

Nationality: New Zealander with permanent residency in Denmark, two children.

Education:

- Ph.D. (July 1995). University of Canterbury, Christchurch, New Zealand
- B.Sc. (Hons.) (first class)(July 1990).University of Canterbury, Christchurch, New Zealand

Employment history:

- March 2018-present: Deputy Head of Department(education), Department of Geosciences and Natural Resource Management,Copenhagen University, Denmark.
- 2014-present: Professor of Geochemical,Mineralogical and Petrological Earth processes at the Department of Geosciencesand Natural Resource Management, Copenhagen University, Denmark.
- September 2003-2014: Associate Professor inIgneous Petrology at the Department of Geography and Geology, CopenhagenUniversity, Denmark.
- July 2000-August 2003: Manager of the DanishLithosphere Centre Axiom multi-collector ICPMS laboratory (Copenhagen, Denmark).
- 1998-July 2000: Post-doctoral researcher atDanish Lithosphere Centre, investigating geochemical consequences of magmainteraction processes and crustal evolution (including a 6 month visit to theDepartment of Geology, University of Maryland, College Park, USA).
- 1996-1997: Post-Doctoral researchassociate at the School of Earth Sciences, La Trobe University, Melbourne.Research focused on andesite petrogenesis (Mt. Ruapehu, NZ) and granitoidpetrogenesis (Lachlan Fold Belt, Australia).

Researchmanagement and financing:

- 2021: Carlsberg InfrastructureGrant (3,374,264 DKK) for 21st Century mineral identification with micro-XRF
- 2019: DFF Research Grant 2 (6,185,380 DKK) for Assessing the periodicity andmechanisms of continental crustal growth.
- 2017: Grant of 56,600 DKK as acontribution for inviting plenary speakers to the conference “The NordicGeological Winter Meeting 2018
- 2016: Collaboratoron two Geocenter grants (Sam Weatherly- GEUS: Mushy Mineralising Systems – 585356DKK; Emily Pope – SNM: The Evolution of Earth’s Deep Water Cycle: Developing aMethod for Evaluating  $\delta D$  of the Ancient Mantle – 900000 DKK).
- 2013: Grant of60,000 dkk from Carlsberg Foundation towards ‘How accurate is geochronology? Atest case at Ilimaussaq, SW Greenland’.
- 2013: Collaborator on twoGeocenter grants (Lindström: The Triassic-Jurassic boundary: Impact of a Large Igneous Province on thegeobiosphere and Andresen: Upernavik Glacier – a case study for improvingpredictions of future dynamic mass loss from Northwest Greenland)
- 2013: Associate investigator on grant of \$31700(NZD) from OtagoUniversity towards ‘Using mantle ‘fossils’ to elucidate the cause of DunedinVolcano eruption’ (James Scott as PI)
- 2010: Grant of 2.2 million dkk from Danish Agency for Science,Innovation and Technology (FNU) towards ‘Igneous processes during the transition fromsubduction to crustal break-up, New Zealand.
- 2010: Grant of 150,000 dkkfrom Carlsberg Foundation towards ‘Microdrilling investigations of igneousprocesses.
- 2009: Geocenter grant (1.3million dkk) towards post-doctoral position developing Chemical dating ofmonazite using the microprobe.
- 2008-2010: Collaborator onFramework Grant (1.5 million dkk; shared with 3 others) from the Danish Agencyfor Science, Innovation and Technology (FNU) (P.M. Holm, Copenhagen as primaryapplicant)
- 2007-2008: Grant of 100,000dkk from Carlsberg Foundation towards geochronological and geochemicalinvestigating of basement rocks on Bornholm, Denmark.

- 2006: Geocenter grant (1million dkk) with Troels Nielsen as P.I. towards Ph.D. investigating kimberlites in West Greenland.
- 2005-2007: Framework grant of 1.5 million dkk (shared with 3 others) from the Danish Agency for Science, Innovation and Technology (FNU) (C. Tegner, Århus as primary applicant).
- 2005: Grant of 100,000 dkk received from Carlsberg Foundation towards purchase of New-Wave Micromillsampling system.

#### Scientific focus areas

- Growth and origin of the continental crust, igneous petrology and geochemistry, volcanology, mineral chemistry, radiogenic isotope geology and geochronology, economic geology.

#### International relations and collaborations:

- Currently collaborating with the following on various projects: Åke Johansson and Martin Whitehouse (Swedish Museum of Natural History), Troels Nielsen (GEUS, Denmark), Quinten van der Meer (University of Iceland) and Emily Pope (Geological Museum, Copenhagen).

#### Research community service:

- Editor – Journal of Petrology since January 2019.
- Editor – Bulletin of the Geological Society of Denmark.
- Regular reviewer for high-level international petrology and geochemistry journals
- Regular examiner for Ph.D. theses in Scandinavia

#### Supervision of students

- Regular supervisor of students in their 3rd year Bachelor project, 33 completed Masters students.

#### Ph.D. students completed

- Marie Katrine Traun (2023) Geochemistry and magmatic petrology of silicic volcanism of the southern Andes
- Rikke Vestergaard (2023) Making and shaping of South Greenland: Assessing crustal growth and evolution of the Ketilidian Orogen through the lens of U-Pb-O-Hf isotopes in zircon.
- Robin-Marie Bell (2016) Gold mineralization in the Nanulak region, S Greenland.
- Anouk Borst (2016) REE mineralogy in the Ilimaussaq Intrusion, Greenland.
- Quinten van der Meer (2015) Investigating sources of magmatism during the change from subduction to extension in Cretaceous New Zealand.
- Llewellyn Pilbeam (2012) Identifying parental magmas of kimberlites, West Greenland (joint supervisor with Troels Nielsen GEUS).
- Jane Chadwick (2007) (Trinity College, Dublin, supervised while a Marie Curie student visitor to DLC)
- Anna Pietranik (2007) (University of Wrocław, Poland, supervised while a Marie Curie student visitor to DLC)

#### Postdoctoral supervision

- Andreas Petersson: (ongoing) Crustal evolution in Scandinavia.
- Alicia van Ham-Meert: (2019-2020) Sr isotopes as a tracer of archaeological wood.
- Alexander Rodler: (2017-18) Sr isotopes as a tracer of archaeological wood
- Barry Reno, IGG, 2010-2011 (Total Pb dating and REE analysis by microprobe)

#### Additional academic responsibilities:

- Regular member of evaluation committees for hiring of academic staff at IGN.
- Group leader for the research group in Geochemical, Petrological and Mineralogical processes at IGN 2016-2017.
- Member of organizing committee for the Nordic Geological Winter Meeting 2018, held at the Danish Technical University.
- Academic staff member responsible for operation and management of electron microprobe.
- Member of 'Studienævnet' (Study committee) and 'Undervisningsudvalg' (teaching committee) responsible for planning of teaching-related matters at Department of Geoscience and Natural Resource Management.
- Member of Work Environment and Safety Committee (2003-2013).
- Chair of special session at Goldschmidt 2004 conference, Copenhagen, entitled 'In situ investigations of properties and processes.'
- Member of board of the Danish Geological Society (from 2014).
- Member of the Geoscience Society of New Zealand (from 1992).

#### Current Teaching Responsibilities:

- Planet Earth: First year introductory geology course, including field trip to Bornholm (7.5 ECTS), responsible for ca. 75% of teaching. Course coordinator (course given in Danish).
- Geology and Geochemistry of the Lithosphere: Second-third year course in petrology and geochemistry, including a field trip to Spain (7.5 ECTS), course coordinator, field trip organizer and responsible for 50% of teaching.
- Structural Geology: Second-third year course on basic mapping, map analysis and tectural geology. Course coordinator and responsible for 100% of teaching.
- Integrating Fundamental Concepts in Geoscience: Compulsory Masters course (15 ECTS), responsible for 25% of teaching (geochemistry and petrology of the continental crust). Course coordinator
- Masters Field techniques course: Joint organizer of 15 ECTS field course to Utah (run in 2006, 2010, 2014, 2016)

#### Publication summary:

93 published peer-reviewed articles, two book chapters, H-Index = 36 (Web of Science 09-06-23).