

Water Treatment Technology

Course Outline:

Day 1:

- Oilfield Water Chemistry
- The Nature, Chemistry and Composition of Hydrocarbons
- Water Chemistry Fundamentals
- Environmental Regulations and Water Specifications
- Environmental Impacts Caused by Produced Water
- Water Sampling and Analysis
- Test Methods for Oil and Grease in water
- Zero Liquid Discharge (ZLD)

Day 2:

- Oilfield Production Liquid Separation Principles
- Produced Water Generation and Production and Management Practices
- Wastewater recycle / reuse
- Water Scaling, Corrosion Control and Microbiology of Water
- Emulsions / Stabilization, Destabilization
- Simulation Software to predict water quality for injection
- Case Study Scaling Software demonstration

Day 3:

- Crude Oil Desalting
- Principles of flotation
- Dissolved/ Induced/ dispersed Air/ Gas Flotation
- Key Design Parameters of Flotation

EXPERT

EXPERT & PROFESSIONAL EXCELLENCE FOR TRAINING & CONSULTATIONS

- **Air-To-Solids Ratio**
- **Henry's & Stokes Laws**
- **Nucleus & Rate of Rise Theory**

Day 4:

- **Separation and Treatment (I)**
- **Mechanical filters & Filtration Technologies**
- **Gravity Separation Systems**
- **Skim Tanks & Piles**
- **API Separators**
- **Plate Coalescers**
- **Evaporative processes**

Day 5:

- **Separation and Treatment (II)**
- **Desalting Technologies**
- **Electro deionization**
- **Ion exchange**
- **Membrane processes**
- **Desalination**

Location	Conrad Hotel
Start Date	15 Sep 2024
End Date	19 Sep 2024
Fees Before Discount	3500 \$
Special Discount	20% (To Nominate Four Participants)
Fees After Discount	2800 \$