

Marco Scambelluri

Full Professor of Petrography and Petrology
Department of Earth, Environmental and Life Sciences - DISTAV
University of Genova, Corso Europa 26, 16132, Genova
Email marco.scambelluri@unige.it

Google Scholar: <https://scholar.google.it/citations?user=Sv01ZyEAAAAJ&hl=it>
ORCID: <https://orcid.org/0000-0003-4445-1308>

EDUCATION AND TRAINING

27-11-1984: Degree in Geological Sciences, University of Torino
12-09-1989: PhD Degree in Earth Sciences, University of Genova. Thesis in Metamorphic petrology

PROFESSIONAL HISTORY

16-06-1990: Permanent research position in Petrography and Petrology, University of Genova
01-09-2000: Associate Professor of Petrography and Petrology, University of Genova.
01-12-2019: Full Professor of Petrography and Petrology, University of Genova.

ACADEMIC APPOINTMENTS

2018- Coordinator of the Doctorate Course in Science and Technology for the Earth and the Environment – STAT, University of Genova
2018- Member of the University Doctorate Committee, University of Genova
2018-2024 Responsible for the Departmental Research Commission, Department of Earth, Environmental and Life Sciences – DISTAV, University of Genova
2005-2018 PhD Course in Sciences for the Earth and the Environment, University of Genova: member of the STAT Doctorate Committee.

SCIENTIFIC ACTIVITY

Research activities in metamorphic petrology of high- and ultra-high-pressure rocks forming sections of oceanic and continental lithosphere exposed in orogenic belts like the (Alps; Betic Cordillera, Southeastern Spain; Dabie–Shan–Sulu, China; Caledonides, Western Norway). The research is based on detailed fieldwork, petrological, and geochemical studies of natural samples, and aims at understanding global geodynamic processes.

Research objectives: metamorphic phase relationships; quantitative estimation of pressure–temperature conditions during metamorphism, using traditional methods and innovative approaches based on the thermoelastic properties of minerals; genesis and composition of metamorphic fluids, fluid–rock interaction, recycling of trace elements and volatile compounds in the mantle; channelized fluid flow in veins systems; structures generated by deep subduction-related seismic events.

SCIENTIFIC PRODUCTION

Papers: 101 in international magazines, 14 in national magazines, 10 as proceedings of international meetings and excursion guidebooks, 2 as articles in books or in outreach magazines. Numerous abstracts at international and national congresses (> 120 at international meetings, > 50 at national ones)

Bibliometrics: ISI WOS: H Index 50, 6347 citations. Scopus: H Index 50, 6639 Citations. Google Scholar: H Index 53, 8125 Citations.

EXPERIENCE**MAIN SEMINARS**

2001 Tokyo Institute of Technology, Japan; Research School of Earth Sciences, ANU, Australia; 2003 Stanford, USA

2004 Kyoto University, Japan; University of Bern, Switzerland; Ecole Normale Supérieure, Lyon, France; University of Granada, Spain; Budapest, Hungary; School of Earth and Space Sciences, University of Science and Technology of Hefei, China; E-FIRE retreat San Francisco, USA; ISTeP, Pierre et Marie Curie University, Paris; School of Geosciences, University of Edinburgh

2008 Earth Science Department of the Ecole Normale Supérieure, Lyon.

Keynotes and Plenaries

2004 Invited at IGC, Firenze, Italia

2007 Keynote, 16th Deformation Mechanisms, Rheology and Tectonics Conference DRT, Milano;

2009 Keynote Goldschmidt Conference, Davos, Svizzera

2015 Keynote, Congress SIMP-SGI-SOGEI-AIV Florence, Session S3

2016 Plenary lecture at the European Mineralogical Conference – EMC2016, Rimini, Italia

2023 SIMP-SGI Congress, Potenza, Plenary conference.

Invited presentations:

2004 Kagi Meeting, Beppu Island, Japan

2006 EGU Meeting, Vienna; Geomar, Kiel, Germany

2007 ECROFI-XIX European Current Research on Fluid Inclusions, Bern, Switzerland

2012 Sessione “V40 Serpentinization and Dehydration as Major Processes for Deep Earth Elemental Cycling” AGU fall Meeting 2012, San Francisco, USA

2016 Sessione DI44A The Distribution and Pathways of Melts, Fluids, and Volatiles in Subduction Systems: A Multidisciplinary Approach II, AGU fall Meeting, San Francisco, USA

2017 EGU Galileo conference “Exploring new frontiers in fluids processes in subduction zones” Leibnitz, Austria

2018: Sessione T140 *Frontiers in mineralogy, petrology, and geochronology* in onore del Dana medalist Jörg Hermann, GSA Annual Meeting, Indianapolis, Indiana, USA; College de France, Paris, Symposio su *Intermediate and Deep Earthquakes: Observation and Modelling*, Organizzatori: B. Romanowicz & A. Schubnel, presentazione a invito su Fossil Intermediate Depth (Eclogite-Facies) Earthquake in the Alpine Oceanic Lithosphere.

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

Scientific Research Programs of significant national Interest (PRIN) funded by the Italian Ministry of University and Research:

2003: Fluid inclusions and role of volatile compounds during the subduction of pelitic and ultramafic sequences. The case study of the Ulten area (Upper Austroalpine, Eastern Alps)

2005: Multiphase inclusions in ultrahigh-pressure (UHP) garnet peridotites and pyroxenites: Tracers of deep COH fluids and crust-mantle trace element exchanges in subduction zones
2007: Phase relationships and interactions with COH fluids in carbonate peridotites from subduction contexts: from nature to experiments
2009: Light element and LILE content of subduction fluids released from ultramafic natural COH systems at high and very high pressure
2012: Volatile element transfer at convergent plate margins: relationships between COH fluid/melt heterogeneity and tectonic anomalies in subduction zones
2017: The dynamic mass transfer from slabs to arcs - Dynastars
2020: High-stress earthquakes by faulting of deep dry rocks (Thales)

European Union:

2013 -2017 Marie Curie Initial Training Network ZIP Zooming in Between the plates (Coordinator: Philippe Agard, UPMC). Responsible for the Genova partner University
2016 ERC Starting Grant True Depths - H2020 (Coordinator: M. Alvaro, Pavia University). Responsible for the Work Package relating to the petrology of high and ultrahigh pressure rocks within the project

Partnership to USA programs

2016 NSF-PIRE: ExTerra Field Institute and Research Endeavor (E-FIRE). Senior scientist and Advisory Board member.

TEACHING OR RESEARCH POSITIONS (FELLOWSHIPS) AT FOREIGN UNIVERSITIES AND RESEARCH INSTITUTES

24-25/11/2008: Series of lectures at the Diploma and Master students of the L'École Normale Supérieure de Lyon, France
08-11 novembre 2010: Cycle of lectures and seminars on Alpine tectonics, subduction and fluid infiltration in the Earth's mantle at the School of Earth and Space Sciences University of Science and Technology of China **Hefei**.
04-5/12/2014: Cycle of lectures at master and doctorate students on the petrology of high and ultrahigh pressure rocks and the role of serpentinite in fluid recycling in subduction zones at the ISTeP, University Pierre et Marie Curie (now Sorbonne), Paris.

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

Chief Editor of *Lithos* (Elsevier, IF 3.677) from 2011 to 2021. Member of the editorial board of *Lithos* and of the *Geological Field Trips and Maps* (<https://gftm.socgeol.it/285/editorial-board.html>). Guest editor of the Special Issue: "Subduction versus intraplate lithospheric mantle: agents and processes" published on *Lithos*.

Referee for funding agencies (Italian MIUR; NSF, USA; Australian ARC; Swiss SNSF) and for national and international magazines.

PRIZES AND ACCOLADES FOR SCIENTIFIC ACTIVITY, INCLUDING MEMBERSHIP OF ACADEMIES

Fellow of the Mineralogical Society of America

TEACHING AND TRAINING

Since 1990 the teaching activity of Marco Scambelluri has been in the fields of Petrography, Petrology, Applied Petrography, Tectonics and Metamorphism of Basement Rocks for the Bachelor, Master and PhD courses in Earth Sciences at the University of Genova.

Supervised PhDs: Franca Vallis, Laura Federico (now Associate Professor, Genova University), Nadia Malaspina (Associate Professor, Milano Bicocca University), Cristina Malatesta (Researcher at CNR-IMATI, Genova), Enrico Cannaò (Researcher, Milano University), Mattia Gilio (recipient of Von Humboldt fellowship in Hamburg, now Researcher at the Pavia University), Hugo Van Schrojenstein Lantmann (Technician in Utrecht University), Nicola Campomenosi (former recipient of Von Humboldt fellowship in Hamburg, now researcher at the Genova University), , L. Notini (now professor in the high schools). At present, he is co-tutor of the PhD student di Serena Cacciari, University of Padova.

Tutored post docs: Enrico Cannaò, Mattia Gilio, Nicola Campomenosi, Rodrigo Gomila (now researcher at the University of Padova)