



## COURSE-1 G&G

## Sub-surface Modelling Of Complex Fold Belts & Model Validation Through Advanced Structural Restoration Techniques

Presenter

Dr. Gohar Rehman 5 Hours

Who Should Attend The Training

Exploration Geologists and Geophysicists, Development Geologists and Geophysicists, Reservoir Engineers

## **BROADER TRAINING CONTENTS**

- 1. Geological Map analysis to extrapolate the clues into the subsurface.
- 2. Integration of regional tectonic and geological understanding with the sub-surface model.
- 3. Generation of a stratigraphic package/layer cake in the software.
- 4. Selecting different structural algorithms for structural modelling based on layer cake.
- 5. Geological Map-controlled near surface 2D structural modelling.
- 6. Deeper interpretation and 2D structural modelling based on regional understanding.
- 7. Determining the probable locations of back thrusts and out of sequence faults within the model.
- 8. Validation of interpreted faults by forward and backward modelling.
- 9. Determination of regional tectonic decollement for restoration of thrust sheets and layer package.
- 10. Complete restoration of faults and folds.
- 11. Calculation of percentage shortening.
- 12. Sequential modelling for understanding different stages of deformation.

## PRESENTER INFORMATION

Dr. Gohar Rehman is a researcher and a consultant Structural Geologist offering his services to the E&P Sector for the last 15 Years. He has an extensive fieldwork experience in almost all the fold and thrust belts and basins of Pakistan. He conducted a Doctoral Research on the Tectono-Stratigraphic evolution of the northwestern margin of the Indian Plate covering the Kurram and North Waziristan districts. Most of his offered consultancy services to the industry involve the frontier basins and ranges, with least data and exploration history including the Peshawar East Block, Peshawar Block, Tirah Orakzai Blocks, Bannu West Block, Wali West Block, Baska Block, DG Khan Block, Harnai South Block, Kalat Block, and currently working on the uleiman Block. His major skills are Geological Mapping, Sub-Surface Structural Modelling, Backward and Forward modelling, Sequential modelling, 3D subsurface modelling, 3D model restoration, and Seismic Interpretation. His extensive experience of working in complex tectonic regimes and generating balanced subsurface models has evolved him as a trustable consultant for the Oil and Gas Sector.







## COURSE-2 P.E

# Hydraulic fracturing design - An overview (Fracturing concept, candidate selection and Design, Execution, Evaluation Cycle)

Presenter

Haris Ahmed Siddigui

Duration

5 Hours

#### **HYDRAULIC FRACTURING DESIGN - AN OVERVIEW**

This course will cover Hydraulic Fracturing concepts and design including but not limited to the followings:

- Introduction to Hydraulic Fracturing (Concept and Treatment Objective)
- Design Execution and Evaluation Cycle Concept
- Candidate selection process
- · Fracturing fluid and proppants
- · DataFRAC analysis and its usefulness in Design update
- · Hands on session for Fracture designing

Upon Completion of course participants will

- Acquire knowledge to identify Stimulation candidates
- Understand basic analysis of Fracturing Design
- Understand the aspects involved in the design of a Frac Treatment

#### PRESENTER INFORMATION

Haris Siddiqui is a Senior Stimulation & Fracturing Expert working for SLB (Schlumberger) in MENA region. He has vast experience in integrated fracturing projects in Middle east region with international clients including ADNOC onshore and offshore, DPE (Dubai petroleum establishment), Medco Energi, OXY, Shell, Oman Oil and locally within Pakistan with all major clients including OGDCL, PPL, UEPL, OMV, Prime Pakistan, ENI, PGNiG, MPCL, PEL, KUFPEC and MOL having expertise in Hydraulic Fracturing and stimulation. Haris has more than 10 years of vast experience as SME for Stimulation & Hydraulic Fracturing (Tight gas. Shales and Unconventional plays, High pressure High temperature. Conventional and Matrix Stimulation). He has interests and expertise in enhancement of well productivity, implications of geomechanics and hydraulic fracturing operations, efficiency of enhanced recovery methods, and environmental impacts of well stimulation techniques.

Haris holds MSc in petroleum engineering degree from Heriot Watt University and BE in Mechanical Engineering from NED university of Engineering & Technology.

