"WHAT IS ONE IDEA FOR TAKE AWAY?" There is no magic, just, Integration of Engineering and Technology can break the recovery limit and maximize the hydrocarbon recovery in the Oil Rim development with lower cost.

Biography:

Rahim Masoudi is currently a Specialist in Reservoir Engineering for Petroleum Resource Development in PETRONAS, and also he helps UTP University on part time basis. He holds BSc and MSc in Chemical Engineering both with first class honor and PhD in Petroleum Engineering from Heriot-Watt University in UK. He is a recognized expert and invited lecturer in the oil and gas industry on IOR/EOR, reservoir fluid/engineering/simulation/management, production/flow assurance and optimization and gas hydrate. He had held various research and development, technology management, field operation technical support positions throughout his 14 years career in the oil/gas industry and university. He holds three patents, published more than 50 international journal and conference papers, supervised more than 30 MSc and PhD students in Petroleum/Reservoir Engineering in various areas and carried out more than 30 reservoir studies.