

The Sea Bed Logging - Marine Controlled Source Electromagnetism (mCSEM)

About the course:

Since its rise in the noughties, the ability of the mCSEM to evaluate the spatial distribution of the resistivity made it a widely used technique of the E&P sector. Indeed, resistivity is a physical quantity which is significantly influenced by HC bearing reservoir.

That course gets back to Electromagnetism basics, other techniques (MT, Transient EM, ...) and highlights mCSEM abilities and limitations through some examples and a case study.

Duration: 2 days.

Level: Intermediate

Prerequisites:

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

Course objectives:

After attending that course, participants shall understand abilities and limitations of mCSEM and could be in charge of acquisition/processing QC and feasibility surveys.

Typical Attendees:

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

Agenda:

Day 1 – Morning: Introduction and Electromagnetism Theory (Lecture),

Day 1 – Afternoon: Electromagnetism Theory and Applications to Geosciences (Lecture),

Day 2 – Morning: Focus on feasibility (Practice session), Operations (Lecture), case study (Practice session),

Day 2 – Afternoon: Case study (Practice session) and Course wrap-up.

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.

Data:

Course shall rely on data from Oil and Gas Industry or Near Surface as per clients' request.

1,500 EUR Tax Excluded extra cost shall be applied if clients request to run examples on their own data base.

Price:

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

Other Information:

Lecture could be made in English or French at the sole discretion of clients. Course media (slides and booklet) shall be written in English only. The booklet only shall be provided as a hard copy.

EarthQuick licenses are provided without extra costs, for the course duration only.

Attendees shall practice with EarthQuick Software for exercises, running EarthQuick on their own PC, compliant with following minimum requisites:

- OS: Windows 7, 8, 8.1 or 10,
- Free Space HD: 1 TB,
- Amount of RAM: 8 GB RAM,
- CPU speed: 2.4 GHz,
- CPU Core count: 2,
- Video Resolution: 1280x720.

