

# Petrogenium. Academy

Upstream (Geophysics)

## Geophysical Data Acquisition and Processing (Basic Geophysics)

Consultant / Trainer

**Gerhard Diephuis/Jaap Mondt**



The **Petrogenium** (in collaboration with EPTS) **Geophysical Data Acquisition and Processing (Basic Geophysics)** course will provide participants with a foundation in how geophysical technology is used to image the subsurface for applications such as hydrocarbon, mineral, and groundwater exploration, as well as environmental monitoring and site clean-up. They learn the fundamentals of major methods including seismic refraction and reflection, gravity, magnetic, electrical, and electromagnetic techniques, and how these are applied in practice. In addition, they develop practical skills in modern data acquisition and processing by working through mainly Excel-based exercises that apply the theory rather than focusing only on textbook material.



### Participants

This **Petrogenium**. course aims at Geologists, Geophysicists and Petroleum engineers, involved in exploration and development of oil and gas fields and for those involved in projects related to the shallow subsurface. In addition, it would be useful for those dealing with the (geo)physical effects of production of a field.



### Learning Objectives

At the end of the course, participants will have a good understanding of the fundamental concepts in geophysical exploration. With that foundation they will be able to better grasp the potential of seismic data in terms of interpretation value and liaise and collaborate with experts in the fields of seismic acquisition, processing and interpretation.

# Programme

## 5 Days Training

1. Potential field methods, gravity and magnetics
2. Basics of surveying
3. Fundamentals of signal theory and wave propagation
4. Seismic acquisition, land and marine. Essentials of processing
5. Principles of structural and stratigraphic interpretation
6. 3D seismic
7. Time-to-depth conversion
8. Well Geophysics and synthetics
9. Principles of quantitative analysis of seismic data
10. Direct Hydrocarbon Indicators
11. Artefacts
12. New developments

### 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](mailto:training@petrogenium.com)

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

***Because Experience Matters***