



## Dehydration and Refrigeration Technical Course Program

### Day 1 (Full Day)

#### Session I – Fundamentals & Analysis

- Introduction
- Hydrate Formation & Control Methodologies
- Process Principles – TEG, DEG Dehydration, MEG Refrigeration and Solid Desiccants
- Process Layout – Equipment Review
  - Part 1 – Glycol Systems,
  - Part 2 – Silica Gel & Molecular Sieves

#### Session II – Fundamentals and Analysis

- Typical Operating Conditions
- Controls and Instrumentation
- Glycol Analysis – Parameter Definitions & Sampling Frequency
- Sour Gas Dehydration Fundamentals

### Day 2 (Full Day)

#### Session III – Troubleshooting & Corrosion

- Meeting Specification – Hydrocarbon and Water Dewpoints
- Foam and Emulsion Control
- Filtration Selection and Application
- Contaminants and Upstream Process Carryovers

#### Session IV – Troubleshooting & Corrosion

- Degradation Products - Organic Acids
- Acceptable Limits and Thresholds
- Case Studies

### Day 3 (Half Day)

#### Session V – Process Optimization

- Reduction of Glycol Losses
- Enhancing Desiccant Longevity
- Energy Conservation and Emission Control
- Problem Solving and Circulation Rate Simulation
- The *Seven Deadly Sins* of Dehydration
- Summary