

Curriculum Vitae

Professor Mike Burton, Chair in Volcanology

School of Earth and Environmental Sciences, The University of Manchester

Appointments

March 2015-present	Chair in Volcanology at the School of Earth and Environmental Sciences, University of Manchester
October 2008-March 2015	Permanent senior researcher with INGV-Pisa, Italy;
2002-October 2008	Permanent senior researcher with INGV-Catania, Italy;
2000-2002	Researcher with INGV-Catania, Italy.
1998-2000	PDRA in the Dept. of Geography, University of Cambridge.

Academic Qualifications

1999	PhD in Atmospheric Chemistry, University of Cambridge
1993	BSc Chemical Physics, 2i, University of Sussex

Current Role: As a senior member of faculty in the School of Earth and Environment at the University of Manchester I lead the Geoscience Group of 15 permanent academic staff, in addition to leading my own research team of 3 PDRAs, 5 PhDs, 1 senior research fellow. Key elements of this leadership role include maximising opportunities for REF outputs, to maintain and improve REF performance, and to encourage and stimulate research proposal submission and success. I serve in the School Senior Leadership Team, defining School strategies and objectives. Recognised as University of Manchester Researcher of the Year, 2017.

Publications to November 2018: 95 ISI papers, 4 book chapters. Google Scholar: h-factor:41, citations: 5063. <https://scholar.google.co.uk/citations?user=t2hw7E4AAAAJ&hl=en>

Key Publications:

Burton, M., Allard, P., Mure, F. and La Spina, A., 2007. Magmatic gas composition reveals the source depth of slug-driven Strombolian explosive activity. *Science*, 317(5835): 227-230.

Burton, M.R., Mader, H.M. and Polacci, M., 2007. The role of gas percolation in quiescent degassing of persistently active basaltic volcanoes. *EPSL*, 264(1-2): 46-60.

Burton, M.R., Prata, F. and Platt, U., 2015. Volcanological applications of SO₂ cameras. *JVGR*, 300: 2-6.

La Spina, G., Burton, M., Vitturi, M.D. and Arzilli, F., 2016. Role of syn-eruptive plagioclase disequilibrium crystallization in basaltic magma ascent dynamics. *Nature Communications*, 7.

Pardini, F., Burton, M., Arzilli, F., La Spina, G. and Polacci, M., 2018. SO₂ emissions, plume heights and magmatic processes inferred from satellite data: The 2015 Calbuco eruptions. *JVGR*, 361: 12-24.

Queisser, M., Burton, M., Allan, G.R. and Chiarugi, A., 2017. Portable laser spectrometer for airborne and ground-based remote sensing of geological CO₂. *Opt. Letts*, 42(14): 2782-2785.

Polacci, M., Arzilli, F., La Spina, G., Le Gall, N., Cai, B., Hartley, M.E., Di Genova, D., Vo, N.T., Nonni, S., Atwood, R.C., Llewellyn, E.W., Lee, P.D. and Burton, M.R., 2018. Crystallisation in basaltic magmas revealed via in situ 4D synchrotron X-ray microtomography. *Scientific Reports*, 8.

Previous and current research grants:

2019-2023	V-PLUS NERC project, TROPOMI data analysis, £500k
2018-2021	EUROVOLC Project, Horizon 2020, 150 keuro
2017-2018	ERC Proof of Concept grant CarbSens 150 keuro
2016-2021	NERC Project DisEqm, PI, £3.5M
2012-2018	ERC project 'Quantifying the global volcanic CO ₂ cycle', PI, size € 1.72M £1.45M

International research coordination roles

President of the Geochemistry, Mineralogy, Petrology and Volcanology division of the European Geosciences Union from 2014, responsible for coordination of approximately 1000 abstracts in 25 sessions, leadership of the GMPV science officer team and participation on the EGU Council, which makes policy decisions affecting EGU's future.