

Curriculum vitae: Gerald Raab, Dr. sc. nat.

PERSONAL INFORMATION



Surname	Raab	 https://orcid.org/0000-0002-3063-6806
First name	Gerald	
Born	1988	Total citations: 111 (Google Scholar)
Civil status	Single, 1 child	h-index = 8 (Google Scholar)
Nationality	Austria	www.geraldraab.com
Profession	Geomorphologist & Geochronologist	
Position	Postdoctoral Researcher	

My interest focuses on the quantification of surface denudation and landscape degradation processes. I tackle research questions with a multidisciplinary approach where I typically combine:

- **geomorphological field studies**
- **geochronological techniques**
- **numerical modeling**

EDUCATION

(Reference)

since 07/2021	Postdoctoral Researcher, Dalhousie University, Canada	(John Gosse)
03/2020 – 06/2021	Postdoctoral Researcher, University of Zurich, Switzerland	(Markus Egli)
04/2016 – 09/2019	Doctoral studies, Earth System Sciences, University of Zurich, Switzerland. Defence: 18.10.2019, Awarded: 31.01.2020	(Markus Egli)
05/2019	1-month research stay, University of Wroclaw, Poland	(Piotr Migon)
08/2018	Climate Change Impacts on Sediment Dynamics, IYFSWC, Moscow, Russia	
09/2017	International Geochronology Summer School, Davos, Switzerland	
04/2017	Petrochronology course, EGU, Vienna, Austria	
02/2017	1-month field and lab training, University of Wellington, New Zealand	(Kevin Norton)
04/2016	Raman Spectroscopy course, University of Leoben, Austria	
06/2013 – 11/2015	MSc., Earth Sciences, Technical University Graz, Austria	(Kurt Stüwe)
08/2012 – 05/2013	ERASMUS, Environmental Engineering, Aalto University, Finland	
10/2009 – 08/2012	BSc., Earth Sciences, Technical University of Graz, Austria	(Martin Dietzel)
04/2006 – 01/2007	Paramedic, Austrian Red Cross, Austria	
09/2002 – 06/2007	Manager & Controller, Federal Commercial Academy Steyr, Austria	

EMPLOYMENT HISTORY

since 07/2021	Postdoctoral Researcher, Department of Earth and Environmental Sciences, Dalhousie University, Canada
03/2020 – 06/2021	Postdoctoral Researcher, Physical Geography, University of Zurich, Switzerland
10/2019 – 02/2020	Radiocarbon Laboratory Assistant, Physical Geography, University of Zurich, Switzerland
04/2016 – 09/2019	Research Assistant, Physical Geography, University of Zurich, Switzerland
06/2014 – 11/2015	Graduate Researcher, Geology and Petrology, Karl-Franzens University of Graz, Austria
03/2015 – 06/2015	Graduate Teaching Assistant, Engineering Geology, Technical University of Graz, Austria
10/2014 – 02/2015	Graduate Research Technician, Geology and Petrology, Karl-Franzens University of Graz, Austria
07/2014 – 07/2014	Field Geologist, Alfred Wegener Memorial Expedition, Greenland
09/2012 – 05/2013	Project Manager, School of Engineering, Aalto University, Finland
08/2011 – 06/2012	Undergraduate Researcher, Applied Mineralogy & Hydrogeochemistry, Technical University Graz, Austria
08/2010 – 06/2011	Marketing Researcher, AGROsolution GmbH, Linz, Austria
01/2007 – 06/2012	Paramedic, Austrian Red Cross, Austria

INSTITUTIONAL RESPONSIBILITIES

2016 – 2019	Mittelbau (union) representative, Faculty of Sciences, University of Zurich
2016 – 2019	Promotion committee member (e.g., Andreas Vieli, Jan Seibert), University of Zurich
09/2018	InnoPool Project "SAFE" – University of Zurich (9'500,- CHF acquired)
2017 – 2018	Display case designer, Department of Geography (Geochronology), University of Zurich
2016 – 2017	Laboratory focus group, Department of Geography, University of Zurich

RESEARCH PROJECTS (§: PRINCIPAL INVESTIGATOR, &: PROJECT PARTNER, #: STUDENT) **ACQUIRED: € ~230 K**

since 07/2021	§ Determining Relief Evolution in the Alps with Muon Paleotopometry	SNSF	117'650 CHF
since 04/2021	§ Erratic boulders on Disko Island	SPI	15'838 CHF
since 08/2021	& Characterization of Granular Degradation – Çine Submassif	TÜBITAK	
03/2020 – 06/2021	§ Tor Exhumation Rates and soil erosion: Relation between non-glaciated and formerly vastly glaciated areas	UZH	88'219CHF
03/2016 – 11/2019	# Boulder Exhumation Rates (over 10 ⁵ years) in Low-gradient Landscapes in an Upland Mediterranean Area	SNSF	
07/2014 – 10/2015	# Alfred Wegener Memorial Expedition (ÖAW funded)	ÖH	2'500EUR
06/2016 – 11/2015	# Evolution of the Seckau Complex	KFU	
08/2011 – 06/2012	# Formation and Use of Amorphous Silica	TUG	

(SNSF: Swiss National Science Foundation, SPI: Swiss Polar Institute, TÜBITAK: Scientific and Technological Research Council of Turkey, UZH: University of Zurich (Forschungskredit), ÖH: Austrian Student Union – Special Project Fund, KFU: Karl-Franzens University of Graz, TUG: Technical University of Graz)

EXPEDITIONS & FIELD CAMPAIGNS (§: LEADER, #: PARTICIPANT)

07/2021 – 08/2021	§ Disko Island, Greenland (23 days): Geomorphological mapping, rock sampling for in-situ ¹⁰ Be, ²⁶ Al, ¹⁴ C and petrological, geochemical analysis.
07/2020 – 07/2020	§ Serra da Estrela, Portugal (7 days): Geomorphological mapping, soil and rock sampling for fallout radionuclides and terrestrial cosmogenic nuclide dating.
02/2017 – 02/2017	§ Otago, New Zealand (7 days): Geomorphological mapping, soil and rock sampling for ²³⁹⁺²⁴⁰ Pu and in-situ ¹⁰ Be analysis.
09/2016 – 09/2016	# Sila, Italy (12 days): Geomorphological mapping, soil and rock sampling for ²³⁹⁺²⁴⁰ Pu and in-situ ¹⁰ Be analysis.
08/2014 – 08/2014	§ Seckauer Tauern, Austria (21 days): Geological mapping, rock sampling for geochemical and zircon analysis.
07/2014 – 07/2014	# Neerlerit Inaat, Greenland (19 days): Geological and geomorphological mapping, rock sampling for geochemical and petrological analysis.

SUPERVISION & TRAINING OF JUNIOR RESEARCHERS

BSc.-Lab-Assistants: 7, MSc. Theses: 2, MSc.-Committees: 5

Personal Mentoring of BSc. Students

since 11/2021	<i>Sana Salehi Salehi, BSc student at Dalhousie University. Personal training to be geochemistry isotope lab assistant (crystal isolation and target chemistry of TCNs).</i>
since 11/2021	<i>Morgan Dauphinee, BSc student at Dalhousie University. (Lab assistant trainee).</i>
since 11/2021	<i>Samantha Shapira, BSc student at Dalhousie University. (Lab assistant trainee).</i>
since 11/2021	<i>Sadie Jacobs-Peters, BSc student at Dalhousie University. (Lab assistant trainee).</i>
since 11/2021	<i>Helena Muirhead-hunt, BSc student at Dalhousie University. (Lab assistant trainee).</i>
02/2017	<i>Martin Harms, BSc. student from University of Potsdam. Laboratory training for rock and soil analytics at Victoria University, Wellington, New Zealand.</i>
02/2017	<i>Aidan McLean. BSc. student from Victoria University. Field training. Otago upland, New Zealand.</i>

Personal Mentoring of MSc. Students

since 09/2021	<i>Sebastian Schaffner, MSc. Student at UZH. Supervision on laboratory training for TCNs and rock analyses on "Origin and timing of erratics boulders on Disko Island, Greenland".</i>
11/2020–07/2020	<i>Wasja Dollenmeier, MSc. Student at UZH. Laboratory and field training for TCNs, FRNs, rock and soil analyses on "Determination of soil disturbances in Geopark Estrela (Portugal)".</i>

TEACHING ACTIVITIES

I have contributed to the teaching of 7 bachelor level and 4 master level classes.

BSc. classes

2020 Fall	GEO351.3	Applied Soil Science, University of Zurich
2019 Fall	GEO35.2	Geochronology I, University of Zurich
2018 Fall	GEO351.2	Geochronology I, University of Zurich
2017 Fall	GEO199	Small Group Teaching - Landslides, University of Zurich
2016 Fall	GEO417.2	Laboratory course in geochronology University of Zurich
2016 Fall	GEO351.2	Geochronology I, University of Zurich
2016 Fall	GEO199	Small Group Teaching - Landslides, University of Zurich

MSc. classes

2020 Fall	GEO463	Soil Science I, University of Zurich,
2017 Spring	GEO708	Excursion (Diversity of Landscape and Land use - Sicily), University of Zurich
2017 Spring	GEO417.3	Field Course Environmental Archives, Natural Hazards, University of Zurich
2015 Spring	GEO841	Engineering Geology Field Excursions, Technical University of Graz

MEMBERSHIPS IN PANELS, BOARD & REVIEWING

Reviews: Catena, Geoderma, Solid Earth, Geosciences
 Panels: AGU EPSP Canvas Committee

SCIENTIFIC MEMBERSHIPS

Soil Science Society Switzerland, Young Geomorphologists, British Society for Geomorphology – BSG, European Association of Geochemistry - EAG, European Geoscience Union - EGU, American Geoscience Union - AGU, Naturwissenschaftlicher Verein Steiermark, Deutsche Quartärvereinigung – DEUQUA.

CONFERENCE SERVICES

Organizer: „SaFE – Safety and Field Education” 2018
 Assistant: Working for the EGU General Assembly 7 times (2011–2017)
 Convener: AGS 2022 – Advances in quantifying erosion processes, sediment dynamics, and landscape evolution
 AGU 2021 – EP33B: Novel applications & technique advances of cosmogenic nuclides
 AGU 2021 – EP35F: Novel applications & technique advances of cosmogenic nuclides
 vEGU2021 – NET3: Crowd Solving Problems in Earth Sciences
 EGU 2019 – SC2.7: Visualizing Science

PRIZES, AWARDS & FELLOWSHIPS

- Josef Krainer Award (2/2022)
- Legat for outstanding doctoral theses, University of Zurich (12/2020)
- Graduate Campus, University of Zurich (12/2018)
- Geographical Society Switzerland (04/2017, 12/ 2018)
- Graduate School, University of Zurich (08/2018, 04/2018)

CAREER BREAK & PERSONAL SKILLS

2008/2009 Journey around the world (South- & North America, Pacific Ocean, New Zealand, Australia, Asia, Europe)
 Leadership: Arctic expedition leader (1 year), Scout leader (10 years), Offshore sailing skipper (9 years), Red Cross (6 years), Trainer for adult scout leaders (2 years)
 Laboratory: Mineral separation (e.g. quartz, zircons), target chemistry for terrestrial cosmogenic nuclides (¹⁰Be, ²⁶Al, ¹⁴C) and fallout radionuclides (²³⁹⁺²⁴⁰Pu), physical, (geo-)chemical and mineralogical characterization of soils and rocks
 Languages: German (native), English (C1), Spanish (A2), Italian (A1)
 IT: MS Office, Adobe CS6, QGIS, GCDkit, Matlab