

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

Teaching Program

The course consists of 20 hours of multidisciplinary theoretical and practical lessons 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 sampling, sea water sampling (with Niskin bottles and benthic chamber), gas and sediment sampling, multiparametric probe positioning, gas flow measurements, visual census techniques, benthic composition and cover measurements, shoot density and plant phenology evaluation of the seagrass *Posidonia oceanica* meadow.



Teaching Staff

Cinzia De Vittor (OGS, Trieste), Sabina Bigi (Sapienza University, Roma), Maria Cristina Gambi (Stazione Zoologica Anton Dohrn, Napoli), Manfredi Longo (INGV, Palermo), Nuria Teixidò (Observatoire Oceanologique de Villefranche sur Mer, France) Marco Munari (Stazione Zoologica Anton Dohrn, Napoli), Rocco Auriemma (OGS, Trieste), Valentina Esposito (OGS, Trieste).

Requirements

Any kind of diving license with at least 20 certified dives is required; a medical certificate for diving activity not older than I year; 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 at Panarea.

Costs

For theoretical lessons, laboratory exercises and underwater activities (5 dives) the cost is \in 350,00 per person (to be paid directly to the Diving Center Amphibia).

Accommodation costs in an affiliated Hotel will be € 50,00 (single room/day), € 60,00 (double room/day), € 80,00 (triple room/day).

Dinner in a affiliated restaurant will be \in 18,00; 10% reduction on lunch in a affiliated restaurant will be available.

Payments will be made by participants directly to the affiliated structures.



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 e-mail.



Contact: scuolasubpanarea@gmail.com



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 May 2019 at <u>scuolasubpanarea@gmail.com</u>. Minimum number of participants for the School to be held is set to 8; maximum number of participants is 12.

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 for getting the license of European Scientific Diver or Advance European Scientific Diver.