

Consultant / Trainer

Jaap Mondt



The **Petrogenium** (in collaboration with EPTS) **Basic Geophysical Data Acquisition and Processing** participants of this geophysics course will gain a solid understanding of how geophysical technologies are used to investigate the Earth's subsurface for hydrocarbons, minerals, groundwater, and environmental monitoring. The course covers the fundamentals of seismic refraction and reflection, as well as gravity, magnetic, electrical, and electromagnetic methods. Learners will also develop practical skills in modern geophysical data acquisition and processing, applying theoretical concepts through hands-on, Excel-based assignments that bridge theory with real-world practice.



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 what information geophysical data can give and for what purposes it can be used. This will enable them to specify the requirements for a survey, either done by themselves or by a special service provider.

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Learning Objectives

Course content

Various geophysical methods from gravity, magnetics, electrical, electro-magnetic, refraction and reflection seismic.

Topics are:

- Gravity surveying
- Magnetics surveying
- Electrical surveying
- Electro-Magnetic surveying, including Ground Penetrating Radar
- Acquisition of shallow refraction seismic data
- Acquisition of reflection seismic data
- When to use 2D, 3D and 4D seismic
- Principles of wave propagation
- Basic designs of 2D and 3D seismic acquisition
- Processing of seismic and GPR data: Objectives
- How to improve signal-to-noise ratio, vertical and lateral resolution
- From simple migration to Imaging
- Result in depth (Time-to-Depth conversion)
- What to spend on a new survey (Value of Information)

5 Day Training

1. Gravity surveying
2. Magnetism surveying
3. Electrical surveying
4. Electro-Magnetic surveying, including Ground Penetrating Radar
5. Acquisition of shallow refraction seismic data
6. Acquisition of reflection seismic data
7. When to use 2D, 3D and 4D seismic
8. Principles of wave propagation
9. Basic designs of 2D and 3D seismic acquisition
10. Processing of seismic and GPR data: Objectives
11. How to improve signal-to-noise ratio, vertical and lateral resolution
12. From simple migration to Imaging
13. Result in depth (Time-to-Depth conversion)
14. What to spend on a new survey (Value of Information)

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