

Short Term Scientific Missions (STSM)

Host institution: OGS (The Italian Institute of Oceanography and Applied Geophysics)

OGS is a public internationally oriented research Institute funded by the Italian Ministry of University and Research - MIUR, which performs research studies turned to the knowledge about Earth and its resources in the fields of basic and applied research in Oceanography, Geophysics and Marine Geology, Applied Geophysics, exploration and Seismology. The research activities are carried out by four sections (Geophysics, Oceanography, Seismology and Infrastructures) and are organized within the framework of local, national, European and international private/public-sector programs or projects. OGS also contributes to the development and circulation of knowledge, to promote the societal engagement in science, research and innovation, by enabling easier access to scientific results, promoting outreach activities and following the strategic goals set forth by the European Commission, with particular reference to Horizon 2020. Valorisation of human capital, career development, gender balance and equal opportunities, international and intersectoral mobility represent the main crosscutting priorities of OGS. Complying with these priorities, the Institution has recently and formally committed itself in applying the European Charter for Researchers principles. At this aim OGS is implementing a concrete "Action Plan" in the framework of the Human Resources Strategy for Researchers ("HR Strategy for Researchers"). Such a strategy is specifically promoted by the EC to support research institutions and funding organisations in the implementation of "The European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers". This effort has been recognised by the EC, which awarded OGS the 'HR Excellence in Research' acknowledgement, as the first National Research Institution to obtain this recognition. Henceforth, capacity building and training play a key role in OGS's overall mission to enhance international cooperation.

In an effort to build an international learning community, we have implemented a number of initiatives aimed at developing knowledge and facilitating cross-border cooperation and capacity building. The OGS philosophy is to focus on international cooperation in all of its manifestations, particularly cooperation among institutions and among individual participants. The ultimate goal is to enhance knowledge and encourage innovation, in order to turn training into operational practice.

Host/contact person:

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Description of the proposed STSM activity:

We propose to illustrate methods to analyze seismic data with the main purpose to detect direct and indirect evidences of gas hydrate and free gas presences. Several software commercial and open source are proposed, such as ECHOS and Seismic Unix. The methods will be decided depending on the quality of the data. For example, we can perform pre- and post stack processing of seismic data, migrations, detailed velocity analyzing and/or improve the imaging of the final seismic sections. Moreover, we are available to teach the use of the software in order to former young researchers regarding the seismic processing.

Estimated duration:

From 2 weeks to few months, depending on background of applicant and characteristics of seismic data.

Proposed contribution of the STSM to the scientific objectives of the COST Action "Migrate":

The proposed STSM will contribute mainly to the WG1 "Resource assessment". In fact, seismic data can be re-processed with new approaches in order to better identify evidences of gas hydrate and free gas presences that can be ignored in the past.