Paola Stabile

EDUCATION

- *2015*, **PhD** in Earth Sciences, University of Camerino, on "Pantelleritic magmas: experimental study on the effect of [Na/(Na+K)] ration and fO_2 on iron redox and viscosity".
- *2011*, **MSc** in Earth Sciences**,** University of Calabria, on" Study of melt inclusions in basaltic magma (Mutnovsky volcano)" (110/110+lode).
- 2008, **BSc** in Science, University of Calabria, on "Distribution coefficients of trace elements in shoshonitic rocks of Vulcanello -Aeolian Islands" (108/110).

WORK EXPERIENCE

April 2018- present	Postdoctoral research in petrography/petrology (GEO/07)
October 2015-march 2018	POST-DOC in Earth Sciences, University of Camerino, on LIFE ECOTILES PROJECT
2017-2019	Partecipation to the CNRA PNRA project for research on Antarctic meteorites and microtektites (Local resp.: Gabriele Giuli)
2015-2017	FAR funds for REE behaviour in minerals and glasses (PI: Gabriele Giuli)
Febraury 2015-October 2015	Research grant on glass synthesis-Unicam
July 2014	Internship at the Institute of Mineralogy Hannover (D).
2014-2015	Partecipation to CNR PNRA project for research on Antarctic meteorites and microtektites (Local resp.: Gabriele Giuli)
December 2013-March 2014	Collaboration with the Mineralogy Dept. GZG Goettingen) for viscosity measurements by micropenetration technique.
Ocotber 2013-March 2014	Internship at the Institute of Mineralogy /Univeristy of Hannover (Germany) in the frame of **DAAD AWARD**.
November 2012-March 2013	Research period at the Institute for Mineralogy (Hannover).
June 2012-Septemeber 2012	Internship at the Institute for Mineralogy (Hannover) in the frame of ERASMUS PLACEMENT.

(Analysis at main facilities)

18-20 April 2016	FTIR analysis for water content determination in silicate glasses at IFN (Istituto Nazionale di Fisica Nucleare)-Laboratori Nazionali di Frascati LFN, Frascati-Roma.
19-30 November 2013	XANES measurements on silicate glasses at beamline GILDA BM08 at European Synchrotron Radiation Facility ESRF, Grenoble (F).
25-30 September 2013	XANES measurements on silicate glasses at beamline GILDA BM08 at European Synchrotron Radiation Facility ESRF, Grenoble (F).
20-22 August 2012	XANES measurements at ANKA-Karlsruhe Institute of Technology KIT, Karlsruhe (D).
29 Febraury-6 March 2012	Raman Spectroscopy measurements at the IPGP, Paris (F).

(Courses and schools)

March- July 2018	Percorso formative 24 CFU
13-15 June 2016	Course on Life Cycle Assessment- Centro Ricerca ENEA (Bologna).
October 2015-Febraury 2016	English class CAE (Certificate in Advanced English).
4-8 September 2013	"Beyond diffraction"-AIC School-Camerino.
21-25 July 2013	ZFM FERRUM Summer school 2013 on "Functional solids", Goslar (D).
8-13 July 2013	Summer school: "Melt, magmas and glasses 2013 LMU Munich (D).
15-21 September 2012	AIC Cristallographic school on "Structure, microstructure, nanostructure-exploiting the potential of powder diffraction techniques", Trento.
22-28 April 2012	Course on"Structural state of minerals and applications" at University of Copenhagen.
August 2011	Summer school "Sulfur in melts" 2011, Hannover-Goslar.

(Conferences and Workshops)

11-15 September 2016	2nd European Mineralogical Conference (Rimini, Italy).
5-8 June 2016	Partecipant with oral communication at EMPG (Experimental Mineralogy Petrology and Geochemestry) XV Conference, Zurich.
19 May 2016	Carrara Marmotec exhibition 2016 (Italy).
16-18 Febraury 2016	IWIW-International Workshop on Industrial Waste (Genova).
2-4 September 2015	Conferenza SIMP- SGI- So. Ge.I.- AIV, Florence 2015.
21-24 September 2014	Partecipant with oral communication at Glass Conference-ESG2014 Conference Parma (Italy).
25-30 August 2013	Helper student and participant at the Goldschimdt Conference 2013 (Florence, Italy).
22-24 August 2013	"5th Natural Silicate Glasses" Workshop, Florence.

LANGUAGE SKILLS

Italian	Native
English	Oral: Excellent (level C1) Written: excellent (level C1)
German	Basic knowledge

SCIENTIFIC SOCIETIES

SIMP, EAG, IAVCEI, AIV

COMPUTING

Good knowledge	MS Office, Kaleidagraph, Origin, IgPet
Basic knowledge	Corel Draw, Table curve

OTHERS ECDL certification

EXPERIMENTAL SKILLS

- Handling and construction of reduction furnace (gas mixing) for synthesis at elevated temperatures and ambient pressure.
- Handling of cold-seal pressure vessels (CSPV) and internal heated pressure vessels (IHPV) for synthesis at elevated temperatures and pressures.
- Basic knowledge of piston cylinder apparatus.
- Good knowledge of micropenetration technique for viscosity experiments.
- Handling of high temperature chamber furnace.
- Sample preparation for experimental work.

ANALYTICAL SKILLS

- Microscope, microprobe (EMP), Infrared spectroscopy (FTIR), Raman spectroscopy, X-ray absorption Spectroscopy (XAS), UV-VIS spectrometry, X-ray Diffractometry, SEM, ICP-MS, CS (Carbon-sulphur) analyzer, KFT (Karl-fisher titration) analyzer.

TEACHING

- Teacher of Geochemistry and Petrogenesis laboratory class (GEO/07) -4 CFU (28 hours)

–years 2016-2017/ 2017-2018 (UNICAM)

- Assistant during Laboratory course (both in Italian and English) of Petrography and Geochemistry- years :2014/2015 - 2015/2016 (UNICAM).

SUPERVISING

- Supervisor of master student Marius Stranghöner for the semester project on "Influence of fO_2 and composition on Fe^{2+}/Fetot ratio and coordination of iron in pantelleritic glasses" (2014); Institute of Mineralogy in Hannover.
- Tutor of master student Roberto Ercoli for the industrial stage on "Synthesis of silicate glasses" (2016); University of Camerino.
- Co-supervisor of master student Kailibinuer Abuduaini for the thesis in geochemistry on "Water solubility study in pantelleritic glasses" (2016); University of Camerino.
- Supervisor of master student Ernestina Appiah for the thesis in geochemistry on "A spectroscopic study of water solubility in pantelleritic glasses" (2017/2018); University of Camerino.
- Co-supervisor of master student Emmanuel Eshemel for the thesis in geomaterials on "Characterization and study of CDW" (2018/2019); University of Camerino.

CONTRIBUTIONS

Stabile P., Giuli G., Behrens H., Knipping J., Webb S. *The influence of oxidation state of iron on melt viscosity*. Glass Conference- ESG2014 Conference Parma (Italy) 21-24 September 2014 (oral contribution).

Stabile P., Behrens H., Carroll M.R., Paris E., and Giuli G. *H2O solubility in pantelleritic glasses: temperature, pressure and compositional effects.* EMPG XV (Fifteenth Symposium on Experimental Mineralogy, Petrology and Geochemestry- Zurich 5-8 June 2016 (oral contribution).

Stabile P., Radica F., Paris E., Ansaloni F.., Giuli G., Carroll. *Il progetto LIFE Ecotiles.* Final conference progetto LIFE ECOTILES- Camerino 11 May 2018 (oral contribution).

Stabile P., De Rosa R., Behrens H., and Vetere F. Melt inclusions in basaltic magma (Mutnovsky Volcano); Summer school "Sulfur in melts" 2011, Hannover-Goslar.

Stabile P., Giuli G., Cicconi M.R., Knipping J., Behrens H. and Paris E. Kinetics of iron reduction in anhydrous pantelleritic glasses; ZFM Summer School 2013 on Functional Solids, 21-26 July 2013,Goslar.

Stabile P., Giuli G., Cicconi M.R., Behrens H., Knipping J., Paris E. Kinetics of iron reduction in anhydrous pantelleritic glasses; 5th Natural Silicate Glasses, August 2013, Florence.

Knipping J., Behrens H., **Stabile P.,** Giuli G. Effect of fO_2 on the coordination and oxidation state of iron in silicate- DMG Conference 2013.

Stabile P., Giuli G., Behrens H., Knipping J., Webb S., Cicconi M.R, Paris E. Experimental studyon the effect of alkali ratio and oxygen fugacity on Fe redox and viscosity in pantelleritic glasses, Conferenza SIMP- SGI- So. Ge.I.- AIV, Florence 2015.

Stabile P., Behrens H, Cestelli M., Radica F., Bello M., Carroll M.R., Paris E. and Giuli G. Effect of temperature and composition on water solubility in pantellerites to 250 MPA. EMC 11-15 September 2016, Rimini.

Paris E., Radica F., **Stabile P.,** Maddala P., Ansaloni F., Giuli G. and Carroll M.R. Construction And Demolition Waste (Cdw) For Eco-Innovative Building Product; SIMP September 2017

Stabile P., Paris E., Ansaloni F., Radica F., Giuli G., Carroll M.R.. Raw Materials With Waste For New Eco-Sustainable Building Products (Ecotiles); GSA October 2017.

Stabile P., Appiah E., Carroll M.R. Water solubility in pantelleritic glasses- Goldschimdt Boston 2018- August 12-17

Stabile P., Appiah E., Carroll M.R. Water solubility in pantelleritic melts- Catania 2018, Convegno SGI-SIMP

LIST OF PUBBLICATIONS

(Papers)

Giuli G., Cicconi, M.R. , **Stabile P.,** Trapananti A., Pratesi G., Cestelli-Guidi M. and Koeberl C. (2014) New Data on the Fe Oxidation State and Water Content of Belize Tektites. **Lunar and Planetary Science Conference, Vol. 45**.

Knipping J.L., Behrens H., Wilke M., Gottlicher J. and **Stabile P.** (**2015**). Effect of oxygen fugacity on the coordination and oxidation state of iron in alkali bearing silicate melts. ***Chemical Geology 411****, 143-154*.

Stabile P. Pantelleritic magmas: experimental study on the effect of [Na/(Na+K)] ratio and fO_2 on iron redox and viscosity (**2016**) ***PLINIUS n.42*** DOI: 10.19276/plinius.2016.01013.

Stabile P., Webb S., Knipping J., Behrens H., Paris E., and Giuli G. (**2016**) Viscosity of pantelleritic and alkali silicate melts: effect of Fe redox state and Na/(Na+K) ratio, **Chemical Geology 422**,73-82.

Stabile P., Giuli G., Cicconi M.R, Paris E., Trapanati A. and Behrens H. (**2017**) The effect of oxygen fugacity and Na/(Na+K) ratio on iron speciation in pantelleritic glasses, **J. Non-Cryst. Solids 478,** 65-74.

Stabile P., Radica F., Bello M., Behrens H., Carroll M.R., Paris E. and Giuli G. (**2018**) H2O solubility in pantelleritic glasses: pressure and alkali effect, to **Journal of Mineralogy and Geochemistry 195/1.**

Stabile P., Bello M., Petrelli M., Paris E. and and Carroll M. (2018) Vitrification treatment of Municipal Solid Waste Bottom Ash ***submitted to Waste management***

Stabile P. and Carroll M.R. (2018) Petrologic Experimental Data On Vesuvius And Campi Flegrei Magmatism: A Review, in **Vesuvius, Campi Flegrei, and Campania Volcanism. Geology, petrology, and related risk (De Vivo B., Belkin H. E. and Rolandi G., Eds),** ***submitted***

Stabile P., Ernestina Appiah, Michael Carroll, Harald Behrens, Gabriele Giuli, Eleonora Paris (2019) Water solubility in Pantelleritic glasses: New experiments with FTIR measurements, ***in prep***

Arzilli F., **Stabile P.** Agostini C., Maimaiti M., Fabbrizio A., Landi P., Scaillet B, Carroll M.R. (2019) Crystallization kinetics of alkali feldspar in peralkaline rhyolitic melts through cooling experiments: implications on Pantelleria volcanic system, ***in prep***

Miller Zambrano, **Paola Stabile**, Hannah Riegel, Gabriele Giuli, Emanuele Tondi, Fabio Arzilli (2019) Fluid flow simulation and mineral characterization of fault cores hosted in heterolithic succession using X-ray micro-CT image analysis, ***in preparation for Frontiers***

(Conference papers)

Stabile P., Paris E., Cicconi M.R. and Giuli G. (2012). Fe and S role in rhyolitic magmas: the effect of alkalis. In: 2nd scientific day of school of Science ad Technology, UNICAM- book of abstracts. Camerino, 6/6/2012, vol. 2, p. 56-56, **ISBN/ISSN: 9788890736308.**

Stabile P., Cicconi M.R., Behrens H., Knipping J., Giuli G., and Paris E. (2013). Kinetics of iron reduction in anhydrous pantelleritic glasses. In: 3rd scientific day of School of Science and technology, UNICAM- book of abstracts. Camerino, 06/06/2013, vol. 3, p. 53-53, **ISBN/ISSN: 9788867680122.**

Stabile P., Cicconi M.R., Giuli G , Knipping J., Behrens H., Paris E. (2013). The structural role of iron in pantelleritic glasses. In: Goldschmidt Conference Abstracts 2013. Firenze, 25-30 Agosto 2013, vol. 77, **ISBN/ISSN: 1471-8022.**

Stabile P., Giuli G , Behrens H., Knipping J., Webb S., Cicconi M.R. & Paris E. (2015) Experimental study on the effect of alkali ratio and oxygen fugacity on Fe redox and viscosity in pantelleritic glasses. **Rend. Online Soc.Geol. It. Suppl. 2, Vol 35**

Stabile P., Behrens H., Cestelli M., Radica F., Bello M., Carroll M.R., Paris E. and Giuli G. (2016). A water solubility study in pantelleritic glasses to 250 MPa In: 5th scientific day of School of Science and technology, UNICAM- book of abstracts. Camerino, 08/06/2016, vol. 5, p. 82, **ISBN/ISSN: 9788867680269**.

Paris E., Grandinetti V., **Stabile P**., Radica F., Bello M., Giuli G., Ansaloni F. , Strina R., De Simone S., Carroll M.R (2016). ECO innovative methodologies fro the valorization of construction and urban waste into high grade TILES (ECOTILES), UNICAM- book of abstracts. Camerino, 08/06/2016, vol. 5, p. 78, **ISBN/ISSN: 9788867680269**.

MR Carroll, **P Stabile**, E Appiah, H Behrens, G Giuli, E Paris. Water solubility in Pantelleritic glasses: New experiments with Karl-Fischer, FTIR and Raman spectroscopic measurements- AGU Fall Meeting Abstracts 2017.

Paris E., Radica F., **Stabile P.,** Ansaloni F., Giuli G., and Carroll M.R. Waste Material Based Terrazzo Tiles: The Effect Of Curing Time And Extreme Environmental Conditions Over Glass Aggregate/Cement Matrix Boundary- AGU Fall Meeting Abstracts 2017.

Francesco Ansaloni, Francesco Radica, **Paola Stabile**, Eleonora Paris (2018). Ecological tiles from Urban Waste Glass and Construction & Demolition Waste, ISDRS conference (june 2018)- **ISBN 978-88-943228-1-1**.

Stabile P., Appiah E. Carroll M., Behrens H., Paris E.,Giuli G.- Water in Pantelleritic glasses measured by FTIR and Raman spectroscopy, UNICAM- book of abstracts. Camerino, 28/09/2018, **ISBN/ISSN: 9788867680368**.

Paris E. , Radica F. **Stabile P.** , Ansaloni F. , Giuli G. , Carroll R. Waste Material Based "Terrazzo" Tiles: The Effect Of Curing Time And Extreme EnvironmentalConditions Over Glass Aggregate/Cement Matrix Boundary, UNICAM- book of abstracts. Camerino, 28/09/2018, **ISBN/ISSN: 9788867680368**.

Bello M., Stabile P., Carroll M.R. Chemical and Mineralogical characterization of BA combustion products, UNICAM- book of abstracts. Camerino, 28/09/2018, **ISBN/ISSN: 9788867680368**.