Università di Genova

Pietro Marescotti

Associate Professor (GEOS-01/D – Mining Georesources, Mineralogical and Petrographical Applications for the Environment and Cultural Heritage)

EDUCATION AND TRAINING

1993
Master's Degree in Geological Sciences
Manganese Mineralizations in the Molinello and Cerchiara Mines
University of Genova

1997
PhD in Earth Sciences
Study of the manganese mineralizations associated with the Diaspri of M. Alpe Formation: mineralogy, chemistry, phase equilibria, and genetic significance
Consortium of the Universities of Genova, Torino, and Cagliari

PROFESSIONAL HISTORY

1997-1999
Post-doctoral fellow
University of Genova

1999-2015
Researcher (permanent position), Scientific Disciplinary Sector GEO/06 (Mineralogy)
University of Genova

2015 - ongoing
Associate Professor, Scientific Disciplinary Sector GEOS-01/D (Mining Georesources, Mineralogical and Petrographical Applications for the Environment and Cultural Heritage)
University of Genova

ACADEMIC APPOINTMENTS

2015-2021
Quality Assurance Manager of the Department of Earth, Environmental and Life Sciences (DISTAV)
University of Genova

2021 - ongoing
Coordinator of the Master's Degree Course "Techniques for Conservation and Restoration of Cultural Heritage" (LM11)
University of Genova

2021 - ongoing
Member of the Academic Board of the PhD Program in Science and Technology for the Environment and Territory (STET)
University of Genova

Università di Genova

2021 - ongoing
Member of the Council of the School of Mathematical, Physical and Natural Sciences
University of Genova

2021 - ongoing
Member of the Board of the Department of Earth, Environmental and Life Sciences
University of Genova

2021 - ongoing
Delegate of the University of Genova to the Community of the Beigua Regional Natural Park
Beigua Regional Nature Park Authority

EXPERIENCE

MAIN SEMINARS

2004 Nanominerals and the environment: genesis, evolution and interactions in the ARD (Acid Rock Drainage) systems
Summer School "Properties and applications of minerals at the nanoscale"
National Group of Mineralogy (GNM), Otranto

2009 Environmental impact of the AMD (Acid Mine Drainage) processes: examples from the abandoned Fe-Cu mine of Libiola (northern Italy)
PhD school Societatea Geologică a României
Universitatea Babeş-Bolyai, Cluj Napoca (Romania)

2011 Mineral-biosphere interactions in contaminated soils
International School 'Minerals and Biosphere'
Italian National Group of Mineralogy (GNM) and Italian National Group for Georesources, Environment and Cultural Heritage (GABeC), Parco Archeo-Minerario di San Silvestro (Campiglia Marittima)

2014 Characterization of a metal-contaminated waste rock dump using field portable X-ray fluorescence (FPXRF) spectrometry
21st IMA General Meeting
International Mineralogical Association, Johannesburg (South Africa)

2016 Ecotoxic metals in soils: determination of their origin and background levels using a mineralogical and geochemical approach
PhD School in Earth Sciences and Geotechnologies
University of Perugia

2017 Geological and geochemical characterization of agricultural soils for the realization of the "Geological Label of the Products
Taiwan Start Ups Internationalisation Tour
National Kaohsiung First University of Science & Technology (Taiwan)

2018 Sulfide weathering processes mediated by microfungi
22st IMA General Meeting
International Mineralogical Association, Melbourne (Australia)

2020 Abandoned mines and environmental hazard
PhD School in Earth Sciences and Geotechnologies
University of Perugia

2022 The Geological Heritage of the Beigua UNESCO Global Geopark
UniGe Senior, free university courses for all ages
University of Genova

2025 The Exploitation of Critical Strategic Raw Materials in Liguria: Resource or Environmental Problem?
UniGe Senior, free university courses for all ages
University of Genova

2026 Exploitation of Ligurian Georesources
Workshop on Critical Raw Materials: National Strategy, Georesources, and the Role of Geoscience Professionals
Regional Order of Geologists of Liguria, Genova, Italy.

SCIENTIFIC RESPONSIBILITY FOR RESEARCH PROJECTS ACCEPTED FOR FUNDING ON THE BASIS OF COMPETITIVE CALLS INVOLVING PEER REVIEW

2024 Erasmus Mundus Design Measures (ERASMUS-EDU-2024-EMJM-DESIGN)
Co-coordinator of the Project for the Development of the Joint Master's Degree in Conservation and Restoration Sciences (CORES)
Università di Genova

2025 Interreg Marittimo-IT FR-Maritime UNIT-GEOPARKS (UNesco Iniziative Trasfrontaliere – GEOPARKS)
Principal Investigator (Soggetto Attuatore)
University of Genova - Beigua Regional Natural Park

2025 Cantieri di digitalizzazione" dell'investimento PNRR " Digital strategy and platforms for cultural heritage"
Principal Investigator of the project "Digitization of Museum Objects of the Edoardo Chiossone Museum of Oriental Art"
Fondazione Scuola Nazionale Patrimonio Attività Culturali

EDITORSHIP OR PARTICIPATION IN EDITORIAL BOARDS OF JOURNALS, PUBLISHING SERIES, ENCYCLOPAEDIAS AND TREATISES

2011-2022 Chief Editor
Rivista PLINIUS
Italian Society of Mineralogy and Petrology, Pisa

2011 Guest Editor Special Issue "Mineral-contaminant relationships: towards a multi-scale, multidisciplinary approach"
Neues Jahrbuch Fur Mineralogie-Abhandlungen, vol. 118/1
Schweizerbart'sche Verlagsbuchhandlung, Stuttgart (Germany)

2019 Guest Editor Special Issue "Chemical-physical properties of minerals and minerogenesis in supergene environment
Minerals, ISSN 2075-163X
MDPI, Basel (Switzerland)

2025 Guest Editor Special Issue "Heritage materials matter: recent perspectives in diagnostics and conservation"
Heritage, ISSN 2571-9408
MDPI, Basel (Switzerland)

2026 Guest Editor Special Issue “Cultivation and recovery of critical raw materials from quarries and mining sites: a circular economy approach and valorization of mining heritage”
Italian Journal of Geoscience, ISSN 2038-1719
Italian Geological Society, Rome (Italy)

PARTICIPATION IN THE CREATION OF NEW BUSINESS ENTITIES (SPIN-OFFS), DEVELOPMENT, USE AND COMMERCIALISATION OF ACADEMIC PATENTS

2013 - 2023 Founding Member of the GeoSpectra SRL Spin-Off
Interdepartmental Spin-Off (Department of Earth, Life and Environmental Sciences and Department of Architecture and Design)
University of Genova

OTHER EXPERIENCES

1996 Shipboard Scientist
ODP Leg 168 'Hydrothermal circulation in the oceanic crust: Eastern flank of the Juan de Fuca Ridge'
JOIDES Reslution Scientific Drilling Ship - Ocean Drillling Program (ODP)

2002 Principal Investigator
Project “Mineralogical and petrographic studies on the materials used for the beach nourishment of Baia delle Favole (Sestri Levante, GE)
Environmental and Forestry Police Investigation Unit of Genova

2005 - ongoing PhD Supervision
Supervisor of 6 Ph.D. theses
University of Genova

2005 - ongoing Relatore tesi di Laurea
Advisor for 64 Master's theses in Geological Sciences, Natural and Environmental Sciences, Techniques for Conservation and Restoration of Cultural Heritage, Architecture.
University of Genova

2007 Principal Investigator
Project “Studies on the abandoned chalcopyrite mine of Libiola (Sestri Levante, Genova): Survey of structures and infrastructures in the mining area”
Sviluppo Italia Aree Produttive (Roma)

2007 Principal Investigator
Experiment EC-156 at the ID-21 beamline: “Characterization, by means of µ-XRF and µ-XANES, of Fe-oxides and oxyhydroxides formed by polymetallic sulphides alteration during AMD processes”
European Synchrotron Radiation Facility (ESRF) Grenoble (France)

2007 Principal Investigator
Project “Development of ARPAL’s institutional expertise for mineralogical and petrographic analyses of rocks potentially containing asbestos”
Regional Agency for the Protection of the Ligurian Environment (ARPAL)

2018 Principal Investigator
Experiment 20175192 at the MCX beamline (ELETTRA): “Potentially Toxic Elements (PTEs) in serpentine soils and bedrocks: mineralogical and crystal chemical investigations”
ELETTRA Synchrotron Light Laboratory (Basovizza, Trieste, Italy)

2020 - 2023 Council Member of Scientific Societies
Executive Council of the Italian Society of Mineralogy and Petrology (SIMP)

SIMP (Pisa)

2021 - ongoing Board Member of Public Institutions
Beigua Regional Natural Park
Beigua Park Authority (Regione Liguria)

2021 – ongoing Delegate of the EGN Coordination Committee
Delegate for the Beigua UNESCO Global Geopark in the Coordination Committee of the European Geoparks Network (EGN)
European Geoparks Network – UNESCO Global Geoparks