### PERSONAL INFORMATION

# Giuditta Marinaro

giuditta.marinaro@ingv.it

### JOB POSITION

## technologist at INGV:

Member of Engineering and Logistics Service Group the European Research Infrastructure EMSO-ERIC (European Multidisciplinary Seafloor and water-column Observatory).

Design, programming, implementation and coordination of the program of technological research activities relating to geophysical and environmental monitoring at sea bottom carried out by means of multiparametric submarine observatories;

Design, planning, implementation and coordination of long-term geophysical and environmental monitoring experiments at sea bottom;

Coordination and participation in the installation cruises for submarine observatories and marine instrumentation;

Supervisor for the logistics of oceanographic cruises;

Supervisor for the management of scientific instruments installed in submarine observatories; Control and analysis of data quality of measurements collected during submarine multiparametric experiments;

Multiparametric processing and analysis of data acquired by submarine observatories with particular interest in the interactions between seepage gas and seismic and oceanographic signals (for example the experiments in Greece with the GMM observatory and in Turkey with the SN4 observatory) highlighting the need for a multidisciplinary analysis for a better understanding of the gas emission phenomena in a submarine environment.

Scientific and technological management of Italian and European projects;

Technological and scientific interface with the industrial world with which EMSO collaborates, coordinating from a technical and scientific point of view the works entrusted to the industries from the design phase of the work to the final one of testing and installation.

# TITLE OF QUALIFICATION AWARDED

Degree in Physics, PhD in Polar Sciences

### WORK EXPERIENCE

### December 2017 onwards

## Technologist, level III - permanent staff

at Istituto Nazionale di Geofisica e Vulcanologia via di Vigna Murata 605 - ROMA

Coordination and responsibility assignments at the INGV

The participation in the research projects listed below includes the project's proposal phase, the executive project phase, the planning and implementation of the activities envisaged by the project, the technical-scientific reporting and the writing of reports and deliverables . For each project the technical-scientific and management activity is described.

• From 1/9/2015: EMSODEV - EMSO implementation and operation: DEVelopment of instrument module - The objective of the project is to catalyze the actions of EMSO research infrastructure in the design, development, testing and use of a multidisciplinary observatory called EMIM (EMSO Generic Instrument Module) for long-term monitoring of oceanographic parameters in the various nodes of the infrastructure in order to standardize the data acquired by EMSO partners. For the project I'm leader of Task 5.3 (Replicated)



EGIMs validation) which aims to validate the EGIM prototype replicas in tests in shallow water. After the tests in shallow water the modules can be used in deep waters and integrated into the EMSO infrastructure.

- from 1/3/2015 to 31/8/2017: INDIGO-DataCloud Integrated Distributed Data Infrastructures for Global ExplOitation The goal of the project is the development of a new cloud software platform for the scientific community. For the project I was leader of the Task 2.2 (Defining support to Research Data) which aims to verify that data coming from research infrastructures are properly supported by INDIGO and to give the appropriate specifications to data entry and processing system. (Defining support to Research Data) Ref: GRANT AGREEMENT NUMBER 653549 -INDIGO-DataCloud, Part B, P. 86-87.
- from 1/9/2013 to 31/03/2016: EMSO-MedIT Enhancement of multidisciplinary marine research infrastructures in Sicily, Campania and Puglia as a contribution to ESFRI EMSO The project represents the Italian contribution to the ESFRI EMSO infrastructure. In EMSO-MedIT I was the leader of Tasks 4.2 and 4.3 (Enhancement in Eastern Sicily (Catania and Portopalo)) and of Task 5.2 and 5.3 (Enhancement in South-Western Sicily (Capo Granitola)) Ref: INGV Decree 233/2013.
- from 1/9/2013 to 31/8/2017: FixO3 Fixed point open ocean observatories EC project: I was the leader of task 2.3 (Technological Harmonization) whose purpose is the evaluation of new sensors and their application in marine long term experiments and I'm INGV responsible for the activities of Transnational Access to FixO3 infrastructures Service activities: Access to data products and knowledge related to the ENSO-Nemo-SN1 node. Ref: GRANT AGREEMENT NUMBER 312463 Fixed point open ocean observatories, Workplan Tables page 14 and part B page 62
- from 1/11/2012 to 31/10/2015: MARSITE New Directions in the Seismic Hazard assessment through Focused Earth Observation in Marmara Supersite EC project: I was the leader of the 8.1 task (Collect multi-parameter time-series through three repeated sea-based cruises, using existing autonomous seafloor observatories) and responsible for the experiment in the Marmara Sea where the SN4 observatory was used. Ref: GRANT AGREEMENT NUMBER 308417 MARSITE New Directions in Seismic Hazard assessment through Focused Earth Observation in Marmara Supersite, Workplan Tables page 42 and part B page 30
- from 1/9/2011 to 31/8/2014: SCIDIP-ES SCIence Data Infrastructure for Preservation Earth Science EC project: The aim of the project was the creation of e-Science services for the conservation and care of scientific data. I was leader of task 14.3 ("Training and dissemination"). Ref: GRANT AGREEMENT NUMBER 283401 SCIDIP-ES SCIence Data Infrastructure for Preservation Earth Science, Workplan Tables page 14
- from 1/4/2009 to 31/3/2012: HYPOX In situ monitoring of oxygen depletion in hypoxic ecosystems of coastal and open-seas, and land-locked water bodies EC project: leader of Work Package 1 ("Improving and Integrating Capacities in situ observation of oxygen depletion), member of the Implementation Committee, member of the Steering Committee and responsible for the INGV of experiments in Black Sea (oceanographic monitoring with the submarine module MEDUSA) and in Greece (GMM submarine observatory) for all technological and logistic activities, participating in the phases of conception, design, testing, installation, quality control of data and their analysis contributing to the publication of scientific articles Ref: GRANT AGREEMENT NUMBER 226213- HYPOX In situ monitoring of oxygen depletion in hypoxic ecosystems of coastal and open-seas, and land-locked water bodies, Annex I description of work, page 78.
- from 3/1/2003 to 28/2/2011: ESONET NoE (European Sea Floor Observatory Network) -



EC project: member of the Data Management Council; co-leader of Work Package 1 of the LIDO demo-mission project; technical and logistic manager for INGV demo-missions LIDO -LISTENING TO THE DEEP-OCEAN ENVIRONMENT and MARMARA.

- from 1/2/2006 to 31/10/2009: KM3NeT Design Study for a Deep Sea Facility in the Mediterranean for Neutrino Astronomy and Associated Sciences - EC project: Local Project Manager and member of the Steering Committee.
- from 11/7/2006: IT contact person for the SIIAM Functional Unit of ROMA2

### **EDUCATION AND TRAINING**

From 2008 to 2012

# PhD in Polar Sciences

Università di Siena

Thesis title:

MABEL benthic observatory and the experiment in Antarctica (Weddell Sea) - 10/05/2012

From 1995 to 2001

# Degree in Physics

Università di Roma Sapienza

From 1989 to 1995

# High School Diploma

Liceo Scientifico Dante Alighieri

# PERSONAL COMPETENCES

Mother tongue

Italian

Other language

English

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C1/C2	C1/C2	C1/C2	C1/C2	C1/C2

Organisational skills and competences During these years at the INGV I was responsible for the management of experiments and scientific instruments installed in submarine observatories (GEOSTAR, SN-1, SN-4, ORION-NODO2, GMM, MABEL, MEDUSA) with particular reference to data quality analysis of data recorded during the test phases and during sea experiments.

One of my fundamental roles is to follow the works entrusted to the industries by intervening from a technical-scientific point of view from the design phase of the work to the final one of testing and installation.

# Professional competences

I deal with the multiparametric analysis of the data acquired by submarine observatories and in particular I dealt with the interactions between gas seepage and seismic and oceanographic signals (experiments in Greece with GMM observatory and in Turkey with SN4 observatory) highlighting the need for a multidisciplinary analysis for a better understanding of gas emission phenomena in a submarine environment.

Preso atto dell'informativa ai sensi dell'art. 10 della L. 675/96 sulla "Tutela delle persone e di altri soggetti al trattamento dei dati personali" autorizzo ai sensi degli art. 11 e 12 della L. 675/96, il trattamento e la comunicazione dei miei dati, per gli scopi inerenti l'attività dichiarata.