

Non-Seismic Methods – from Near Surface to Oil & Gas purposes

About the course:

Non-seismic Geophysical methods discussed in that course and made to assess physical properties of the subsurface are:

- Electromagnetism (MT, Airborne, Transcient (Galvanic and Inductive), mCSEM, GPR),
- Gravimetry (and Gravity gradiometry),
- Magnetism (and Magnetism gradiometry).

Away from the scope of that course, several Electric and EM methods as quoted below shall not be discussed:

- DC Resistivity and Electric Resistivity Tomography,
- VLF (Very Low Freq, sensitive to conductivity variation down to 100 meters deep, utilizes signal from 15 to 30kHz normally used for naval transmitters for submarine communications, several transmitters broadcast over the world),
- Spontaneous Polarization,
- Radiometrics or Gamma-ray spectrometry (for mineral and uranium exploration, nuclear power plant monitoring, radon risks assessment, ...),
- ...

Duration: 2 days.

Level: Basic to intermediate

Prerequisites:

It is highly recommended to have a basic knowledge of fundamentals and/or operational Geophysics and/or Geology.

Course objectives:

After attending that course, participants shall understand abilities and limitations of non-seismic geophysical methods adapted to Near Surface and Oil & Gas purposes.

Typical Attendees:

Subsurface E&P professionals with experience in Geophysics and Geology.

Agenda:

Day 1 – Morning: Fundamentals/Theory of Electromagnetics,

Day 1 – Afternoon: MT and airborne methods,

Day 2 – Morning: Transcient (Galvanic and Inductive), GPR, mCSEM,

Day 2 – Afternoon: mCSEM, Gravimetry and Magnetism.

Instructor:

Ludovic Peignard has been a geophysicist for the Oil and Gas Industry since 2006, in charge of many geographic areas, working for GDFSUEZ and Total groups. He founded and coded, EarthQuick, a software solution to cope with needs of swift geodata integration and interpretation. He is a freelance instructor and a vacant teacher for IFP School and EOST in Geophysics.

Price:

4,000 EUR Tax Excluded, 8 attendees maximum, for the whole duration, traveling and accommodation expenses.

