

Olivier Bachmann

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Education

- B.A. University of Geneva, 1995
M.Sc. University of Geneva, 1997
Ph.D. University of Geneva, 2001

Professional experience

- Post-doctoral research fellow, University of Geneva 2001
- Post-doctoral research fellow, University of Washington 2001-2003
- Maître Assistant, University of Geneva 2003-2007
- Assistant Professor, University of Washington 2007-2011
- Associate Professor, University of Washington 2011-2012
- Full Professor, ETH Zurich 2012-Present

Research Grants

- Swiss SNF Post-doctoral grant (~80'000 CHF; Bourse chercheur avancé and débutant). 2001-2003
- Swiss SNF (41'400 CHF): “Petrological evolution and eruptive dynamics of the largest Quaternary explosive eruption in the Mediterranean basin, Kos Plateau Tuff, eastern Aegean Sea.” PI 2004-2006
- Swiss SNF (200'000 CHF): “Characterization of the juvenile pyroclasts from the Kos-Nisyros Volcanic Complex (south Aegean Arc, Greece): a tool for understanding the dynamics of explosive rhyolitic eruptions.” PI 2006-2010
- Swiss SNF (160'000 CHF): “Numerical simulations of volcanic phenomena by Lattice-Boltzmann methods” (Co-PI with prof B. Chopard, University of Geneva) 2007-2011
- U.S. NSF (305'000 US\$): “Dynamics of large silicic magma reservoirs: Combining geochemical data and physical models on voluminous ignimbrites from the San Juan volcanic field, Colorado”. PI 2008-2012
- Royalty Research Fund, U. of Washington (35'764 US\$): “The importance of volatile elements during and after large explosive volcanic eruptions”. (Co-PI with C. Deering) 2010-2011
- U.S. NSF (68'923 US\$): Funds to organize an international workshop on “Future advances in Geothermal Energy” in New Zealand. (Co-PI with prof. C. Deering) 2012

- U.S. NSF (278’209 US\$): Collaborative Research: The provenance of the excess sulfur released in arc volcanoes during Plinian eruptions (Co-PI with prof. C. Huber)

2012-2015
- U.S. NSF (2’784’000 US\$): Collaborative Research: Illuminating the architecture of the greater Mount St Helens magmatic system from slab to surface (Co-PI with prof. K Creager, H. Houston, J. Vidale, A. Levander, A. Schulze, G. Abers)

2012-2016
- Swiss SNF (389’100 CHF): Towards a quantitative understanding of caldera-forming events (PI)

2013-2016
- ETH Foundation Grant (230’400 CHF): Petrogenesis of low $\delta^{18}\text{O}$ rhyolites in the Snake River Plain – Yellowstone area, USA: a geochemical and experimental approach (co-PI with B. Ellis and P. Ulmer)

2014-2017
- Swiss SNF (209’550 + 63’046 CHF): Taking apart a “super”eruption: the Kneeling Nun Tuff, New Mexico (co-PI with B. Ellis)

2014-2017
- Swiss SNF (262’019 CHF): Towards a quantitative understanding of caldera-forming events (PI); prolongation project.

2016-2018
- Swiss SNF (206’990 CHF): “A subduction factory revealed: The Famatinian arc section, Argentina”. Co-PI with Juan Otamendi

2017-2020
- Swiss SNF (956’212 CHF): “Dynamics of magma reservoirs in the earth’s crust; focusing on the role of volatile elements”. PI

2018-2022
- Burri-Grubermann Fund; 2 PhD positions funded (~400’000 CHF). Co-PI with Max Schmidt

2020-2024
- NZ Ministry of Business and Innovation and GNS Science on supercritical geothermal resources (~200’000 CHF); Main PI, Isabelle Chambeftort (GNS Science); Co-PI with Thomas Driesner at ETHZ

2020-2024
- Nuclear Agency of Japan (~200’000 CHF); Support for developing novel geochronological tools

2020-2023
- LET – ETH (55’000 CHF); Grant to support the development of podcasts to teach to large classrooms.

2020-2024

Awards

- Schläfli Award (Swiss Academy of Science, Young Scientist award) 2001
- Niggli Medal (Young scientist award in the Earth Sciences) 2004
- MSA Distinguished Lecturer 2015
- Joanne Simpson Award (AGU) 2018
- AGU Fellow 2018

Department and community activities

- Head of the Institute of Geochemistry and Petrology at ETHZ 2014-2015, and 2018-2019
- Vice-Head of the Institute of Geochemistry and Petrology at ETHZ 2016-2017, 2020-2021
- Vice-Head of the Earth Science Department at ETHZ 2022- Present
- Board member, Friedlander Foundation 2015 - Present
- Board member, Swiss SIMS owner board 2020-Present
- Committee member, Platform Geoscience SCNAT 2020-Present
- Editor, e-book Volcanoes of the world: Nisyros, Springer 2015-2016
- Editor, JVGR Special Issue on “Large Silicic Magmatic systems” 2007
- Associate Editor for GRL 2013 - Present
- Editorial board member for Geology and Journal of Petrology 2019 - Present
- GSA Research grant committee member 2013-2015
- Session convener at multiple international conferences (IAVCEI General Assembly, AGU, Goldschmidt, EGU, ...) 2005 -Present
- Co-leader of the IAVCEI Commission on Arc Volcanism (with Colin MacPherson) 2004-2016
- Petrology officer, EUG 2015 - 2019
- Chair, AGU-VGP union awards and medals committee 2020-Present
- Secretary of VGP at AGU 2020-Present

Affiliations/Memberships

- American Geophysical Union Since 1997
- Geological Society of America Since 2005

- Mineralogical Society of America Since 2007
- IAVCEI Since 2008
- EAG Since 2015

Publications (Google Scholar citations Sept. 2022 > 11500, H index of 58)

See Google Scholar site; <https://scholar.google.com/citations?user=tuPSdzUAAAAJ&hl=en>