EOR POTENTIAL EVALUATION USING SelectTEOR™

COURSE OUTLINE

1. PRIMARY RECOVERY
   - Mechanism of oil recovery - solution gas drive, natural water drive and gas cap
   - Estimation of current oil saturation
   - Solution and producing GOR. Producing GOR equation
   - Predicting solution gas drive. Discussion
   - Performance of gas drive regime in different conditions. Heavy oil reservoirs, fractured reservoirs, etc

2. FUNDAMENTALS OF EOR
   - Mechanisms of EOR methods; mobility ratio importance
   - Waterflooding; Buckley-Leverett method
   - Effect of heterogeneity
   - Effect of gravity segregation

3. EOR SCREENING CRITERIA
   - Goal of the screening criteria
   - Limitations
   - Discussion regarding different sets of screening criteria
   - Software for screening reservoirs for EOR application

4. LABORATORY TESTING OF EOR METHODS
   - Polymer injection: resistance factor, residual resistance factor, screen factor, etc
   - Gas miscible displacement: MMP, MMC, corefloodings, etc.
   - Steam injection: oil viscosity reduction with temperature, residual oil saturation for steam flooding
   - In-situ combustion: fuel deposition, air requirement, oxydability of oil, etc.

5. SelectEOR SOFTWARE FOR EOR PERFORMANCE PREDICTIONS
   - Detailed presentation of SelectEOR
   - The main points of technical documentation (prediction methods): polymer, gas miscible and immiscible, steam injection and in-situ combustion
   - Demonstration for selected reservoirs

6. Hands-on with students
   - Application for 2-3 reservoirs - light and heavy oil cases