

University of Genova

Department of Earth, Environmental and Life Sciences

Doctorate Course in Earth and Environmental Science and Technology



per l'Ambiente e il Territorio

Earth Science Curriculum

Research Theme n. 5

Titolo (Italiano) **Patrimonio geologico e cambiamenti globali** Title (inglese) **Geoheritage and global change**

Tutor: Francesco Faccini (Università di Genova, faccini@unige.it)

Co-tutor: Paola Coratza (Università di Modena e Reggio-Emilia, paola.coratza@unimore.it)

Global changes, such as climate variations and the increase of anthropogenic pressure, significantly affect the evolution and conservation of geoheritage, either in terms of site vulnerability or hazards to exposed elements. The comprehension of geoheritage evolution is of paramount importance to undertake effective land management strategies.

This PhD project aims to understand the effects of climate change and anthropogenic action on the evolution of geoheritage at various scales: global, regional and local. Particular attention will be given to the identification of specific indicators to monitor the rate of change and the evolution of geoheritage, with reference to different geological and environmental contexts. In addition to this, the project will be devoted to the development of procedures to assess and manage the risk associated to geoheritage evolution. This PhD project will include a formation period at the Institute de Géographie et Durabilité of the University of Lausanne, under the supervision of Professor E. Reynard.

The project will be funded by research projects (Francesco Faccini, University of Genoa). Tutor's publications (max 3):

Coratza P., Vandelli V., Fiorentini L., Paliaga G., Faccini F. (2019) - *Bridging Terrestrial and Marine Geoheritage:* Assessing Geosites in Portofino Natural Park (Italy). Water, 11, 2112.

Sacchini A., Imbrogio Ponaro M., Paliaga G., Piana P., Faccini F., Coratza P. (2018) - *Geological Landscape and Stone Heritage of the Genoa Walls Urban Park and surrounding area (Italy)*, Journal of Maps, 14(2), 528-541.

Faccini F., Paliaga G., Piana P., Gabellani, Angelini S., Coratza P. (2018) – *The Geoheritage map of the Portofino Natural Park (Italy) as a tool for the management of a highly frequented protected area*. Journal of Maps, 14(2), 87-96.