



# Federica Benedetti

## EDUCATION AND TRAINING

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[ 01/11/2023 – Current ] **National PhD in Earth Observation**

**Sapienza Università di Roma**

Title of the project: "Earth Observation and geochemical investigation of deep (volcanic) mercury cycle"

[ 2020 – 12/06/2023 ] **Master's degree**

**Sapienza Università di Roma**

**Address:** Piazzale Aldo Moro, 5 , 00185, Roma (RM), Italy | **Field(s) of study:** Exploration Geology | **Final grade:** 110/110 cum laude | **Thesis:** Mantle oxidation state links to LIPs, subduction of continental crust and geochemical tracers in sediments

[ 2017 – 2020 ] **Bachelor's degree**

**Sapienza Università di Roma**

**Address:** Piazzale Aldo Moro, 5 , 00185, Roma (RM), Italy | **Field(s) of study:** Geological sciences | **Final grade:** 110/110 cum laude | **Thesis:** "Caratterizzazione petrografica di alcune vulcaniti a melilite del complesso vulcanico di Montefiascone (Monti Vulsini)"

**High School Diploma**

**Liceo scientifico "Paolo Ruffini"**

**Address:** Piazza Dante Alighieri, 13, 01100, Viterbo, Italy | **Final grade:** 85/100

## CONFERENCE ABSTRACTS

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[ 06/07/2025 – 11/07/2025 ] **Goldschmidt 2025 Conference-Prague**

Marras G., **Benedetti F.**, Shang L., Lin Y., Stagno V. Experimental investigation of Hg solubility in CO<sub>2</sub>-bearing melts as function pressure, temperature and oxygen fugacity.

[ 01/07/2024 – 04/07/2024 ] **2° congresso So.Ge.I - Perugia**

**Benedetti F.**, Marras G., Brandano M., Calabrese S., Bosi V., Ricciardi A., Stagno V. The Deep Mercury Cycle: an updated database of natural sources against anthropogenic emissions.

[ 14/04/2024 – 19/04/2024 ] **EGU conference - Wien**

**Benedetti F.**, Marras G., Brandano M., Calabrese S., Bosi V., Ricciardi A., Stagno V. An updated database of mercury emissions based on remote sensing, geochemical surveys and laboratory experiments.

[ 14/04/2024 – 19/04/2024 ] **EGU conference-Wien**

Marras G., Stagno V., Aldega L., Domenico Barberio M., **Benedetti F.**, Cornacchia I., Labidi J., Morelli G., Nereo P., Rimondi V., Brandano M. The Bonarelli level (Gubbio, Italy) reveals a potential correlation between the occurrence of oceanic anoxic events and large-scale magmatic activity.

[ 19/09/2023 – 21/09/2023 ] **SIMP, SGI, SOGEI, AIV Joint Congress-Potenza**

**Benedetti F.**, Stagno V., Marras G., Bianchini G., Dallai L. The investigation of the oxidizing role played by the subduction-driven metasomatic fluids through the oxygen fugacity of mantle peridotites coupled with the mineral oxygen isotopes: case of the peridotite mantle xenoliths of Tallante (Betic Cordillera, Spain).

[ 12/06/2023 – 15/06/2023 ] **XVIII International Symposium on Experimental Mineralogy, Petrology and Geochemistry-Milan**

**Benedetti F.**, Stagno V., Marras G., Bianchini G., Dallai L. The oxidation state of peridotite mantle xenoliths rocks Tallante (Betic Cordillera, Spain) coupled with oxygen isotopes: implication for the oxidizing role of the subducted crust.

[ 10/05/2023 – 11/05/2023 ] **First National Workshop on Fluid and Glass Inclusions-Palermo**

**Benedetti F.**, Marras G., Stagno V. Petrographic and spectroscopic investigation of the fluid inclusion in olivines from LIP-related Emeishan picrites.

## **PUBLICATIONS**

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**Fe oxidation state and oxygen isotope composition of metasomatized mantle rocks from Tallante, Spain**

**Benedetti F.**, Marras G., Cannaò E., Bianchini G., Brunelli D., Dallai L., Stagno V. *Fe oxidation state and oxygen isotope composition of metasomatized mantle rocks from Tallante, Spain. Under review on Terra Nova.*

**On the occurrence of kalsilite in melilite-bearing ultrapotassic lavas from the Roman Province (Vulsini Mts., center Italy)**

Innocenzi F., Ronca S., Agostini S., **Benedetti F.**, Lustrino M. (2024). On the occurrence of kalsilite in melilite-bearing ultrapotassic lavas from the Roman Province (Vulsini Mts., center Italy). *Lithos*, 482-483, 107704.

## **TRAINING COURSE**

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[ 27/06/2025 – 29/06/2025 ] **ECROFI 2024 Pre-conference workshop - Fluid Inclusion Study: Principles and Application**

Course organized by Sapienza University of Rome in the frame of the MSc program in Geologia Applicata all'Ingegneria al Territorio e ai Rischi.

[ 10/2024 – 12/2024 ] **Geochimica applicata ed ambientale**

Course organised by National PhD in Earth Observation and held by Dr. Tommaso Bigio (TEAMDEV ecosystem). I learned basic skills of ArcGIS.

16 hours

[ 03/09/2024 – 26/09/2024 ] **Tecnologie GIS per l'analisi delle immagini telerilevate**

Course organized by Sapienza University of Rome in the frame of the MSc program in Geologia Applicata all'Ingegneria al Territorio e ai Rischi.

56 hours

[ 02/2024 – 04/2024 ] **Rilevamento Geomorfologico e Applicazioni GIS**

Summer School on In Situ Measurements and Sampling of Volcanic Gases

Italian Geochemical Society (So.Ge.I.) and the IAVCEI Commission on the Chemistry of Volcanic Gases (CCVG)

Vulcano Island  
17-21 June 2024  
Certificate of attendance

[ 17/06/2024 – 21/06/2024 ] **Summer School on In Situ Measurements and Sampling of Volcanic Gases**

UnitelmaSapienza, Sapienza University of Rome  
4 hours, A.A 2023/2024  
Certificate of attendance

**Course of General training health and safety at work for workers and equivalent**

Course organized by the Doctorate School of Earth, Environment and Resources Science of the University of Naples "Federico II" and held by Dr. Valentina Galluzzi (INAF-IAPS) on June 16th, 17th, 21st, 2021.

[ 16/06/2021 – 21/06/2021 ] **Planetary geology**

**EXPERIENCE**

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**Internship**

Organization of guided visits and cataloguing activities of finds at the MUST (Museo Universitario di Scienze della Terra, Sapienza University of Rome)

[ 19/10/2023 – 21/10/2023 ] **Helper at a congress**

Helper at the joint congress of the Società Italiana di Mineralogia e Petrologia (SIMP), Società Geologica Italiana (SGI), Società Geochimica Italiana (SOGEI) and Associazione Italiana di Vulcanologia (AIV) entitled "The Geoscience paradigm: resources, Risks and future perspectives"

**STUDENT COLLABORATION SCHOLARSHIP**

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**Sapienza University - Rome, Italy**

1. 2023 Support activities for PCTO
2. 2020 Activities at the "Centro informazioni accoglienza e orientamento (CIAO)"
3. 2019 Activities at the "Centro informazioni accoglienza e orientamento (CIAO)"

**LANGUAGE SKILLS**

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**Mother tongue(s):** Italian

**Other language(s):**

**English**

**LISTENING B1 READING B1 WRITING B1**

**SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1**

*Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user*

La sottoscritta dichiara di essere consapevole che il presente curriculum vitae sarà pubblicato sul sito istituzionale l'Ateneo, nella Sezione "Amministrazione trasparente", nelle modalità e per la durata prevista dal d.lgs. n. 33/2013, art. 15.

Ai fini della pubblicazione

Roma, 30/06/2025

f.to Federica Benedetti