

# 5° Scientific Diving Summer School 29 September - 4 October 2021 Panarea (Aeolian Islands, Italy)

Organized by Sapienza University (Rome), OGS (Trieste), CO<sub>2</sub>GeoNet and Diving Center AMPHIBIA

> In collaboration with Zoological Station Anton Dohrn (Naples) and INGV (Palermo)

> > Where: ECCSEL NatLab-Italy (Panarea, Aeolian Island)

> > > Endorsement: AIOSS co-funding: Blue Marine Foundation

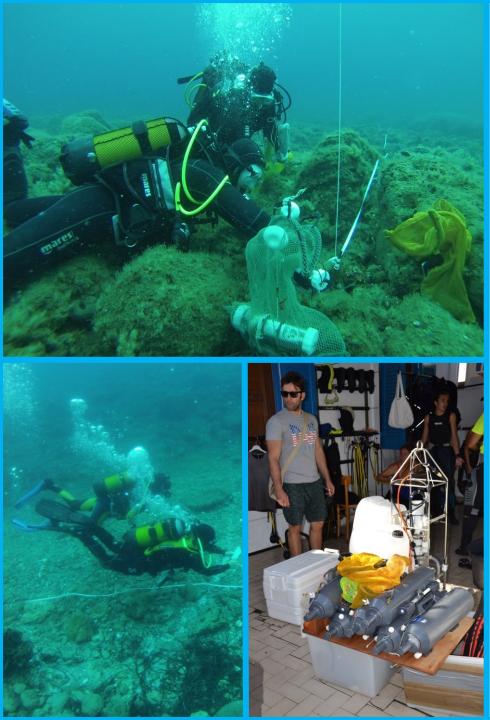


# Open Call for Applications

The school is open to students, graduates, specialists, PhD and post-doctoral students in scientific disciplines and professionals engaged in the study and management of the land/sea.

Topics will cover the geological characteristics of the unique active volcanic area of Panarea Island, its biological components adapted to the naturally acidified vents systems, and the hydrothermal fluids characterization.

Participants will be trained in multi-parameter monitoring techniques and definition of experimental protocols for the sampling and study of the benthic communities, with special focus on assessing effects of climate change and ocean acidification on organisms, communities and ecosystem/habitat, in particular on *Posidonia oceanica* forests.



## **Teaching Program**

The course consists of 10 multidisciplinary theoretical and practical lessons, 4 practical sessions, and 5 scientific dives.

Lectures concern topics of physical, chemical and biological oceanography, marine ecology and earth sciences, with specific focus on marine geology and volcanology, marine hydrothermal systems, climate change and ocean acidification, experimental design and sampling.

Diving activities include mapping techniques, hydrothermal water and gas sampling, sea water sampling (with Niskin bottles and benthic chamber), sediment sampling, multiparametric probe positioning, gas flow measurements, visual census techniques, benthic composition and cover measurements, shoot density, plant phenology and epiphyte evaluation of the *Posidonia oceanica* seagrass meadows.



## **Teaching Staff**

Cinzia De Vittor (OGS, Trieste), Sabina Bigi (Sapienza University, Roma), Maria Cristina Gambi (OGS, Trieste), Manfredi Longo (INGV, Palermo), Nuria Teixidò (Stazione Zoologica Anton Dohrn, Napoli), Rocco Auriemma (OGS, Trieste), Valentina Esposito (OGS, Trieste ), Cinzia Caruso (INGV), Giorgio Minelli (Perugia University).

#### Requirements

Any kind of diving license with at least 20 certified dives (also recreational) is accepted, as well as a medical certificate for eligibility for diving activity not older than 1 year, and a DAN (or equivalent) insurance for underwater activities.

#### **Required Equipment**

Participants must be provided with complete diving equipment, jacket, 2 regulators or octopus, underwater diving computer, underwater whiteboard, underwater net and compass. Tanks and weight belt are included in the participation fee. If necessary, it will be possible to rent the needed equipment at the Amphibia diving.



#### Costs

Accommodation costs in an affiliated Hotel will be  $\in$  50,00 (single room/day),  $\in$  60,00 (double room/day ). Due to COVID-19 restriction only single or double rooms will be allowed.

Dinner in an affiliated restaurant will be  $\in$  20,00.

Payments will be made by participants directly to the affiliated structures, and a pre-payment (150 euro) will be required on the 2<sup>nd</sup> September 2021, after formal acceptance to the course.

No cost for the diving activities are included for participants in this edition.

#### Location and Logistics

The school will be held in Panarea (Aeolian Archipelago, Italy) at the ECCSEL NatLab-Italy, located in road San Pietro. Panarea Island can be easily reached by ferry from Naples, where there is an International airport. Additional information on how to reach Panarea and where to stay will be provided to candidates by email.



#### How to Apply

Complete and send the application form with all your personal and educational information, plus a Curriculum Vitae with specific reference to your diving experience, no later than 31 August at <a href="mailto:scuolasubpanarea@gmail.com">scuolasubpanarea@gmail.com</a>. Maximum number of participants is 8.

Admission to the Summer School is subjected to the requirements mentioned above, and to the assessment of the organizers and teachers. Admitted students will be contacted directly to the email address they have indicated. A participation certificate will be issued and the scientific dives are considered valid for the release of the certification with the European Scientific training standards by the Italian Association of Scientific Diving (AIOSS), according to the competence level demonstrated.

#### **COVID-19** restrictions

All the activities will be held in accordance with the COVID-19 pandemic containment measures and requirements valid on the Italian territory, specifically in Sicily; a COVID-19 vaccination certificate, or healing certificate from COVID-19, or a negative test certificate (molecular swab) taken within 48 hours beforehand, will be required. In case, due to unpredictable COVID-19 emergence, the course will be cancelled, the inscription prepayment will be returned.