





# **Course: Production Chemistry - OGPC**

Code C	ity h	otel Start	End	price	Hours
345 Madrid	(Spain) Hotel Me	eeting Room 2024-0	2-05 2024-0	<b>2-09 5450 €</b>	25

## Objectives

This course covers the selection and use of chemicals used in oil and gas production. As oilfields mature more water is produced which requires the use of more chemicals to maintain production. Chemicals used for controlling corrosion, emulsions, foaming, mineral scales, paraffins (waxes), asphaltenes, gas hydrates, hydrogen sulfide scavengers, and water clarifiers are covered. The course includes methods to determine the need for chemical treating, how to select the proper chemicals, and how testing for chemical compatibility with the formation and other chemicals is performed. Requirements for environmentally friendly products and products for deep water production are discussed. The course will include how the use of chemicals can prevent problems, improve production and economics, and extend the life of the production equipment. Due to its modular construction, this course can be offered on an in-house basis with expansion of some of the major sections and deletion of others to suit the needs of individual client groups. Should you desire this approach, please contact us.

## What you will learn

#### How To:

- Recognize corrosive conditions and monitor corrosion rates
- Select and apply corrosion inhibitors
- Predict and treat emulsions
- Understand causes and control of foaming
- Predict scale forming conditions
- Select and apply scale inhibitors
- Control gas hydrate formation
- Predict and control paraffin (wax) deposition
- Evaluate methods for asphaltene control
- Scavenge low concentrations of H2S
- Select and apply water clarifiers
- Select chemicals for use in deep water
- Select environmentally friendly chemicals

#### Outlines

• Corrosive agents



- Corrosion inhibitor selection and application
- Predicting and monitoring corrosion rates
- Basics of oilfield emulsions
- Demulsifier selection and field application
- Foams
- Defoamers
- Foam basics
- Field application of foams
- How defoamers work
- Compounds that cause scaling
- Prediction of scaling tendency
- Scale inhibitors
- Solvents to dissolve scales
- Requirements for gas hydrates to form
- Types of compounds used to control hydrate formation
- Causes of paraffin (wax) problems
- Paraffin treatment chemicals
- Asphaltene stability tests
- Asphaltene treatment chemicals
- Chemicals used as H2S scavengers
- Application of H2S scavengers
- Oil carryover in water
- Removal of oil and oily solids
- Tests required for chemicals used in deep water
- Green chemicals (environmentally friendly chemicals)



The Scandinavian Academy employs modern methods in training and skills development, enhancing the efficiency of human resource development. We follow these practices:

- Theoretical Lectures:
  - We deliver knowledge through advanced presentations such as PowerPoint and visual materials, including videos and short films.
- Scientific Assessment:
  - $\circ\,$  We evaluate trainees skills before and after the course to ensure their progress.
- Brainstorming and Interaction:
  - We encourage active participation through brainstorming sessions and applying concepts through role play.
- Practical Cases:
  - $\circ\,$  We provide practical cases that align with the scientific content and the participants specific needs.
- Examinations:
  - $\circ\,$  Tests are conducted at the end of the program to assess knowledge retention.
- Educational Materials:
  - $\circ\,$  We provide both printed and digital scientific and practical materials to participants.
- Attendance and Final Result Reports:
  - $\circ\,$  We prepare detailed attendance reports for participants and offer a comprehensive program evaluation.
- Professionals and Experts:
  - $\circ\,$  The programs scientific content is prepared by the best professors and trainers in various fields.
- Professional Completion Certificate:
  - $\circ\,$  Participants receive a professional completion certificate issued by the Scandinavian Academy for
    - Training and Development in the Kingdom of Sweden, with the option for international authentication.
- Program Timings:
  - Training programs are held from 10:00 AM to 2:00 PM and include buffet sessions for light meals during lectures.