



Dr Danilo Di Genova
PhD

Honorary Research Fellow

Area of research

Experimental volcanology and petrology

Office L121
Wills Memorial Building,
Queens Road, Clifton BS8 1RJ
([See a map](#))

+44 (0) 117 3315181
danilo.digenova@bristol.ac.uk

Biography

February 2020 - Ongoing. Bayerisches Geoinstitut (Universität Bayreuth, Germany) and honorary staff member at the University of Bristol.

July 2018 - February 2020. Clausthal University of Technology and honorary staff member at the University of Bristol.

Oct. 2016 - June 2018. Research associate at the School of Earth Sciences, University of Bristol. NERC/NSF funded large grant "*Quantifying disequilibrium processes in basaltic volcanism (DisEqm)*"

Dec. 2013 – Sept. 2016. Postdoc at the Department of Earth and Environmental Science, University of Munich (LMU). EVOKES-ERC grant "*Explosive volcanism in the earth system: experimental insights*".

May. 2013 – Aug. 2013. Postdoc fellowship at the INGV-Naples. *Vulcamed project*.

Apr. 2012 – July 2013. Postdoc at the Department of Science, University of Roma Tre. *The effect of H₂O and CO₂ on magma rheology*.

Nov. 2008 - May 2012. PhD at the Department of Science, University of Roma Tre. *Experimental investigation of physical and chemical properties of magmas. Application to magma degassing*.

May 2008. M.Sc. at the Department of Science, University of Roma Tre. *Rheological and electrical proprieties of peralkaline magmas from Pantelleria Island*.

Teaching

2016 Melts, glasses and magmas (teaching assistant), Ludwig-Maximilians-Universität, Munich, Germany.

2016 Rocks and minerals M.Sc. level, Ludwig-Maximilians-Universität, Munich, Germany.

2015 Melts, glasses and magmas (teaching assistant), Ludwig-Maximilians-Universität, Munich, Germany.

2014 Rocks and minerals M.Sc. level, Ludwig-Maximilians-Universität, Munich, Germany.

2014 Melts, glasses and magmas (teaching assistant), Ludwig-Maximilians-Universität, Munich, Germany.

2011 Magmatology and Petrology (teaching assistant) M.Sc. level, Università di Roma Tre, Italy.

2011 Introduction to Geology (teaching assistant) B.Sc. level, Università di Roma Tre, Italy.

2009 Melts, glasses and magmas (teaching assistant), Università di Roma Tre, Italy.

Keywords

- Magma dynamics
- volatiles in magmas
- thermodynamics

- silicate melts and glasses
- Experimental Petrology and Volcanology

Memberships

Organisations

[School of Earth Sciences](#)

Earth Sciences staff

- [Honorary staff and academic visitors](#)
- [Earth Sciences postdoctoral researchers](#)

Research groups

- [Petrology](#)

Recent publications

- Arzilli, F, La Spina, G, Burton, M, Polacci, M, Le Gall, N, Hartley, M, Di Genova, D, Cai, B, Vo, N, Bamber, E, Nonni, S, Atwood, R, Llewellyn, E, Brooker, R, Mader, H & Lee, P, 2019, '[Magma fragmentation in highly explosive basaltic eruptions induced by rapid crystallisation](#)'. *Nature Geoscience*.
- Polacci, M, Arzilli, F, La Spina, G, Le Gall, N, Cai, B, Hartley, ME, Di Genova, D, Vo, NT, Nonni, S, Atwood, RC, Llewellyn, EW, Lee, PD & Burton, MR, 2018, '[Crystallisation in basaltic magmas revealed via in situ 4D synchrotron X-ray microtomography](#)'. *Scientific Reports*, vol 8.
- Kolzenburg, S, Di Genova, D, Giordano, D, Hess, KU & Dingwell, DB, 2018, '[The effect of oxygen fugacity on the rheological evolution of crystallizing basaltic melts](#)'. *Earth and Planetary Science Letters*, vol 487., pp. 21-32
- Fulignati, P, Gioncada, A, Costa, S, Di Genova, D, Di Traglia, F & Pistolesi, M, 2018, '[Magmatic sulfide immiscibility at an active magmatic-hydrothermal system: The case of La Fossa \(Vulcano, Italy\)](#)'. *Journal of Volcanology and Geothermal Research*, vol 358., pp. 45-57
- Di Genova, D, Caracciolo, A & Kolzenburg, S, 2018, '[Measuring the degree of "nanotilization" of volcanic glasses: Understanding syn-eruptive processes recorded in melt inclusions](#)'. *Lithos*, vol 318-319., pp. 209-218
- Hughes, EC, Buse, B, Kearns, SL, Blundy, JD, Kilgour, G, Mader, HM, Brooker, RA, Balzer, R, Botcharnikov, RE, Di Genova, D, Almeev, RR & Riker, JM, 2018, '[High spatial resolution analysis of the iron oxidation state in silicate glasses using the electron probe](#)'. *American Mineralogist*, vol 103., pp. 1473-1486
- Di Genova, D, Kolzenburg, S, Wiesmaier, S, Dallanave, E, Neuville, DR, Hess, K-U & Dingwell, DB, 2017, '[A chemical tipping point governing mobilization and eruption style of rhyolitic magma](#)'. *Nature*.
- Di Genova, D, 2017, '[Effect of oxygen fugacity on the glass transition, viscosity and structure of silica- and iron-rich magmatic melts](#)'. *Journal of Non-Crystalline Solids*.
- Di Genova, D, Sicola, S, Romano, C, Vona, A, Fanara, S & Spina, L, 2017, '[Effect of iron and nanolites on Raman spectra of volcanic glasses: A reassessment of existing strategies to estimate the water content](#)'. *Chemical Geology*, vol 429., pp. 75-84
- Yilmaz, TI, Duschl, F & Di Genova, D, 2016, '[Feathery and network-like filamentous textures as indicators for the re-crystallization of quartz from a metastable silica precursor at the Rusey Fault Zone, Cornwall, UK](#)'. *Solid Earth and Discussions*, vol 7., pp. 1509?1519

[View complete publications list](#) in the University of Bristol publications system