

Rosalda Anna Punturo,

Date of birth: 26 April 1971

Dpt. of Geological Sciences, University of Catania.

Higher Education

University of Catania; B.Sc. in Geological Sciences (1994);

University of Catania (1996-1999), Doctoral Course in Igneous Petrology: Ph.D (2000).

Research Grants

- PhD research grant University of Catania (1996-1999).
- Post doc research grant – university of Catania (2001-2003) in Igneous Petrology. Title: Petrographic, geochemical and petrophysical features of Stone materials employed in eastern Sicily and Calabria.

Academic Positions

2nd January 2004 – to now: Researcher in Petrology and Petrography (GEO/07), at the Dpt. Of Geological Sciences, University of Catania;

Professional Habilitations

- Teaching habilitation- secondary school (Maths and Natural sciences) – University of Catania 24/07/2001;
- Professional geologist – University of Palermo 1995;
- Teaching qualification, competition class A059- Mat. Sciences, Phys., Chem., Nat., Middle School - achieved in 2001 through an ordinary competition for professorships ;
- Habilitation as Associate professor 04/A1 -Geochimica, Mineralogia, Petrologia, Vulcanologia, Georisorse Ed Applicazioni (dal 10-04-2017).

Scientific responsible of Research projects and grants

- PRIN 2007 (RESEARCH PROJECTS OF NATIONAL INTEREST -24 months):2007W7PENA: “Strain rate in mylonitic rocks and induced changes in petrophysical properties across the shear zones”. Role : Principal Investigator (National Coordinator).
- Young researchers grant 2000 -(Università degli Studi di Catania) geochemical and structural investigations on shear zones of the Calabrian Orogen (southern Italy). 24 months.
- c) The Youth Project of the Italian Alpine Club Discovering Minerals and Rocks - call for bids for the distribution of SIMP disciplines (from 17 September 2015)Role: responsible
- Grant for International collaboration (2007): funding grant was used for visiting the Department of Earth Sciences in Kiel (Germany), where petrophysical investigations on mylonitic rocks were performed (July-August 2007);

- e) Contributions for International collaboration (2007): funding grant was used for visiting the Department of Earth Sciences in Kiel (Germany), where petrophysical investigations on mylonitic rocks were performed (July-August 2007);
- f) Responsible for the Project funded by M.U.R.S.T (P.R.A) 2006: "Petrophysical properties of mylonitic rocks in shear zones from the Aspromonte Massif" (2 years).Role: P.I.
- g) Research project at Elettra Sincrotrone (Trieste). Proposal n° 20195100. Investigation on porosity and permeability of asphalt-bearing limestones from the Noto formation (south-East Sicily, Italy). Beamtime February 2020. Role: proposer and principal investigator;
- h) Research project at Elettra Sincrotrone (Trieste). Proposal n° 20180137. Changes in texture strength of mylonites developed from granodiorite rock: clues for understanding the behavior of crustal- scale shear zone at depth. Beamtime: May 2019. Role: proposer and principal investigator;
- i) Research project at Elettra Sincrotrone (Trieste). Proposal n° 20170020. Microstructural investigation on naturally deformed mylonites from a crustal scale shear zone: implication on the rheological behavior of the continental lithosphere. Beamtime : 3-5/10/2017. Role:proposer and principal investigator.
- j) Research project funded by the University of Catania (2012). Title: serpentinite and metabasite cropping out at Monte Reventino (Calabria): Mineralogical-petrographic features and health implications. Role: principal investigator;
- k) Three-year research plan (2017-2020) UNiversity of Catania. N.O.A. Natural Asbestos Occurrences and health risks. Role: principal investigator

Academic Teaching activity

Lectures for the undergraduate course in Geological Sciences (University of CATania): Laboratory of Petrography; Mineralogy; Analytical geochemistry

Lectures for the undergraduate course in Technology applied to the Conservation and Restoration of Cultural Heritage (University of Catania – Syracuse): Geochemistry (from 2004 to 2010);

Lectures for the graduate course in Geological Sciences (University of Catania): Laboratory of Petrography 2; Petrophysics

Responsible for the Laboratory of Geochemistry, Dpt. Of Geological Sciences; Member of the Italian Society of Mineralogy and Petrology since 2006.

- Member of the Presidential Council of the National Group of Petrography (GNP) for the period 2020-2023;

- Member of the "Research Center on the causes of decay for the recovery of Cultural and Monumental Heritage" (CRIBECUM) of the University of Catania, from 2006-2014 the date of decommissioning of the Center;

- Participation to the ANSIC 2001 oceanographic campaign (oceanographic vessel Urania) directed by the section of the CNR of Mazara del Vallo (TP), July 2001.

- Resident Correspondent Member of the Gioenia Academy in the Nature Sciences section since January 2016;
- Member of the Scientific Provincial Council of the Free Municipal Consortium of Ragusa (formerly the Ragusa Regional Province) since February 2020;
- Member of the working group on Mediterranean ophiolites (coordinator R. Tribuzio) since September 2017;
- Member of the Regional Scientific Committee of Sicily of the Italian Alpine Club since January 2020.

Scientific manager of Studies and Research entrusted by public and private bodies:

- Visiting researcher at the Institut fuer Geowissenschaften (CAU, Kiel) 2003.
- Visiting researcher at the Institut fuer Geowissenschaften (CAU, Kiel) 2010
- Visiting Professor at "Department of Geology & Geophysics" Indian Institute of Technology - Kharagpur - India. October 2016.
- Responsible for UNICT of the two-year agreement between Elettra Sincrotrone Trieste and the University of Catania (from February 2019);
- Responsible for the scientific collaboration of the University of Catania and ARPA Sicily - Regional Agency for the Protection of the Environment from 26-07-2018.
- Scientific manager (Petrography and scientific dissemination within the framework of the protocol between the DSBGA - UNICT and the Etna Park) (from February 2016).

Participant to research projects:

- PRIN 2009(24 months): Experimental study of the chemical and physical-mechanical transformations of ceramic artefacts following the controlled interaction with the marine environment, in relation to their textural and compositional characteristics. Responsible: A. Pezzino. Role: participant;
- PRIN 2005 (24 months): Petro-archaeometric analysis of ancient ceramic productions of central-eastern Sicily: identification of production centers and characterization of raw materials, mixtures and ceramics. Responsible: A. Pezzino. Role: participant;
- FIR (2014): "Deep Water Sandstones in Sicily (DWSS): proven gas reservoirs and potential CO2 storage sites ", Responsible: R. Maniscalco. Role: participant;
- University research P.R.A. 2005 entitled "Petrology of Filonian products emerging in the southern sector of the Calabro-Peloritano Orogene and relations with the deep cutting areas. Responsible: R. Cirrincione. Role: participant;
- 3D morphometric investigation on chrysotile fibers and their intergrowth within serpentinite rocks. (Proposal 20170159) 2017. Scientific responsible: A. Bloise. Role: participant;
- 3D quantitative microstructural analysis of deformation bands in sandstones and their role as regulators of fluids migration in field analogues: a potential support for reservoir geology characterization. (Proposal n.20170107) 2017 Scientific responsible: E. Fazio. Role: participant

Scientific interests focus on the following main topics:

- Petrophysics and geochemistry of crustal and mantle rocks, with particular regards to the crystalline basements (e.g. Calabrian-Peloritani Orogen; Hyblean Plateau (Southern Italy); Southern Rhodope Complex (Greece)).
- Stone materials employed in monuments;
- Natural Asbestos occurrences and health implications
- REE and heavy metals distribution geological system

Dissemination of results of research: a) publication on indexed magazines; b) Organization of Congresses and Convener of sessions and workshops. Reviewer of ISI indexed scientific magazines.

Scientific production

64 publications (59 indexed)

36 contributions and 53 abstracts to International and National Congresses

in atti di convegno nazionali ed internazionali

4 educational papers

5 as Guest editor

1 Monography

Bibliometric data retrieved from Scopus: 59 articles, 859 Citations

and h-index: 17

Member of the PhD college at University of CATANIA: "EARTH AND ENVIRONMENTAL SCIENCES".

Contact person (DSBGA) for the following Erasmus agreements:

- Erasmus + Studio: 1) Christian Albrecht Universitaet Kiel (Germany); 2) Technical University of Clausthal (Germany) + Traineeship; 3) University of Salamanca (Spain).

Member of the Organizer and Editorial Board of the workshop on: Multidisciplinary approach to the study of Cultural Heritage, Syracuse October 2005.

Dissemination project of SIMP disciplines: Young people of the Italian Alpine Club discovering minerals and rocks. Approved by the SIMP Presidency Council (2015)

Member of the group for the dissemination of SIMP disciplines. As part of the dissemination activities by SIMP, disclosure video(2018).

Thanks to the contribution of the National Scientific Degree Plan - geology - Catania and in the context of the collaboration with the Etna Park Authority, a geological thematic path has been set up (Etna).

Collaboration in the realization of TV program for scientific dissemination: The investigation on fine particles by Maurizio Torrealta, directed by Flaviano Masella broadcast on Rainews 24 (<http://rainews24.rai.it/it/canale-tv.php?id=23558>)

Publication of several popular articles in various magazines; guest editor of various special Issues on International magazines.

Scientific dissemination of geological disciplines: seminars at associations, schools and for the Italian Alpine Club also with thematic field trip.