EUROPEAN CURRICULUM VITAE FORMAT

PERSONAL INFORMATION

Name	**BARILARO, Federica**
Nationality	Italian

INTEREST AND COMPETENCES

Non-marine carbonates and volcaniclastics: 1) sedimentology, stratigraphy, petrography and diagenesis; 2) rock physics and petrophysics; 3) reservoir characterization; 4) geochemistry and stable isotope: 5) geo-microbiology, 6) geophysics; 7) seismology.

SELECTED WORK EXPERIENCE

• Dates	18th February 2019 -31st May 2019 / 9th April 2018 - 31st May 2018
• Name and address of employer	Department of Theoretical and Applied Sciences, University of Insubria
• Type of business or sector	Academical
• Occupation or position held	Adjunct Professor
• Main activities and responsibilities	Teaching activities related to Rock identification, rock petrography and cartography in support of the Geology and Lithology course.

• Dates	1th September 2014 -31st August 2015
• Name and address of employer	ETH ZURICH–Geological Institute, Sonneggstrasse 5, 8092 Zurich (CH)
• Type of business or sector	Academical
• Occupation or position held	Scientist
• Main activities and responsibilities	Multi-disciplinary biogeochemical and petrophysical research conducted to investigate the biotic and abiotic influence of mineral formation in non-marine and marine carbonate settings. Petrographic and petrophysical characterisation of Cretaceous South Atlantic carbonate reservoir core samples have been carried out. Teaching activity on continental carbonates during the laboratory activities of the course of Geomicrobiology.

• Dates	20th June to 12th August 2011
• Name and address of employer	STATOIL ASA, Sansdslivegen 90, Sandsli-5254 Bergen (N)
• Type of business or sector	Industry
• Occupation or position held	Summer internship
• Main activities and responsibilities	Development and constraint of predictive models of porosity and permeability vs. fabric types and depositional systems 1) to evaluate the quality of hydrothermal travertines (Tuscany and Marche, Italy) in terms of potential reservoir and 2) to contribute to the understanding of South Atlantic carbonate reservoirs. Methods: field activity, helium porosity and permeability, petrographic and SEM observations, micro-CTscanning and Avizo Fire software. Core analysis of Tivoli (Lazio, Italy) continental carbonates has been also conducted.

• Dates (from – to)	15th January to December 2009
• Name and address of employer	Italian National Research Council- Research Institute for Geo-hydrological Protection (CNR-IRPI) Via Cavour, 4-6 - 87036 Rende (CS), Italy.
• Type of business or sector	Accademical
• Occupation or position held	Scientific research assistant
• Main activities and responsibilities	Research conducted to detect causes and effects of areas subject to landslides and natural disasters in Calabria (Italy). Methods: Bibliographic and data research; field activity; aerial photograph analysis and interpretation; geotechnical characterisation by in situ and lab tests;

Esri-GIS Software used to capture, store, manipulate, analyse, manage all the data and to create interactive geological maps

EDUCATION AND TRAINING

• Dates	5th February 2013
• Name and type of organisation providing education and training	University of Milan, Earth Science Department "Ardito Desio", Via Mangiagalli 34, 20133 Milan, Italy.
• Title of qualification awarded	Ph.D in Earth Sciences
•Principal subjects	Thesis: "The character and spatial distribution of Holocene and Pleistocene hydrothermal travertines (Albegna Valley, Southern Tuscany, Central Italy)". The aim of the project was to establish facies models, fabric types, porosity, diagenetic evolution, abiotic vs. microbially induced processes and spatial distribution of Holocene and Pleistocene travertine. The PhD research was part of a project funded by BG Group (UK), Repsol (Brasil) and Statoil (Norway) and contributed to the understanding of non marine carbonate reservoirs. Calcareous tufa (Lombardy, Italy) and microbial lacustrine (Pyramid Lake, Nevada; Mono Lake, California; Great Salt Lake, Utah, USA; Ries Crater, Germany) carbonates were also object of study. Lectures on continental carbonates have been held for the Geological Sciences, Milano University students.
• Dates	10th January 2010
• Name and type of organisation providing education and training	Ordine dei Geologi della Calabria (Association of Calabria Geologists). Earth Science Department, University of Calabria, Via Ponte Pietro Bucci, 87036, Arcavacata di Rende (CS), Italy.
• Title of qualification awarded	Licensed geologist
• Dates	17th December 2008
• Name and type of organisation providing education and training	Earth Science Department (Faculty of Mathematics, Physics and Natural Sciences), University of Calabria (Unical), Via Ponte Pietro Bucci, 87036 Arcavacata di Rende (CS), Italy.
• Title of qualification awarded	Master's Degree in Geological Sciences Final Mark: 110/110 cum laude
• Principal subjects	Thesis: "Characterisation of soil-slips in Vibo Valentia areas. Pluviometric event of 3 July 2006". Geomorphological and geotechnical study conducted in collaboration with the CNR-IRPI of Rende (CS), Italy. Esri-GIS Software was used to capture, store all the data and to create geological maps. Supervisors: Prof. Salvatore Critelli and Dr. Loredana Antronico.
• Dates	26th July 2006
• Name and type of organisation providing education and training	Earth Science Department (Faculty of Mathematics, Physics and Natural Sciences), University of Calabria (Unical), Via Ponte Pietro Bucci, 87036 Arcavacata di Rende (CS), Italy.
• Title of qualification awarded	Bachelor Degree in Geological Sciences
• Principal subjects/occupational skills covered	Thesis: "Stratigraphy and sedimentology of Neogene deposits of Piscopio areas (Vibo Valentia, Southern Italy)". This project about sedimentology, stratigraphy and biostratigraphy of a mixed silicoclastic-carbonate marine/continental systems, was conducted under the supervision of Prof. Claudio Neri.

AWARDS AND HONORS

8th March 2016: Early Career Scientists Committee (ECSC) International Association of Sedimentology (IAS).

24th October 2011: Ozan Sungurlu Memorial Award for the Best International Student Poster- American Association of Petroleum Geologists (AAPG). AAPG 2011-International Conference & Exhibition (ICE), Milan, Italy.

27th June 2009: Special Mention Certificate of "Best Graduate 2008"–Faculty of Mathematics, Physics and Natural Sciences, University of Cosenza, Arcavacata di Rende (CS), Italy.

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE **Italian**

OTHER LANGUAGES

English

• Reading skills: Excellent
• Writing skills: Good
• Verbal skills: Good

Spanish and French

• Reading skills: Enrty level
• Writing skills: Enrty level
• Verbal skills: Enrty level

SOCIAL AND ORGANIZATION SKILLS AND COMPETENCES

OPEN, GENEROUS AND CARING. PASSIONATE, HIGHLY MOTIVATED WITH EXCELLENT INTERPERSONAL AND COMMUNICATION SKILLS. OPTIMISM, ENTHUSIASM, IDEAS, CREATIVITY, FORESIGHT AND ABILITY TO IDENTIFY OPPORTUNITIES AND CHALLENGES. COURAGE, DEDICATION, ENDURANCE AND AMBITION. HANDS-ON, GOAL-ORIENTED AND RESULTS-ORIENTED. SHARING KNOWLEDGE/EXPERIENCE SKILLS WITH THE ABILITY AND THE DESIRE TO WORK IN A COLLABORATIVE ENVIRONMENT. ENJOY WORKING WITHIN MULTIDISCIPLINARY TEAMS. INDEPENDENTLY AND AT THE SAME TIME, STRONG TEAM PLAYER. EXCELLENT COOPERATIVE, ORGANIZATION AND ANALYTIC SKILLS, UNDERSTANDING, FLEXIBLE MINDSET, APTITUDE TO STIMULATE NEW IDEAS, TO ENJOY TO HELP OTHERS TO SUCCEED, CAPABILITY TO ACCEPT CONSTRUCTIVE FEEDBACK. MULTI-TASKING, PROACTIVE. APTITUDE TO TAKE RESPONSIBILITY AND TO ACT DECISIVELY. ABILITY TO WORK UNDER PRESSURE, TO MEET DEADLINES WITHOUT COMPROMISING ON QUALITY.

TECHNICAL SKILLS AND COMPETENCES

Proficient in the use of: Microsoft Office; Adobe Creative Suite. Basic knowledge of: a) CT Analysis, 3D Visualization and NRecon reconstruction software used for X-ray microtomography (Micro-CT) analyses and, b) Esri-ArcGIS.

Solid background in Stratigraphy, Sedimentology, Carbonate geology; fieldwork analyses (mapping, log measurement, facies analyses), laboratory (traditional petrographic methods on rocks and sediments ; XRD ; SEM-EDS)

SELECTED CONFERENCE ACTIVITY

Barilaro F., Michetti A., de Franco R., Di Capua A., Villa A. (2019) Seismically-triggered, syn-sedimentary deformation structure suite in travertine deposits as guide for (paleo)seismic hazard assessment. International Association of Sedimentologists 2019, Rome, 10-13 September.

Di Capua and Barilaro F., (2019) Pyroclastic deposits in a non-marine hydrothermal environment: emplacement mechanism, diagenesis and implication for hydrocarbon generation and accumulation. AAPG ICE 2019, Buenos Aires, 27-30 August 2019.

Barilaro F. and Di Capua (2019) Influence of volcaniclastic sedimentation on hot-spring related carbonate sedimentation: a potential pre-Salt basin analogue? EGU 2019,Vienna, 7-12 April.

Barilaro F., Di Capua A., Vasconcelos C. (2018) Biotic to abiotic mineral precipitation in continental hydrothermal setting: a potential journey from early Earth to extra-terrestrial planets. Società Geologica Italiana 2018 Congresso SGI-SIMP Catania 12-14 September 2018.

Barilaro F. and Di Capua A. (2018). Interaction between hydrothermal-carbonate precipitation and volcanoclastic sedimentation in continental settings: is there any relevance to hydrocarbon generation? Società Geologica Italiana 2018 Congresso SGI-SIMP Catania 12-14 September 2018.

Barilaro F., Verwer K., Lapponi F., Della Porta G. Pore Structure, Porosity and Permeability of Continental Carbonates: A Case Study of Pleistocene Travertine (Southern Tuscany, Italy.) Poster presentation. AAPG Hedberg Conference "Microbial carbonate reservoir characterization", Houston, Texas, 4th-8th of June 2012.

Barilaro F., Della Porta G., Capezzuoli E. Upper Pleistocene-Holocene? terraced-slope hot- spring travertine system and its modern analogue in the Albegna Valley, Southern Tuscany

(Central Italy).Poster presentation. AAPG International Conference and Exhibition, Milan, Italy, October 2011.

PUBBLICATIONS AND TECHNICAL PRODUCTIONAL

Barilaro F. and Di Capua (2019) Piroclastic flow in hydrothermal travertine systems: emplacement, diagenesis and implication for early Earth and Mars. In prep.

Barilaro F. (2018) Minero-chemical properties of travertine deposit: quality assessment and definition of potential raw material resources. Technical report for a private mining company.

Barilaro F. (2018) Preliminary stratigraphic, sedimentological characterization of travertine and volcanic sequences of the S. Travertine body. Technical report for a private mining company.

Di Capua A., Groppelli G., and Barilaro F. (2018) Deep-Water Volcaniclastic Fans: What Can We Learn from the Past? AAPG Search and Discovery Article #51487 (2018).

Barilaro F., Bontognali T. R.R., McKenzie J.A. and Vasconcelos C. (2015). Microbial bio-mineralization processes in hydrothermal travertine: the case study of two active travertine systems (Tuscany, Italy). Geophysical Research Abstracts Vol. 17, EGU2015-13809-7, 2015

Barilaro F., Vasconcelos C. (2015). Geometry, depositional systems, abiotic versus biotic fabric types, porosity, permeability and diagenesis of hydrothermal travertine. Technical Report for Petrobras.

Barilaro F. (2013). Depositional systems and fabric types of present-day calcareous tufa deposits at Montevecchia and Curone Valley Regional Park, Lombardy, Northern Italy. Report for Statoil (Norway), Repsol (Brasil) and Bg (UK).

Barilaro F. (2012). Pleistocene hydrothermal travertine deposit and its modern “analogue” in the Albegna Valley, Southern Tuscany (Central Italy). Report for Statoil (Norway), Repsol (Brasil) and Bg (UK).

Barilaro F., Della Porta G., Capezzuoli E. Upper Pleistocene-Holocene? terraced-slope hot-spring travertine system and its modern analogue in the Albegna Valley, Southern Tuscany (Central Italy) AAPG.Search and Discovery Article #50561 (2012) Barilaro F. and Della Porta G. (2012). Pleistocene-Holocene hydrothermal travertine deposits in Southern Tuscany: depositional environments, fabric types and porosity. Field trip guide-book.

Barilaro F., Della Porta G., Capezzuoli E. (2012). Depositional geometry and fabric types of hydrothermal travertine deposit (Albegna, Valley, Tuscany, Italy). Rend. Online Soc. Geol. It., Vol. 21 (2012), pp. 1024-1025.

Della Porta G. and Barilaro F. (2011) Non-Marine Carbonate Precipitates: A Review Based on Recent and Ancient Case Studies. AAPG Search and Discovery Article #30217 (2011).

Barilaro F., Della Porta G., Capezzuoli E. (2011). Sedimentology and petrography of hot-spring travertine deposits in the Albegna Valley, Southern Tuscany (Central Italy). Epitome, Geoitalia 2011. ISSN 1972-1552 Vol. 4, pag. 306.

Barilaro F., Della Porta G., Ripamonti M. (2010). Southern Tuscany Neogene thermal travertine field trip in the areas of Rapolano Terme and Albegna River. Field trip guidebook.

Barilaro F., Borrelli L., Antronico L. (2009). Il dissesto idrogeologico in alcune aree della provincia di Vibo Valentia a seguito delle piogge dell’inverno 2008-2009. CNR-IRPI U.O.S di Cosenza. Rapporto N° 777.

5 dicembre 2019

Federica Barilaro