

Curriculum Vitae
Maria Luce Frezzotti

Education

- Ph.D. (Petrology) Università di Siena – Vrije Universiteit Amsterdam, C. Ghezzi and J.L.R. Touret, Thesis Advisors
- M.Sc. (Geology) cum laude. Università di Siena
- Liceo Classico Enea Silvio Piccolomini, Siena

Professional Positions

- Present position: Dean Doctoral School, Università Milano Bicocca
- Present position: Full Professor of Petrology, Università Milano Bicocca
- Vice-Dean Doctoral School, Università Milano Bicocca, 2019-2020
- Coordinator Ph. D. Course in Chemical Geological and Environmental Sciences, Università Milano Bicocca, 2015-2020
- Associate Professor of Petrology, Università Milano Bicocca, 2012-2019
- National habilitation as full Professor in Petrology, 2012
- Associate Professor of Petrology, Università di Siena, 2006-2011
- Assistant Professor Petrology, Università di Siena, 1996-2006
- Adjoined Resercher, IGAG-CNR, Roma, 1997-2011
- Visiting professor: Faculteit voor Aardwetenschappen, Vrije Universiteit, Amsterdam 1996-1997.
- Assistant Professor Petrology, Università di Siena, 1996-2006
- Researcher, Università di Siena, 1992-1996
- Postdoctoral Appointee: Faculteit voor Aardwetenschappen, Vrije Universiteit, A'dam 1990-1992
- Teaching Assistant: Faculteit voor Aardwetenschappen, Vrije Universiteit, Amsterdam 1990-1992
- Ph.D. Student: Università di Siena, and Vrije Universiteit, Amsterdam 1986-1990

Research Interests:

Research interests are in the general areas of igneous and metamorphic petrology and Earth volatiles cycling and include:

- 1) Deep Earth Carbon Cycle and diamond genesis.
- 2) Modelling of fluid phase behaviour during subduction of oceanic and continental lithosphere.
- 3) Characterization of mantle metasomatic processes in different geodynamic settings.
- 4) Relations between recent magmatism and geodynamics in Italy.
- 5) Applications and development of Raman micro-spectroscopy in the Earth and environmental sciences.

87 publications - h index = 34 (SCOPUS)

Honours, Awards

- Medal for Physical and Natural Sciences, Accademia delle Scienze Italiana, 2019
- Fellow Mineralogical Society of America, 2015

Major Teaching

- Fluids in the Earth, Ph.D. Course, Università Milano Bicocca, 5 credits, 2015-present
- Petrogenesis and Geodynamics, Università Milano Bicocca, 6 credits, 2014-present
- Igneous and Metamorphic Petrology, Università Milano Bicocca, 7 credits, 2012-present
- Volcanology, Università di Siena, 9 credits, 1996-2013
- Fluids in the Earth, Università di Siena, 6 credits, 2010-2012
- Petrology, Università di Siena, 6 credits, 2005 - 2009
- Spectroscopic laboratory techniques in Earth Sciences, Università di Siena, 6 credits, 2001-2012
- Geothermics, Università di Siena, 72 hours, 9 credits, 1996-1998
- Igneous Petrology, Vrije Universiteit, 7 credits, 1996
- Volcanology, Vrije Universiteit, 3 credits, 1996

Supervision of Doctoral Student Research

- Samantha Remigi, Ph.D. expected 2021, Università Milano Bicocca, Co-advisor R.J. Bodnar
- Renzhi Zu, Ph.D. 2020, Universities Milano Bicocca and Nanjing, Co-advisor P. Ni
- Eduardo Ogialoro, Ph.D., 2017, Università Milano Bicocca
- Alessio Casagli, Ph.D. 2014, Università di Siena
- Corrado di Martino, Ph.D. 2011, Università di Bologna, Co-advisor F. Lucchi
- Rossana Bonelli, 2007, Università di Siena.
- Simona Ferrando, Ph.D., 2003, Università di Torino, Co-advisor. R. Compagnoni
- Vittorio Zanon, Ph.D. 2000, Università di Perugia, Co-advisor A. Peccerillo
- Sabrina Nazzareni., Ph.D. 1998, Università di Perugia, Co-advisor A. Zanazzi
- Barbara Stefanini, Ph.D. 1996, Università di Siena, Co-advisor C. Ghezzo

External PhD Thesis evaluator

- Katerina Schloglova, Ph.D., 2017, ETH Zurich, Switzerland
- Chiara Tiraboschi, Ph.D., 2015, Università Milano, Italy
- Daniele Redi, Ph.D. 2014, University of Tasmania
- V. Hurai. Ph. D. 2010 Comenius University, Bratislava, Slovakia
- E. Campos, Ph.D 2002, Vrije Universiteit Amsterdam
- E. Wulff Pedersen, Ph.D. 1997 Mineralogisk, Geologisk Museum, Oslo

Expertise in Research Management

Coordinator or P.I. of projects:

- MSCA-ETN 2021-2023 Fluids driving the evolution of the continental crust: influence of pathway NETWORKS, fluxes, and time scales – FLUIDNET.
- MIUR 2019 - 2021 Carbon cycling and Earth control on the livable planet: connecting deep key carbon sources to surface CO₂ degassing by transfer processes - Connect4Carbon.
- MIUR 2012 - 2015 La subduzione e l'esumazione di litosfera continentale: i suoi effetti sulla struttura degli orogeni, sull'ambiente e sul clima.
- MIUR 2010 - 2012 Caratterizzazione petrologica e geochemica delle fasi fluide generate nei processi di subduzione profonda di crosta continentale, e processi di interazione tra fasi fluide e cuneo di mantello.
- MIUR 2004 - 2006 Caratterizzazione del mantello litosferico al di sotto della regione italiana attraverso lo studio petrologico, delle inclusioni fluide e vetrose e degli isotopi stabili negli xenoliti di mantello.

- MIUR 2002 – 2004 Caratterizzazione dell'evoluzione petrologica e geochemica del mantello al di sotto del rift-Est Africano attraverso lo studio delle inclusioni fluide e vetrose e degli isotopi negli xenoliti ultramafici.
- Socrates EU Program, Università di Siena, VU Amsterdam e Oslo 1997 - 2003.
- EU Network Human Capital and Mobility: Fluid/rock interaction in crystalline basements 1993 – 1995.
- PRNA, Progetto Nazionale di Ricerca in Antartide per lo studio delle fasi fluide nella Terra Vittoria Settentrionale 1988 – 2002.
- MIUR, 2010 – 2012 Caratterizzazione petrologica e geochemica delle fasi fluide generate nei processi di subduzione profonda di crosta continentale, e processi di interazione tra fasi fluide e cuneo di mantello.
- MIUR, 2004 – 2006 Caratterizzazione del mantello litosferico al di sotto della regione italiana attraverso lo studio petrologico, delle inclusioni fluide e vetrose e degli isotopi stabili negli xenoliti di mantello.
- Swiss National Research Foundation (FNRS). The genesis of alkaline magmatism., 2003 - 2004 (Coordinator J. Hernandez, Lausanne).
- MIUR, 2002 – 2004 Caratterizzazione dell'evoluzione petrologica e geochemica del mantello al di sotto del rift-Est Africano attraverso lo studio delle inclusioni fluide e vetrose e degli isotopi negli xenoliti ultramafici.
- EU Socrates Program, Siena, VU Amsterdam, and Oslo Universities, 1997-2003.
- EU Research Network Human Capital and Mobility: Fluid/rock interaction in crystalline basements, 1993-95.

Service to science

- Associate Editor Communications Earth and Environment, Nature group, 2020- present
- Panel member for awards and grants, International Mineralogical Association, 2018-present
- Panel member for fellowship awards, Mineralogical Society of America, 2018-present
- Editorial Board, Helyion, Elsevier, 2018-2020
- Editorial board, Lithos, Elsevier, 2017-present
- Coordinator of the international Lake Como School for Ph.D. students on “Carbon form paths and processes, Como 2017
- Associate Editor, Journal Geochemical Exploration, Elsevier, 2009-2018
- Co-Editor, Chemical Geology issue on Fluid inclusions, 2007, Elsevier
- Coordinator ISPET - International Seminars of Petrology, "Fluids in Metamorphic Rocks" Certosa di Pontignano Siena, 2005
- Associate Editor, European Journal of Mineralogy, 1998-2004
- Co-Editor, Lithos issue “Fluid Inclusions: Phase Relationships - Methods - Applications”. Elsevier, 2001
- Co-Editor, book: “Fluid inclusions in minerals: methods and applications”. Virginia Polytechnic Institute and State University press, Blacksburg, VA., 377 pp, 1994
- Coordinator Short course of the working group (IMA) "Inclusions in minerals", Siena 1994
- Secretary of “Inclusion in minerals” IMA (commission) 1994-1998
- Member of Scientific Committee, ECROFI and ACROFI, 1999-present

Service to European Union education and activities

- Program Coordinator ISTIP, for the development of scientific research between UE and Gulf Countries, 2016 - present
- Scientific advisor for the program Inco-Net-Gulf, 2009-2011.
- Lecturer at the EU EURISPET Schools for Petrology, 2007-2010.

- Evaluator and chair-person in the Environmental and Geological Sciences at the European Union, “Marie Skłodowska Curie” Actions, 2000-2006
- Coordinator Socrates Teaching Program, Siena, VU Amsterdam, and Oslo Universities, 1997-2003
- Coordinator of Erasmus Intensive Program “Modern trends in fluid phase petrology” Consortium Siena-Amsterdam-Oslo 1998-2001
- School Director on “Modern trends in fluid phase petrology” Erasmus Intensive Program, Siena 1998, Consortium Siena-Amsterdam-Oslo.
- Erasmus doctoral student, 1987

Plenary and invited presentations

- Invited speaker Goldschmidt Conference, Lion 2021
- Invited Speaker, Accademia Lombarda 2019
- Invited speaker, Convegno Terra Acqua Clima, CNR, Pisa 2018
- Invited Speaker, University Bern, Bern 2017
- Invited speaker, Deep Carbon Observatory International Science Meeting, University of St. Andrews, Scotland 2017
- Fellow lecturer “Fluids in the Earth” University Mumbai, Mumbai 2016
- Invited speaker Accademia Nazionale Lincei, Roma 2016
- Invited speaker EMC2016, European Mineralogical Meeting, Rimini, 2016
- Invited speaker AGU Fall Meeting, San Francisco 2015
- Invited speaker, Deep Carbon Observatory Thematic Institute, Berkeley, California 2015
- Invited speaker DCO Executive Committee, Accademia dei Lincei, Roma 2015
- Invited speaker Accademia delle Scienze (XL), Venezia 2015
- Fellow Lecturer “Fluid in the Earth” University Nanjing, Nanjing May 2014
- Invited speaker Goldschmidt Conference, Firenze 2013
- Invited speaker AGU Fall Meeting, San Francisco 2012
- SGI, SIMP and SPI 2012 lecturer on “The deep Earth Carbon Cycle”
- Invited speaker AGU Fall Meeting, San Francisco 2008
- Invited speaker, Norwegian Academy of Science, November 26th 2008
- Invited speaker, Marie Curie conference of the EU on the European Research, Pisa-Manchester, 2005
- Invited Speaker, Erasmus Intensive Program “Ultra-High Pressure Metamorphism” Budapest, 2003
- Invited speaker at the Vrije Universiteit of Amsterdam, in the occasion of J.L.R. Touret valedictory lecture, 2001
- Invited Speaker at the University Of Oslo, 1997

Milano, April 9th 2021