

Europass curriculum vitae



Personal information

Surname / First name

Zucchini Azzurra

Address

Strada per Lidarno 10/F, Perugia, Italy

Telephone

Mobile: 0039 349 69 04 886

E-mail

azzizuc@libero.it

Nationality

Italian

Date of birth

10-03-1983

Gender

Female

Occupational field

Mineralogy and Geochemistry

Work experience

Dates

Since AY 2015/2016

Occupation or position held

Didactic work:

DEPARTMENT: Department of Physics and Geology, University of Perugia.
Master's degree - Ix055 - geological science and technology (LM-74 - Master's Degree in Geological Science and Technology D.M: 270).

CURRICULUM: Georesources, volcanic and seismic risk.

TEACHING: Industrial Minerals.

S.S.D.: GEO/06 – MINERALOGIA.

CFU: 6.0.

Dates

Since 2015

Occupation or position held

Affiliation to INFN (Istituto Nazionale di Fisica Nucleare)

Dates

Since October 2012

Occupation or position held

Referee for *Journal of Applied Crystallography*, *Physics and Chemistry of Minerals* and *European Journal of Mineralogy* journals.

Dates

Since AY 2010/2011

Occupation or position held

Co-tutor of master and bachelor thesis in **Enclosure #1**.

Dates

Since 2010

Occupation or position held

Research projects at synchrotron facilities listed in **Enclosure #2**.

Dates

Since 2009

Occupation or position held

Publications and Conference proceedings listed in **Enclosure #3**.

Dates

Since 2008

Occupation or position held

Member of research projects in **Enclosure #4**.

Dates	Since December 2014
Occupation or position held	3 years researcher position in mineralogy
Name and address of employer	University of Perugia (Department of Physics and Geology).
Dates	2016 September 14th
Occupation or position held	Convener at the congress EMC2016 "2nd European Mineralogical Conference - Minerals, rocks and fluids: alphabet and words of planet Earth" (Rimini, Italia). Session S14 "Advances in computational and experimental mineralogy: A journey from the surface to the deep Earth and beyond".
Dates	Ottobre 1 st – December 28 th 2014
Occupation or position held	Temporary Research Fellow in mineralogy titled "Physical properties of dolomite as a function of P, T and cation ordering: applications to geological sciences and material sciences".
Name and address of employer	University of Perugia (Department of Physics and Geology).
Dates	September 2013 – September 2014
Occupation or position held	1 year contract in the frame of "7° PQ" (programma quadro) – POR UMBRIA FSE 2007-2013 Asse IV "Capitale Umano". <u>Research project:</u> "Innovazione e sostenibilità ambientale dell'industria cementizia: utilizzo di nuovi materiali per la produzione di cemento" – "Innovation and sustainability in cement industry: new materials for cement production".
Name and address of employer	Umbria Region – University of Perugia (Department of Physics and Geology).
Dates	January – March 2013
Occupation or position held	Fellowship for research activities financed from PNRA09 project (v. Enclosure #3). <u>Scientific person in charge:</u> Prof.ssa Paola Comodi. <u>Title of the project:</u> "Caratterizzazione mineralogica-petrografica di noduli di mantello dalla Terra Vittoria, Antartica"
Name and address of employer	Department of Earth Sciences – University of Perugia
Dates	October 2012 – September 2013
Occupation or position held	Honour fellow in Mineralogy (SSD GEO/06).
Name and address of employer	Department of Earth Sciences – University of Perugia
Dates	July 2007 – July 2008
Occupation or position held	"Capable and deserving students" contract in relation to tutor activities
Name and address of employer	University of Perugia, 1 Piazza Università 06100, Perugia, Italy
Dates	January 2005 – December 2006
Occupation or position held	University of Perugia Board of Governors member as student delegation.
Name and address of employer	University of Perugia, 1 Piazza Università 06100, Perugia, Italy
Dates	3 October – 4 November 2005

Occupation or position held	Training to gain knowledge about geophysical researches applied to hydrogeological studies aimed at water resources basements preservation
Main activities and responsibilities	-data storage, data processing and elaboration of thematic papers related to environmental clean up -visioning of pits and construction sites
Name and address of employer	-implementation of Electrical Resistivity Tomography and Geognostic investigation. <i>Idrogeotec s.n.c.</i> , 78 via Fra Giovanni da Pian di Carpine, Perugia
Type of business or sector	Geological activities
Dates	Academic year 2004/2005
Occupation or position held	Recipient of a student part-time employment contract (150 hours) for the Mathematical, Physical and Geological Sciences library
Name and address of employer	University of Perugia, 1 Piazza Università 06100, Perugia, Italy

Education and training

Dates	Since 2009
Occupation or position held	Attended conferences and courses listed in Enclosure #5 .
Dates	4 September 2012
Title of qualification awarded	"Best PhD thesis" award for 2012 from the Italian Society of Mineralogy and Petrology (SIMP).
Dates	14 February 2012
Title of qualification awarded	European Ph.D.
Principal subjects/Occupational skills covered	Thesis "Dolomite stability as a function of P , T , $p\text{CO}_2$ and cation ordering. Applications to natural processes."
Name and type of organisation providing education and training	Ph.D. Course in "Earth Sciences and Geotechnolgy", University of Perugia
Dates	June-September 2010
Title of qualification awarded	Statement of Erasmus Placement Period (Encl. 8)
Principal subjects/Occupational skills covered	Trainee in the frame of LLP/ Erasmus Placement Programme.
Name and type of organisation providing education and training	Bayerisches Geoinstitut, University of Bayreuth (Bayreuth, Germania).
Dates	Academic Year 2007/2008
Title of qualification awarded	Master Degree
Principal subjects/Occupational skills covered	Thesis title: "Geochemical and mineralogical characterization of sedimentary dolomites. Influence of chemical and physical parameters on dissolution processes".
Name and type of organisation providing education and training	University of Perugia, Mathematical Physical and Natural Sciences Faculty, Geological Resources and Hazards degree course.
Level in national or international classification	110/110 cum laude

Dates | Academic Year 2004/2005
 Title of qualification awarded | Bachelor of Science
 Principal subjects/Occupational skills covered | Thesis title: "Background and geochemical anomalies of trace and ultratrace elements in groundwater. Study of Umbria-Marche Appennine".
 Name and type of organisation providing education and training | University of Perugia, Mathematical Physical and Natural Sciences Faculty, Geological Sciences degree course.
 Level in national or international classification | 110/110 cum laude

Dates | Academic Year 2001/2002
 Title of qualification awarded | High School degree
 Name and type of organisation providing education and training | Scientific Lyceum "G. Galilei", Perugia
 Level in national or international classification | 98/100

Personal skills and competences

Mother tongue | Italian

Other language
 Self-assessment
 European level ^(*)

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
B1	B1	B1	B1	B1

English

^(*) Common European Framework of Reference (CEF) level

Computer skills and competences | Good skill in using computer through a knowledge of Microsoft Office and OpenOffice packages in both Windows and Linux environments.
 Good skill in using different application softwares:

- experimental data processing: *GSAS, Topas, PowderX, Fit2D, SHELX, XcrysAlis, XtalDraw, VESTA*;
- *ab initio* calculations: *Crystal* and *VASP*;
- computer graphics: *Inkscape, GIMP, Corel Draw, Photoshop*;
- office suites: *Origin, QtiPlot, Gnumeric*.

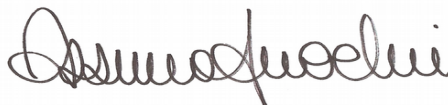
Enclosures

- Enclosure #1 | List of the co-tutored theses.
- Enclosure #2 | List of experiments at large facilities for research.
- Enclosure #3 | List of publications and conference proceedings.
- Enclosure #4 | List of research projects.

Enclosure #5 | List of attended courses and conference.

Date
Perugia, 11 October 2017

Signature

A handwritten signature in black ink, appearing to read 'Azzurra Zucchini', written in a cursive style.

ENCLOSURE #1

Thesis where the candidate was tutor

- Master thesis “Cementi ecosostenibili: il contributo dei nanomateriali alla cuocibilità del clinker portland”. Student: Dott. Giada Santarelli. AY 2014/2015.

Thesis where the candidate was co-tutor

- Bachelor thesis “Applicazione della TOF-SIMS in cosmochimica: analisi isotopica dell'ossigeno nella pallasite Mineo”. Student: Lisa Ricci. AY 2016/2017.
- Bachelor thesis “Effetto dei nanomateriali sulla cuocibilità dei clinker Portland”. Student: Giulia Bracci. AY 2013/2014.
- Master thesis “Nanomateriali e prodotti di seconda generazione per la produzione di cementi eco sostenibili”. Student: Dott. Giovanni Rizzo. AY 2012/2013.
- Master thesis “Indagini archeometriche sulla terra sigillata italica di Scoppieto (Baschi, Italia)”. Student: Dott. Mirco Vantaggi. AY 2011/2012.
- Master thesis “Studio minero-petrografico delle ricche dell'isola di Faial (Azzorre, Portogallo)”. Student: Dott. Domenico D'Elia. AY 2011/2012.
- Bachelor thesis “La terra sigillata di Scoppieto: caratterizzazione mediante indagini archeometriche”. Student: Michela Sgombra. AY 2010/2011

Experiments at synchrotron facilities

- European Synchrotron Radiation Facility (ESRF, Grenoble, France) (2017) (**in consideration**)

Experiment Title: The effect of disordering on the dissolution rate of dolomite

Principal proponent: Dr.ssa Azzurra Zucchini

- Elettra (Trieste, Italia) (2017) (**in consideration**)

Experiment Title: Fate of Potentially Toxic Elements (PTEs) in serpentine soils during weathering processes

Principal proponent: Prof. Pietro Marescotti

- Elettra (Trieste, Italia) (2015)

Experiment Title: Synchrotron X-ray microtomography on nano added Portland Clinkers

Principal proponent: Prof.ssa Paola Comodi

- Advanced Photon Source (APS, Chicago, USA) (2012)

Principal proponent: Prof.ssa Paola Comodi

- European Synchrotron Radiation Facility (ESRF, Grenoble, France) (2010)

Experiment Title: The effect of ordering on the equation of state of dolomite: implication for deep carbon cycle

Principal proponent: Prof.ssa Paola Comodi

Publications ISI

- Comodi P., Guidoni F., Nazzareni S., Balic-Zunic T., Zucchini A., Prakapenka V. (2017) A high pressure phase transition in chalcostibite, CuSbS_2 . **In press** on *European Journal of Mineralogy*.
- Zucchini A., Petrelli M., Frondini F., Petrone C.M., Sassi P., Di Michele A., Palmerini S., Trippella O., Busso M. (2017) Chemical and mineralogical characterization of the Mineo (Sicily, Italy) pallasite. A unique sample. **In press** on *Meteoritics and Planetary Science*.
- Palmerini S., Trippella O., Busso M., Petrelli M., Vescovi D., Zucchini A., Frondini F. (2017) s-Processing from MHD-Induced Mixing and Isotopic Abundances in Presolar SiC Grains. **In press** *Geochimica et Cosmochimica Acta*.
- Zucchini, A., Prencipe, M., Belmonte D., Comodi, P. (2017) *Ab-initio study of the dolomite to dolomite-II high pressure phase transition as influenced by cation disordering. European Journal of Mineralogy, 29(2), 227 – 238.*
- Comodi, P., Stagno, V., Zucchini, A., Fei, Y., Prakapenka, V. (2017) *The compression behavior of blödite at low and high temperature up to ~10 GPa: implications for the stability of hydrous sulfates on icy planetary bodies. Icarus, 285, 137 – 144.*
- Trippella, O., Busso, M., Wasserburg, G.J, Palmerini, S., Frondini, F., Petrelli, M., Zucchini, A. (2016) *Effects of the s-process on Fe-group elements in meteorites. Journal of Physics: Conference Series, 703(1), 012027.*
- Rossetti, I., Lasso, J., Compagnoni, M., Finocchio, E., Ramis, G., Di Michele, A., Zucchini, A., Dzwigaj, S. (2016) *Syngas production via steam reforming of bioethanol over Ni-BEA catalysts: A BTL strategy. International Journal of Hydrogen Energy, 41(38), 16878-16889.*
- Gentili, S., Bonadiman, C., Biagioni, C., Comodi, P., Coltorti, M., Zucchini, A.,

- Ottolini, L. (2015) *Oxo-amphiboles in mantle xenoliths: evidence for hydrous rich fluid circulation in the lithospheric mantle from Harrow Peaks, Victoria Land, Antarctica. Mineralogy and Petrology*, **109**(6), 741 – 759.
- Gentili, S., Comodi, P., Nazzareni, S., Zucchini, A. (2014) The Orvieto-Bagnoregio Ignimbrite: pyroxene crystal-chemistry and bulk phase composition of pyroclastic deposits, a tool to identify syn- and post-depositional processes. *European Journal of Mineralogy*, **26**(6), 743 – 756.
 - Zucchini, A., Comodi, P., Nazzareni, S., Hanfland, M. (2014) The effect of cation ordering and temperature on the high-pressure behaviour of dolomite. *Physics and Chemistry of Minerals*, **41**, 783 – 793.
 - Frondini, F., Zucchini, A., Comodi, P. (2014) Water-rock interactions and trace elements distribution in dolomite aquifers: The Sassolungo and Sella systems (Northern Italy). *Geochemical Journal*, **48**(3), 231 – 246.
 - Comodi, P., Nazzareni, S., Balić-Zunić, T., Zucchini, A., Hanfland, M. (2014) The high-pressure behavior of bloedite: A synchrotron single-crystal X-ray diffraction study. *American Mineralogist*, **99**(2-3), 511 – 518.
 - Comodi, P., Buccianti, A., Zucchini, A., Merletti, M., Bergamini, M., Nazzareni, S. (2014) Insights into the provenance of Roman moulds and poinçons found at Scoppieto (Terni, Italy). *Archaeometry*, **56**(S1), 58 – 77.
 - Zucchini, A., Comodi, P., Katerinopoulou, A., Balic-Zunic, T., McCammon, C., Frondini, F. (2012) Order–disorder–reorder process in thermally treated dolomite samples: a combined powder and single-crystal X-ray diffraction study. *Physics and Chemistry of Minerals* **39**, 319 – 328.
 - Zucchini, A., Prencipe, M., Comodi, P., Frondini, F. (2012) Ab initio study of cation disorder in dolomite. *Calphad* **38**, 177 – 184.

Non-ISI Publications

- Zucchini A., Comodi P., Buccianti A., Sgombra M., Vantaggi M., Fontanella S.

- (2016) Archeometria della terra sigillata di Scoppieto: uno studio in corso, in Scoppieto IV/2 – I materiali. Terra sigillata liscia, punzoni e matrici (a cura di M. Bergamini), 229 – 242, Edizioni Quasar, Roma. ISBN 978-88-7140-600-8.
- Comodi P., Gentili S., Buccianti A., Mariotti R., Zucchini A. (2015) Ceramica da cucina ossidante e ceramica comune calcarea: analisi archeometriche, in Scoppieto V – I materiali. Ceramiche comuni (a cura di M. Bergamini), 107 – 123, Edizioni Quasar, Roma. ISBN 978-88-7140-568-1.
 - Comodi, P., Zucchini, A., Buccianti, A. (2013) Coroplastica: analisi archeometriche, in Scoppieto III – Lo scavo, le strutture, i materiali (Coroplastica, Marmi) (a cura di M. Bergamini), 247 – 301, Edizioni Quasar, Roma. ISBN 978-88-7140-522-3.

Abstracts and conference proceedings

- Zucchini, A., Comodi, P., Di Michele, A., Vivani, R., Brizzi, E., Casagrande, S., Santarelli, G., Gentili, S., Santinelli, F., Neri, A. (2016) Sustainable portland clinkers: nano-materials addition to raw mixtures. *European Mineralogical Conference 2*, EMC2016-345.
- Gentili, S., Speziale, S., Zucchini, A., Comodi, P., Reichmann, H.J., Wunder, B. (2016) The effect of cations order/disorder on the elastic properties of dolomite. *European Mineralogical Conference 2*, EMC2016-354.
- Zucchini, A., Prencipe, M., Belmonte, D., Comodi, P. (2016) Dolomite to dolomite-II: a high pressure *ab-initio* study. *European Mineralogical Conference 2*, EMC2016-371.
- Zucchini, A., Comodi, P., Di Michele, A., Blasi, P., Gentili, S., Santinelli, F., Neri, A. (2015) Nanomaterials addition to raw mixtures for portland clinker production. A way to decrease clinkerization temperature. *Rendiconti Online della Società Geologica Italiana*, 35(2), 283. **Key note.**
- Gentili S., Bonadiman C., Biagioni C., Comodi P., Coltorti M., Zucchini A., Ottolini L. (2015) Oxo-amphiboles in mantle xenoliths: a key to understand the hydrous rich metasomatic melts circulating beneath Harrow Peaks, Victoria Land, Antarctica. *Rendiconti Online della Società Geologica Italiana*, 35(2), 259.

- Zucchini, A., Comodi, P., Di Michele, A., Gentili, S., Rizzo, G. (2014) Improving cement sustainability by using nano-materials in clinker production. *Rendiconti Online della Società Geologica Italiana*, 31(1), 236.
- Gentili, S., Comodi, P., Bonadiman, C., Biagioni, C., Zucchini, A., Coltorti, M. (2014) Volatile content in mantle amphiboles from Harrow Peaks, Northern Victoria Land (Antarctica). *Rendiconti Online della Società Geologica Italiana*, 31(1), 425.
- Zucchini, A., Prencipe, M., Comodi, P., Nazzareni S. (2014) Dolomite behaviour at high-pressure and phase transition to Dolomite-II. A couple of theory and experiment. *Rendiconti Online della Società Geologica Italiana*, 31(1), 301.
- Zucchini, A., Belmonte, D., Prencipe, M., Comodi, P. (2014) High pressure study of dolomite and phase transition to dolomite II. *Abstract volume – 21st General Meeting of the International Mineralogical Association*, 48.
- Comodi, P., Stagno, V., Zucchini, A., Fei, Y., Prakapenka, V. (2014) HP behaviour of bloedite at low and high T: insights to the knowledge of the ice planets. *Abstract volume – 21st General Meeting of the International Mineralogical Association*, 390.
- Comodi, P., Stagno, V., Zucchini, A., Fei, Y., Prakapenka, V. (2014) HP behaviour of bloedite at low and high T: insights to the knowledge of the ice planets. *Abstract volume – 21st General Meeting of the International Mineralogical Association*, 390.
- Gentili, S., Comodi, P., Bonadiman, C., Coltorti, M., Biagioni, C., Zucchini, A. (2013) A new insight of the role of the fluids below Victoria Land (Harrow Peaks, Antarctica). *Mineralogical Magazine* DOI: 10.1180/minmag.2013.077.5.7 1154.
- Comodi, P., Stagno, V., Zucchini, A., Fei, Y., Prakapenka, V. (2013) The baric behaviour of Bloedite at low and high T: A contribution to the study of icy satellites. *Mineralogical Magazine* DOI: 10.1180/minmag.2013.077.5.3 908.
- Zucchini, A., Comodi, P., Nazzareni, S., Prencipe, M. (2012) HP ab-initio study of dolomite compressibility as influenced by cation disordering. *European Mineralogical Conference 1*, EMC2012-37-3.
- Comodi P., Zucchini A., Nazzareni S. (2012) The effect of temperature and cation ordering on the HP behavior of dolomites. *European Mineralogical Conference 1*, EMC2012-333.

- Comodi P., Nazzareni S., Balic-Zunic T., Zucchini A., Hanfland, M. (2012) The HP stability of Bloedite ($\text{Na}_2 \text{Mg}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O}$): a contribution to the knowledge of asteroids and icy satellites. *Mineralogical Magazine*, **76**(6), 2581 – 2606.
- Zucchini A. (2012) Studio della distribuzione cationica nella struttura della dolomite e implicazioni sulla stabilità del minerale in processi naturali. Giornate di studio “Il ruolo della geochimica nel monitoraggio ambientale”, 6-7 luglio 2012, Dipartimento di Scienze della Terra, Università degli Studi di Perugia.
- Zucchini A., Comodi P., Prencipe M., Frondini F., McCammon C., Katerinopoulou A., Balic-Zunic T. (2011) About cation distribution in dolomite structure by theory and experiments. *Epitome Geoitalia 2011 - FIST 4/2011*, ISSN 1972-1552, 318-319.
- Comodi P., Nazzareni S., Balic-Zunic T., Zucchini A., Hanfland M. (2011) The stability of bloedite ($\text{Na}_2\text{Mg}(\text{SO}_4)_2 \cdot 4\text{H}_2\text{O}$) under high pressure by single crystal synchrotron x-ray diffraction: a contribution to knowledge of asteroids and icy satellites. *Epitome Geoitalia 2011 - FIST 4/2011*, ISSN 1972-1552, 244-245.
- Zucchini A., Comodi P., Prencipe M., Frondini F., McCammon C., Balic-Zunic T. (2011) Cation disordering in dolomite: theoretical and experimental approach. *Geophysical Research Abstracts* **13**, EGU2011-12591.
- Zucchini A., Prencipe M., Comodi P., Frondini F. (2010) Ab-initio study of dolomite cation disordering. Further details. 89th SIMP meeting - l'evoluzione del sistema terra dagli atomi ai vulcani (Ferrara, Italia).
- Zucchini A., Prencipe M., Comodi P., Frondini F. (2010) Ab-initio study of dolomite cation disordering. Preliminary results. *Acta mineralogica-petrographica abstract series* **6**, 820.
- Zucchini A., Comodi P., Frondini F., Marmottini F., 2009. Long Term Dissolution Experiments of Two Sedimentary Dolomite Samples. *Epitome Geoitalia 2009 - FIST*, **3/2009**, ISSN 1972-1552, 444-445.

Research projects where the candidate was/is a member

- INFN (Istituto Nazionale di Fisica Nucleare).

Scientific person in charge of the research unit where the candidate belongs (University of Perugia – INFN): Dr. Sara Palmerini

Title of the project: ERNA (European Recoil mass separator for Nuclear Astrophysics)

- Regione Umbria (Italy)

Scientific person in charge: Colacem s.p.a.

Scientific person in charge of the research unit where the candidate belongs (University of Perugia): Prof.ssa Paola Comodi

Title of the project: Studio di un nuovo clinker a base di nanomateriali e sviluppo di un innovativo cemento bianco ad alte prestazioni per applicazioni speciali, da realizzarsi mediante un processo maggiormente efficiente e a minor impatto ambientale

- UNIVERSITÀ DEGLI STUDI DI PERUGIA 2015, FONDO DI FINANZIAMENTO PER LA RICERCA DI BASE (in progress)

Scientific person in charge: Prof. Maurizio Busso

Title of the project: From Rocks to Stars. The Nuclear History of the Galaxy as Written in Solar System Solids

- FONDAZIONE CASSA DI RISPARMIO DI PERUGIA 2014

Scientific person in charge: Prof. Paola Comodi

Title of the project: Nanomateriali e materiali di riciclo per la produzione di cementi ecosostenibili

- “7° PQ” (programma quadro) – POR UMBRIA FSE 2007-2013 Asse IV "Capitale Umano" (09/2013 – 09/2014)

1 year contract in the frame of “7° PQ” (programma quadro) – POR UMBRIA FSE 2007-2013 Asse IV "Capitale Umano".

Title of the project: “Innovazione e sostenibilità ambientale dell’industria cementizia:

utilizzo di nuovi materiali per la produzione di cemento” – “Innovation and sustainability in cement industry: new materials for cement production”.

– PNRA2013

Scientific person in charge: Prof.ssa Costanza Bonadiman

Scientific person in charge of the research unit where the candidate belongs (University of Perugia): Prof.ssa Paola Comodi

Title of the project: Stabilità delle fasi idrate nel mantello litosferico dei grandi sistemi di rift continentale: un approccio petrologico-sperimentale su noduli e lave basiche della Terra Vittoria Settentrionale

– PRIN2010/2011 (in progress)

Scientific person in charge: Prof.ssa Maria Franca Brigatti

Title of the project: Dalle materie prime del sistema terra alle applicazioni tecnologiche: studi cristallografici e strutturali.

Scientific person in charge of the research unit where the candidate belongs: Prof.ssa Paola Comodi

– PNRA2009

Scientific person in charge: Prof. Massimo Coltorti

Scientific person in charge of the research unit where the candidate belongs: Prof.ssa Paola Comodi

Title of the project: Noduli e lave basiche per la conoscenza del sistema C-O-H nel mantello terrestre delle regioni polari

– PRIN2008

Scientific person in charge: Prof. Francesco Frondini

Title of the project: Studio del degassamento terrestre e modellizzazione geochimica del processo

Attended Courses

Dates	14 – 15 June 2016
Title of qualification awarded	Certificate of Attendance
Principal subjects/Occupational skills covered	Seminars on “Modelling the mineralogical world: how and why”
Name and type of organisation providing education and training	Gruppo Nazionale di Mineralogia (GNM) (Rome, Italia)
Dates	15 – 16 June 2015
Title of qualification awarded	Certificate of Attendance
Principal subjects/Occupational skills covered	School “I minerali e la luce: l'opportunità della bellezza”
Name and type of organisation providing education and training	Gruppo Nazionale di Mineralogia (GNM) (Perugia, Italia)
Dates	18 – 19 February 2015
Title of qualification awarded	Certificate of Attendance
Principal subjects/Occupational skills covered	Workshop “Le geoscienze e il ciclo del carbonio”
Name and type of organisation providing education and training	SIMP e SGI, Dipartimento di Scienze della Terra “A. Desio”, Università degli Studi di Milano
Dates	2 – 5 February 2015
Title of qualification awarded	Certificate of Attendance
Principal subjects/Occupational skills covered	School “La Fisica dei Minerali: implicazioni geologiche e applicazioni pratiche”
Name and type of organisation providing education and training	Gruppo Nazionale di Mineralogia (GNM) (Bressanone, Italia)

Dates	27 February – 1 March 2013
Title of qualification awarded	Certificate of Attendance
Principal subjects/Occupational skills covered	School “Colloquium sulla costruzione dei diagrammi di fase”
Name and type of organisation providing education and training	SoGel and SIMP, S. Margherita Ligure (Liguria, Italy).
Dates	5 – 6 July 2012
Title of qualification awarded	Certificate of Attendance
Principal subjects/Occupational skills covered	Course “Il ruolo della geochimica nel monitoraggio ambientale”
Name and type of organisation providing education and training	Department of Earth Sciences, University of Perugia (Perugia, Italy)
Dates	29 – 30 March 2012
Title of qualification awarded	Certificate of Attendance
Principal subjects/Occupational skills covered	Course “La valutazione del rischio geochimico: nuovi strumenti per una gestione sostenibile del territorio”
Name and type of organisation providing education and training	ENEA and SoGel c/o ENEA – via Giulio Romano 41, Roma
Dates	20 December 2012
Title of qualification awarded	Certificate of Attendance
Principal subjects/Occupational skills covered	Course in Radioprotection
Name and type of organisation providing education and training	Department of Earth Sciences, University of Perugia (Perugia, Italy)
Dates	12 – 18 December 2010
Title of qualification awarded	Certificate of Attendance
Principal subjects/Occupational skills covered	Ph.D. School “Structural State of Minerals and its Applications”

Name and type of organisation providing education and training	Department of Geography & Geology, University of Copenhagen (Copenhagen, Denmark)
Dates	2 – 4 August 2010
Title of qualification awarded	Certificate of Attendance
Principal subjects/Occupational skills covered	Course “Equilibrium and transport properties of high temperature systems”
Name and type of organisation providing education and training	Bayerisches Geoinstitut, University of Bayreuth (Bayreuth, Germany)
Dates	1 – 4 March 2010
Title of qualification awarded	Certificate of Attendance
Principal subjects/Occupational skills covered	Seminars “Some Problems of Geodynamics: Rheology of Lithosphere and Mantle”
Name and type of organisation providing education and training	Department of Earth Sciences, University of Perugia (Perugia, Italy)
Dates	15 – 19 February 2010
Principal subjects/Occupational skills covered	Short Course “High-Pressure Experimental Techniques and Applications to the Earth’s Interior”
Name and type of organisation providing education and training	Bayerisches Geoinstitut, Università di Bayreuth (Bayreuth, Germany)
Dates	8 – 12 February 2010
Principal subjects/Occupational skills covered	Short Course “Microstructures and Physico-Chemical Properties of Earth and Planetary Materials”
Name and type of organisation providing education and training	SIMP (Società Italiana di Mineralogia e Petrologia) and Marie Curie Research Training Network - c2c
Dates	12 November 2009
Title of qualification awarded	Certificate of Attendance
Principal subjects/Occupational skills covered	Seminar on “Geological, Geophysical and Geochemical methods for carbon capture and storage”
Name and type of organisation providing education and training	Department of Chemistry, University of Rome “Sapienza”

organisation providing
education and training

Dates

14 – 18 September 2009

Principal
subjects/Occupational
skills covered

Summer School "MSSC2009 - Ab Initio Modelling in
Solid State Chemistry"

Name and type of
organisation providing
education and training

Imperial College (London)

Dates

7-8 September 2009

Principal
subjects/Occupational
skills covered

Short Course SC9 "*Tecniche Computazionali Ab Initio
nella risoluzione di problemi di Interesse Mineralogico*"
held before Heart Sciences Italian Federation Meeting
"Geoitalia 2009"

Dates

12 February 2009

Principal
subjects/Occupational
skills covered

Course "Nuove applicazioni della spettroscopia
RAMAN nei minerali"

Name and type of
organisation providing
education and training

Università degli studi di Parma, dipartimento di Scienze
della Terra

Dates

26 – 30 January 2009

Principal
subjects/Occupational
skills covered

Course "From micro to macro: microstructural and
texture analysis from diffraction data"

Name and type of
organisation providing
education and training

Department of Earth Sciences, University of Milan
(Milan, Italy)

Conferences

Dates	5 – 6 October 2017
Principal subjects/Occupational skills covered	Attendance at “GIANTS2017” IX Incontro dei Gruppi Italiani di Astrofisica Nucleare Teorica e Sperimentale (Bologna, Italia)
Dates	3 – 6 September 2017
Principal subjects/Occupational skills covered	Attendance at “Geosciences: a tool in a changing world” (Pisa, Italia)
Dates	26 – 29 June 2017
Principal subjects/Occupational skills covered	Attendance at the XLVI annual meeting of the Italian Crystallographic Association (AIC) (Perugia, Italia)
Dates	15 – 16 December 2016
Principal subjects/Occupational skills covered	Attendance at “Secondo convegno interdipartimentale – Fare Scienza oggi” (Perugia, Italy)
Dates	11 – 15 September 2016
Principal subjects/Occupational skills covered	Attendance at EMC2016 “2nd European Mineralogical Conference - Minerals, rocks and fluids: alphabet and words of planet Earth” (Rimini, Italia)
Dates	2 – 4 September 2015
Principal subjects/Occupational skills covered	Attendance at “Il Pianeta Dinamico: sviluppi e prospettive a 100 anni da Wegener” (Florence, Italy)
Dates	10 – 12 September 2014
Principal subjects/Occupational skills covered	Attendance at “The Future of the Italian Geosciences - The Italian Geosciences of the Future” (Milan, Italy)
Dates	2 – 6 September 2012
Principal subjects/Occupational skills covered	Attendance at “EMC2012 - European Mineralogical Conference” (Frankfurt, Germany)

Dates	19 – 23 September 2011
Principal subjects/Occupational skills covered	Attendance at “VIII Forum Italiano di Scienze della Terra – Geoitalia 2011” (Turin, Italy)
Dates	3 – 8 April 2011
Principal subjects/Occupational skills covered	Attendance at “European Geosciences Union General Assembly 2011” (Vienna, Austria)
Dates	21 – 27 August 2010
Principal subjects/Occupational skills covered	Attendance at “IMA2010-20th General Meeting of the International Mineralogical Association” (Budapest, Hungary)
Dates	9 – 11 September 2009
Principal subjects/Occupational skills covered	Attendance at “Federazione Italiana di Scienze della Terra – Geoitalia 2009” (Rimini, Italy)
Dates	28 May 2009
Principal subjects/Occupational skills covered	Conference “Recent advances in the study of hydrous minerals”
Name and type of organisation providing education and training	Department of Earth Sciences, University of Florence (Florence, Italy)