

The Complete Flow Assurance Overview

for Oil & Gas Field Development, Design and Operations



Proven track-record in the provision of Flow Assurance Consultancy, Training & Operations Support

PetroFlow present part of our Flow Assurance Training Package suited for personnel involved in field development, design and oil & gas asset operations. The course presents a comprehensive overview of flow assurance considerations that must be made to ensure asset delivery through robust design and sound operating philosophy

Flow Assurance Course PFA-001a Outline

Design Considerations

Hydraulic Assessment

- ❖ Principles of Multiphase flow in pipes
- ❖ Pressure drop calculation/Line sizing
- ❖ Integrated System Hydraulics – Well, flowline & risers

Thermal Assessment

- ❖ Principles of Heat transfer
- ❖ Thermal performance specification
- ❖ Insulation types /application & Thermal Modelling

Operational Issues

Slugging & Transient Operations

- ❖ Types of slugging, slug prediction & mitigation
 - ❖ Production Shutdown/Cooldown
 - ❖ Pipeline Depressurisation
 - ❖ Production Start-up/Restart
 - ❖ Pigging operations

Fluids & Production Chemistry

Fluids Handling

- ❖ Lab measurements
- ❖ Fluid Characterisation & property prediction

Solids Handling

- ❖ Hydrate prediction and management
 - ❖ Wax prediction and management
- ❖ Produced water analysis & Scale Management
 - ❖ Sand erosion calculations

Design & Operations Interfaces

Integrated into Design & Operations

- ❖ Input to Mechanical Design & Materials Selection
 - ❖ Input to Process Facilities Design
- ❖ Input to Subsea Equipment Design and Specifications
 - ❖ Input to Operations Support
- ❖ Input to Production Enhancement/Optimisation

Course case studies and exercises include gas condensate systems, deepwater developments, subsea tie-backs, pipeline network systems, water and chemical injection systems and more

Who Should Attend:

- Subsea Project Managers
- Development Engineers
- Process/Facilities Engineers of subsea fields
- Field Development Personnel
- Introduction/overview for Flow assurance engineers

Mixture of lectures, exercises, case studies and software demonstrations to help the candidates understand flow assurance challenges and considerations that must be made at the concept and design stage of a development and how to generate philosophies to ensure an operable asset.

Our Instructors have world-class experience built on excellent academic backgrounds in the principles of flow assurance

Lead Instructors:

Dr Bishop Falope, M.Sc., Ph.D. (London, UK);
Dr Isaac Ogazi, M.Sc., Ph.D. (Cranfield, UK)

Supporting Instructors:

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