

History Matching and Conditioning Reservoir Models to Dynamic Data

0.8 CEUs (Continuing Education Units) awarded for this 1-day course.

Instructors

Akhil Datta-Gupta, Texas A&M University

Intended Audience

The course is designed for practicing geoscientists and engineers. No formal training is required other than knowledge of basic mathematics.

Description

This course is designed to cover techniques to incorporate production data into high-resolution reservoir models using conventional and fast flow simulation techniques such as streamline models. Both assisted history matching and automatic history matching techniques will be covered and pros and cons of the methods will be discussed. The production data can be in the form of pressure transient test, tracer test, multiphase production history or interpreted 4-D seismic information. Field examples will be presented to illustrate the current state of the art and limitations.

Topics Covered

- ◆ Dynamic Data Integration
- ◆ Flow Simulation Through Geologic Models
- ◆ Streamline-Based Dynamic Data Integration
- ◆ Dynamic Data Integration Using Conventional Simulators
- ◆ Dynamic Data Integration: Recent Development

About the Instructor

Akhil Datta-Gupta is the Rob L. Adams Endowed Professor in Petroleum Engineering at Texas A&M U. in College Station, Texas. He holds a Ph.D. degree from the University of Texas at Austin and worked for BP Exploration/Research and the Lawrence Berkeley National Laboratory. He is the recipient of the 2003 SPE Lester C. Uren award for significant technical contributions in petroleum reservoir characterization and streamline-based flow simulation. He is an SPE Distinguished Member (2001), Distinguished Lecturer (1999-2000), Distinguished Author (2000), and was selected as an outstanding Technical Editor (1996). He also received the SPE Cedrick K. Ferguson Certificate (2000) and the AIME Rossitter W. Raymond Award (1992).