

Kuala Lumpur Technical Seminar Series

RTA: Rate Transient Analysis and its application for Reservoir Characterization and Forecasting By Dr Abdolrahim Ataei, PETRONAS

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January 24th, 2018 (12 noon – 2.30 pm) PETRONAS Digital Collaboration Centre, Level 22, Tower 2, PETRONAS Twin Towers

Rate Transient Analysis (RTA) has been widely accepted as a valuable analytical tool for reservoir characterization and production forecasting because it is fast, practical, and inexpensive. It becomes even more important in case of complex systems such as finely laminated shale, or highly heterogeneous multi-stuck reservoirs where sometimes numerical simulation model miscarries in predicting the reservoir performance.

This talk will take you through the application of RTA in reservoir characterization and will demonstrate how, when and where it works, what is the limitation and potentials and how fast and efficient it is for reservoir forecasting or characterization. Several case studies will be shared to show the application of Production Analysis (PA) which integrates RTA with other tools like General Material Balance (GMB), Pressure Transient Analysis (PTA), deconvolution, nodal analysis, and Flowing Material Balance (FMB) for reservoir characterization and forecasting.

An integrated workflow is also introduced for PA which successfully applied in different cases of highly heterogeneous conventional gas reservoirs with huge complexities. The proposed workflow shows to be very powerful particularly when large volume of data from pressure downhole gauges (PDG) is available. It saves significant time for the study team in determining the potential value of a project.

Who Should Attend

The talk is designed for engineers involving in various phases of reservoir studies, production surveillance, field development, operation and production technologies.



Dr. Abdolrahim Ataei, BSc, MSc, and PhD is Principal Reservoir Engineer in PETRONAS. He has more than 28 years of industrial and academic experiences in Upstream E&P with the past 11 years in PETRONAS. Beside reservoir engineering and reservoir studies, he was working in several positions in E&P business including offshore operation and production as well as well completion design and drilling.

In PETRONAS he was a member of MPM Technical Review Committee (TRC) which actively involve in formulation of several FDPs in Malaysia for the past 10 years.

He published more than 50 technical papers in various international journals and conferences on different area in reservoir dynamic and characterization. His areas of interest are reservoir simulation and dynamics, EOR, well testing and Production analysis.

OPEN TO MEMBERS AND NON-MEMBERS SPE members : F.O.C Non-members : MYR 30 <u>Please RSVP at this link</u>

Please direct questions to: nadhirah.hashim@petronas.com.my

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