



# GLOBAL EXPERTS INSTITUTE FOR TRAINING. ISO 9001-2008 TRAINING PROVISION CERTIFIED

# **Amine Treating And Sulfur Recovery Technology**

# **Schedule Dates:**

Start Date	End Date	Place
22 / 01 / 2024	26 / 01 / 2024	Rome, Italy – Quirinale Hotel





## **Program Objective:**

- Demonstrate an understanding of Amine sweetening and Sulphur Recovery technologies
- ✓ Grasp an explanation of the key features of gas treating.
- ✓ Discuss the thermodynamics of gas processing
- ✓ Identify the main process steps
- Evaluate, monitor, and troubleshoot gas treating operations

## **Program Outlines**

### Day One

#### **Introduction to Natural Gas**

- Statistical review of petroleum consumption and supply
- LNG / NGL production and processing
- Commercial and Unconventional Gases
- Associated / Non-associated Gas
- Types of Contaminants and Gas specifications
- Environmental and Safety Considerations

#### **Day Two**

#### **Gas Sweetening**

- Gas contaminants and commercial processing alternatives
- Chemistry of Amine Gas Sweetening
- Physical Solvents and
- Membrane Processes
- Guide to selection of gas Sweetening Processes
- Mechanical Filters





## Day Three

#### **System Design & Troubleshooting**

- Process Flow and process description
- Design Criteria Guidelines for Amine Systems:
- General Considerations for Amine Processes
- Materials selection and construction
- General Operating Problems and troubleshooting
  - Solution degradation & amine losses
  - Foaming
  - Heat Stable salts
  - Corrosion
- Data collection key to successful troubleshooting

## **Day Four**

#### **Sulphur Recovery I**

- "Claus" Sulphur recovery chemistry and thermodynamics A question of equilibrium
- Claus Process Considerations and Modifications
- The EUROCLAUS Concept
- Process Considerations & Instrumentation
- Mechanical Considerations
- Claus Process Calculations and Exercises

#### Day Five

#### **Sulphur Recovery II**

- Tail Gas Handling
- SCOT and Incineration
- Sulfur Product Specifications, Storage and Handling
- Safety and Environmental Considerations
- Troubleshooting: what can go wrong

#### **Training Methodology:**

- Slide presentations
- Interactive discussion
- Simulations and Gamification
- Online Video material





# **Cost Quotation in Kuwaiti Dinars**

#### The total cost includes:

- Instructor(s) expenses
- Training materials
- Certification

# **Total Cost: 1500 KD per Participant**

(One Thousand Five Hundred Kuwaiti Dinar)