

8°

# SCIENTIFIC DIVING SUMMER SCHOOL

*18-23 September 2024*

Panarea (Aeolian Islands, Italy)



ECCSEL NatLab-Italy Panarea

## ORGANIZED BY:

OGS (Trieste), Sapienza University (Rome), CO<sub>2</sub>GeoNet

## IN COLLABORATION WITH:

INGV (Palermo and Rome)

Parthenope University (Naples)

## ENDORSEMENT:

AIOSS

## FUNDING:

ECCSELLENT—Development of ECCSEL-R.I. Italian facilities: user access, services and long-term sustainability, CUPF53C22000560006, European Union – NextGenerationEU - PNRR IR0000020, Italian Ministry of University and Research n. 3264/2021.



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Sperimentale







The school is open to undergraduate, graduate, professional, doctoral, and PhD students of scientific disciplines, as well as professionals involved in the study and management of land and sea.

Topics include the geological features of the unique active volcanic area of the island of Panarea, its biological components adapted to naturally, acidified vents systems, and the characterization of hydrothermal fluids.

Participants will be trained in:

- multi-parameter monitoring
- definition of experimental protocols for CO<sub>2</sub>-rich fluids sampling
- studying benthic communities
- ocean acidification and its effects on organisms, communities, and ecosystem/habitat
- management and arrangement of scientific survey sites
- professional dives planning with seafaring and nautical hints

**OPEN CALL FOR APPLICATIONS**



## TEACHING PROGRAM

The course consists of 6 scientific dives, lectures cover topics in physical, chemical, and biological oceanography, marine ecology, and earth sciences, with special emphasis on marine geology and volcanology, marine hydrothermal systems, effects of climate change and ocean acidification, experimental design, and sampling.

Diving activities include:

- mapping techniques,
- hydrothermal water, gas and seawater sampling (with Niskin bottles and benthic chamber),
- sediment sampling,
- multiparametric probe positioning,
- gas flux measurements,
- visual census techniques,
- benthic composition and measurements of coverage,
- management of tool professional dive (lifting balloons with harness techniques and equipment carriage)



# TEACHING STAFF



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Cinzia  
De Vittor



Maria Cristina  
Gambi



Rocco  
Auriemma



Valentina  
Esposito



Vincenzo Alessandro  
Laudicella



Sabina  
Bigi



Luigia  
Donnarumma



Marco  
Anzidei



Manfredi  
Longo



Cinzia  
Caruso



Gianluca  
Lazzaro



International  
teachers





## REQUIREMENT

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



## REQUIRED EQUIPMENT

Participants must bring complete diving equipment, jacket, 2 regulators or octopus, underwater whiteboard and net.

Above all, **do not forget to bring your dive computer.**

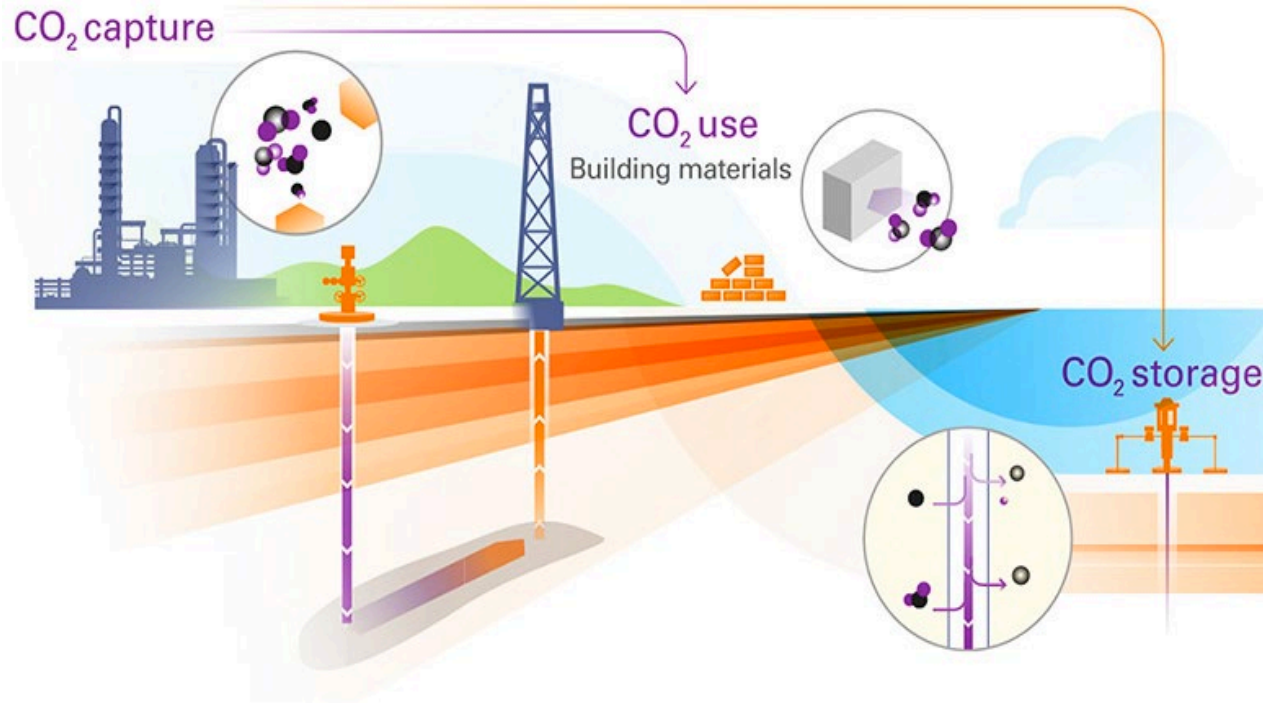
Dive tanks and weight belt are included in the participation fee.

The school is equipped with a limited number of diving equipment, which will be available to the selected applicants, on request, during the enrolment phase while stocks last. Otherwise, the required equipment can be rented at the affiliated Diving Center.

# Workshop on CCUS

(Carbon Capture, Utilization and Storage)

18th September



The first day of the school will be dedicated to a workshop on CCUS.

From 10:30 a.m. to 4 p.m., students will attend lectures on these, important technologies for mitigating climate change reducing atmospheric CO<sub>2</sub> emissions, as well as on the mission and challenges of ECCSEL (European Carbon Dioxide Capture and Storage Laboratory Infrastructure), the European initiative aiming to create a network of top quality research laboratories devoted to the development of CCUS technologies.

A coffee break and lunch will also be provided







## LOCATION AND LOGISTICS

The school will be held in Panarea (Aeolian Archipelago, Italy) at the ECCSEL ERIC NatLab-Italy laboratory of OGS, located in San Pietro Street.

The island of Panarea can be easily reached by ferry from Naples or by bus and hydrofoil from Catania, where there is an international airport.

More information about travel and accommodation in Panarea will be sent to applicants by e-mail.



## COSTS

### THE SCHOOL IS FREE



Lodging in an affiliated hotel is €70 (double room/day).



Dinner in an affiliated restaurant costs €31 (two main courses + side dish) or €20 (second course + side dish) or €14 (first course).



Payments are to be made by participants directly to the affiliated structures, and an advance payment (100 euros) is due on September 2, 2024, after official admission to the course.

# HOW TO APPLY

Please send the completed application form, including all information about yourself and your education, plus a Curriculum Vitae with specific reference to your diving experience, to [divingschoolpanarea@gmail.com](mailto:divingschoolpanarea@gmail.com) no later than **July 19**.

The maximum number of participants is **10**.

Admission to the summer school is subject to the above requirements and the evaluation of the organizers and teaching staff. Admitted participants will be contacted directly to the email address they provide.

A certificate of participation will be issued and the scientific dives will be considered valid for the granting of the certificate with the European Scientific training standards by the Italian Association of Scientific Diving (AIOSS), according to the level of competence demonstrated.

REGISTRATION FORM

