

# **Curriculum vitae et studiorum**

## **Porreca Massimiliano**

born in Atripalda (Avellino - Italy), March 21, 1975

Actual position: Lecturer

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### **Education and Professional Career**

2014-2021: Lecturer in Structural Geology at the University of Perugia

2012-2014: Researcher at the Istituto di Geofisica e Vulcanologia (INGV-L'Aquila)

2009-2012: Post-Doc at the University of the Azores (Portugal)

2005-2009: Post-Doc at the University of Roma Tre

2004: Ph.D. in Geophysics at the University of Bologna

2000: Degree in Geology, University of Roma Tre

### **Research Methodology**

- Geological mapping
- Structural Geology
- Petroleum Geology
- Seismic interpretation
- Structural modelling
- Paleomagnetism
- Magnetic fabric
- Rock magnetism
- Physical Volcanology
- Planet Geology

### **Areas of interest**

Evolution of back-arc basin in Mediterranean area

Study of magnetic fabric in volcanic rocks and weakly deformed sediments

Definition of eruptive mechanisms and emplacement processes of pyroclastic flows

Tectonic evolution of Thyrrenian-Apennine system

Seismotectonic of the Apennines

## **Researches in sedimentary areas**

Apennines (Italy)  
Mts Iblei (Italy)  
Betic chain (Spain)  
Rif Chain (Morocco)  
Ankara basin (Turkey)  
Northwestern Andes (Argentina)

## **Researches in volcanic areas:**

Colli Albani  
Vesuvius  
Stromboli  
Cimini  
Cerro Galan, Tuzgle (Argentina)  
Cerro Blanco (Argentina)  
Cabo de Gata (Spain)  
Azores Islands (Portugal)  
Altafjordur (Eastern Iceland)

## **Research Projects**

- 2019-2022: Centro Ricerche Innovative per lo Spazio dell'Università degli Studi di Perugia – CRISP (ASI-UniPg; Resp. B. Bertucci)
- 2016-2019: Seismic interpretation and subsurface geology of the area affected by the 2016-2017 central Italy seismic sequence (M. Porreca)
- 2012-2014: MegaHazard2: Largescale mass-wasting events in the geological evolution of the Azores islands: location, frequency mechanisms and consequences (Resp. F. Marques)
- 2010-2013: Holocene and Pleistocene recovery of geomagnetic secular variation in the North Atlantic (Azores and Cape-Verde archipelagos and Portugal mainland): Geomagnetic and volcanological implications. FCT Project (Portugal) (PI: P. Silva)
- 2009-2013: Uplift movements in the Western Mediterranean sea during the Miocene-Pliocene transition (prof. M. Mattei and Dr. C. Soriano), in the framework of program "Azione Integrata Italia-Spagna" MIUR-Ministerio de Educaciòn y Ciencia
- 2009-2010: Recent volcanic evolution of Cerro Blanco volcanic complex (Argentina), bilateral action CNR (Italy)-CONICET (Argentina) (Dr. G. Groppelli, Prof. J. Viramonte).
- 2009-2013: Caratteri tettono-magmatici di margini di placca divergenti. (V. Acocella). Prin2009.
- 2009-2012: Eruptive mechanisms and emplacement processes related to the caldera collapsing eruptions: the case of Sete Cidades volcano" in the framework of the research program "Eruptive dynamics of the Azorean volcanism: analysis of the past to understand the future". University of Azores (M. Porreca).

2008-2010: "The formation of the western Mediterranean arcs and slab windows: relationships with the Neogene volcanism", in the framework of program PRIN-2008 (Prof. M. Mattei).

2007: Caldera types and types ignimbrite, Dr G. Giordano and prof. R. Cas, in the framework of the IUGG Perugia 2007 conference.

2006-2009: The eruption, emplacement and characteristics of extremely large volume pyroclastic flow deposits (Andes, South America), (Prof. R. Cas, Australia), funded by Australian Research Council (ARC) (DP0663560).

2005-2007: The volcanic magma structure and the feeding system (prof. M. Mattei), funded by INGV-GNV.

2005-2006: Definition of the conditions leading to the development of the fracture field of the 2002-2003 crisis along the Panarea-Stromboli axis (Panarea), funded by INGV.

2005: Paleomagnetic study on the Pliocene lacustrine Valle del Salto (Central Apennines) (prof. L. Sadori), funded by National Geological Service (APAT) and University Roma La Sapienza.

2004: Magnetostratigraphic study of the Plio-Pleistocene M. Mario sequence (Rome) (prof. R. Funiciello) during excavations of Monte Mario tunnel (Galleria Giovanni XXIII), funded by Astaldi.

2003-2005: Geological survey and mapping for the Italian Geological Map, Sheet n. 375, scale 1:50.000 (Tivoli) (prof. M. Parotto), in the framework of the Geological Map of Italy (CARG project).

2003-2005: Imaging the western Mediterranean margins: a key target to understand the interaction between deep and shallow processes (WESTMED) (prof. M. Mattei) (ESF).

2001: "Volcanic risk of Colli Albani region (Lazio, central Italy)" (prof. R. Funiciello), funded by the Civil Protection.

### **Publications and Supervisor of theses**

Author and co-author of 64 publications published to peer-reviewed scientific journals and 120 presentations at national and international conferences.

Editor of three Special Issues on Paleomagnetism, Cabo de Gata volcanic area and Seismotectonics.

### **Teaching and Tutoring**

Teacher of the Course in Petroleum Geology since 2014.

Tutor of 32 Master degree and 12 Bachelor degree theses; tutor of 3 PhD projects in Volcanology, Paleomagnetism and Seismotectonics.