

Petrogenium. Academy

Upstream (Reservoir Engineering)

Reservoir Engineering and Geoscientist: Introduction to Core Analysis

Consultant / Trainer

Dr. Chris Pentland



The **Petrogenium** (in collaboration with EPTS) **Reservoir Engineering and Geoscientist: Introduction to Core Analysis** course is aimed at Participants gaining both a broad conceptual understanding and practical awareness of the entire core analysis process—from obtaining rock samples at the wellsite to interpreting laboratory data for reservoir modeling.



Participants

This **Petrogenium** course is designed for engineers and geoscientists without prior experience in coring and core analysis. .



Learning Objectives

The learning objectives of this core analysis course are designed to equip engineers and geoscientists—especially those new to coring—with a comprehensive understanding of the entire core analysis process. The course aims to provide participants with the skills to justify and maximize the value of core data, improve communication with technical specialists, and make informed decisions in reservoir characterization and modeling

2 Days training

Topic 1

Wellsite operations coring and core handling

1. An overview of rig-site coring, core handling, core stabilisation and core transportation best practices.
2. Client Implications: Attendees will gain an overview of wellsite practices and important steps to ensure value of information from core is not eroded.

Topic 2

Routine core analysis plugging, cleaning, drying, basic measurements

1. An overview of the workflow once the core arrives in the laboratory, covering plugging, cleaning, drying, and basic measurements.
2. Client Implications: Attendees learn how to tailor the core analysis programme to different rock types to ensure maximum value is attained.

Topic 3

Wettability & Capillarity fundamental principles and oilfield impact, capillary pressure

1. Fundamentals of rock-fluid wettability and capillarity. The impact on reservoir fluid distribution and flow behaviour is discussed alongside laboratory measurement methods and model implementation.
2. Client Implications: Attendees able to link first-principle concepts to reservoir behaviour, data acquisition aims, and model build decisions.

Why select Petrogenium.?

The above support will be provided by principal consultants with 30+ years world-class experience in the technology and hands-on know-how from operation of refinery units.

Contact Petrogenium.:

Email: training@petrogenium.com

Website: <https://www.petrogenium.com/training/>

Because Experience Matters

Topic 4

Electrical properties cementation exponent, resistivity index fundamentals

1. Introduction to electrical core analysis laboratory measurements including best practice and common pitfalls.
2. Client Implications: Attendees gain an awareness of foundational concepts and laboratory measurement approaches.

Topic 5

Relative Permeability fundamental principles and measurement methods

1. Introduction to the first-principle concepts influencing fluid flow in porous media and how relative permeability is measured.
2. Client Implications: Armed with an understanding of the foundation concepts attendees are able to interrogate existing models and workflows and engage in further discussion with colleagues.

Topic 6

Core Analysis Workflow An end to end overview of a typical core analysis study

1. An overview of the end to end core analysis workflow and the roles and responsibilities of a project owner and key stakeholders.
2. Client Implications: Attendees are armed with information to help them manage a core analysis study at a vendor laboratory.

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