Michael Robert Carroll

PERSONAL INFORMATION:

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PROFESSIONAL EXPERIENCE:

2000-present	Professor, School of Science and Technology, Geology Division, University of Camerino, Italy
1998-1999	Associate Professor, Geochemistry, University of Camerino, Italy
1996-1998	Reader, Bristol University, Geology Department, Bristol, UK
1990-1996	Lecturer, Bristol University, Geology Department, Bristol, UK
1989-1990	Scientific Staff, Bayerisches Geoinstitut, Bayreuth, FRG
1988-1989	Visiting Scientist, Bayerisches Geoinstitut, Bayreuth, FRG
1986-1988	Research Associate in Experimental Petrology, California Institute of Technology, Pasadena, CA, 91125, USA
1980 to 1985	Research and Teaching Assistant, Department of Geological Sciences, Brown University, Providence, Rhode Island, USA.

EDUCATION:

PhD in Geology, 1986, Brown University.
MSc in Geology, 1983, Brown University, Providence, Rhode Island, USA
BSc in Geology, 1980, Long Island University, NY, USA

HONORS-AWARDS

Nuffield Foundation Research Fellow – 1995-1996
Elected Fellow, Mineralogical Society of America - 2011

AFFILIATIONS:

American Geophysical Union
The Geochemical Society
Mineralogical Society of America
Societa' Italiana di Mineralogia e Petrologia

PROFESSIONAL SERVICES

Scientific Panel and Program Committee – American Geophysical Union Chapman Conference on Volcano-Climate interactions (2001-2002)
Scientific Panel – organization for 32nd International Geologic Congress, Firenze 2004 (2002-2004)
Mineralogical Society of America Awards Committee, 1999
Scientific Advisory Council, CNR Institute of Geochronology and Isotope Geology, Pisa, 1998-2001
Scientific Advisory Council, CNR Institute of Geosciences and Earth Resources, 2002-2005
Scientific Review Panel, EU Geochemical Facility, Bristol University, 1998-2002
Editorial Council, Italian Journal of Geosciences, 2017-2019
Editorial Board, Bulletin of Volcanology, 1996-2004
Editorial Board, Periodico di Mineralogia, 1998-2006
Editorial Board, Journal of Volcanology and Geothermal research, 2001-2003
Guest Editor, Chemical Geology Special Issue - Degassing of the Earth, 1997

NERC Scientific Services Review Panel, 1997
Grant proposal reviewer for NSF, NERC, Swiss National Science Foundation, European Science Foundation
Manuscript reviewer for Nature, Science, Geochimica Cosmochimica Acta, Contributions to Mineralogy and Petrology, Earth Planet. Sci. Lett, Journal of Petrology, Geophysical Research Letters, J. Geophys. Res., American Mineralogist, Mineralogical Magazine,
Coordinator, Teaching committee in Geology, Camerino (BS, MS degrees) (2004-2006)
Coordinator, PhD program in Earth Science, University of Camerino (from 2007)

TEACHING

Teaching in Igneous Petrology, Geochemistry, Volcanology
External Examiner for PhD Thesis Exams in numerous Italian institutions (Pisa, Palermo, Perugia, Roma 3, Roma La Sapienza), as well as international institutions, including IPG-Paris, CNRS-Orleans, Cambridge, Oxford, Bristol.
Tutor/supervisor for more than 25 PhD students

RESEARCH

~ 80 publications in international journals, ~6300 citations, h-index ~39 (July, 2017 Google Scholar: see https://scholar.google.it/citations?hl=en&user=bwrfrdgAAAAJ&view_op=list_works)
Includes 8 articles with more than 200 citations, 24 articles with more than 100 citations, two articles in Journal of Petrology list of 50 most cited papers of all time.

My current research interests touch on many aspects of igneous petrology but are mainly concerned with the role of volatile elements in earth processes and the kinetics of magmatic processes (crystal nucleation, growth). The major approach used is experimental but this is augmented by study of natural samples in some cases. Specific research topics of current interest include the following:

- Volatiles and eruptive styles of silicic magmas
- Sulfur solubility and magma oxidation state
- Volatiles in back-arc magmas
- The geochemistry of Cl in alkaline magmas
- Water in anhydrous mantle minerals
- Fluid compositions in subduction zones
- Solubility and diffusivity of noble gases in magmas
- Differentiation of Fe-rich basalts
- Kinetics of nucleation and growth of bubbles and crystals in magmas
- Kinetic effects on trace element partitioning between crystals and melts
- Kinetics of crystallization in magmas subjected to decompression

PUBLICATIONS

See Google Scholar summary
http://scholar.google.it/citations?hl=en&user=bwrfrdgAAAAJ&view_op=list_works