

Curriculum Vitae Dr. Ir. Rienk Hajo Smittenberg

Professional experience and education

- 2011- present Senior Lecturer in Isotope Organic Geochemistry (tenured). Department of Geological Sciences, Stockholm University, Sweden
- 2013. 'Docent' competence (habilitation)
- 2010-2011 Senior lecturer ('Oberassistent'). Department of Geography - biogeography, University of Zürich, Zürich, Switzerland
- 2007-2010 Post-doctoral Researcher / University lecturer. Dept. of Geology, Federal Institute of Technology (ETH), Zurich, Switzerland.
- 2005-2007 Research Associate. Department of Oceanography, University of Washington, Seattle, USA
- 2003-2005 Postdoctoral Researcher. Department of Earth, Atmospheric & Planetary Sciences, Massachusetts Inst. of Technology, Cambridge, USA
- 1998-2003. PhD in Organic Geochemistry. Royal Netherlands Netherland Institute of Sea Research / Department of Earth Sciences, Utrecht University, Netherlands
- 1992-1998. BSc+MSc, Environmental Sciences (1998). Wageningen University, Netherlands

Supervision / advising roles

Postdocs:

Dr. Elin Norström, SU. (2013 – present). Projects focusing on compound-specific isotope analysis (δD and $\delta^{13}C$) in paleoclimate research

PhD students:

- Susanne Sjöberg, SU. (2015-2019) Role of microbes and extracellular organic matter in the formation and early diagenesis of microbial carbonates. secondary advisor.
- Kweku Yamoah, SU. (2012 – 2016) A combined carbon and hydrogen isotope approach to reconstruct the SE Asian paleomonsoon: impacts on the Angkor civilization and links to paleolimnology). Defense date: May 20, 2016. Primary advisor
- Francesco Muschitiello, SU (2012-2016). Deglacial impacts of the Scandinavian Ice Sheet on the North Atlantic climate system). Defense date: May 13, 2016. secondary advisor.
- Merle Gierga, ETH. (2009-2015; delay because of chronic illness). Dating buried molecules - Introducing new applications of small-scale radiocarbon analysis to disentangle the carbon cycle and solve archeological questions. day-to-day primary advisor together with Stefano Bernasconi
- Axel Birkholz, ETH. (2008-2011; did not finish for personal reasons); Compound-specific radiocarbon analysis to disentangle the carbon cycle . day-to-day primary advisor together with Stefano Bernasconi
- Inofficial (ad-hoc) advisor to 3 other PhD students (Sebastian Naeher, Kathi Guelland, Max Schneider)
- Numerous undergraduate student projects

Academic expertise

- Reviewer for a wide range of international journals including Nature Geoscience; Geology; Org Geochem; GCA; J. Geophys. Res.; Paleoceanography; PNAS; Mar. Geol.; J. Plant Nutrition & Soil Science; Biogeosciences; J. Quat. Res.; ES&T; EPSL; Anal. Chem.; Arctic, Antarctic and Alpine Research; Chem. Geology; Geoderma; Geophys. Res. Lett.; J. Environm. Management; Rap.

Comm. Mass Spectrom.; J. Quat. Sci. Rev.; Biogeochemistry;
Research proposals (National Science Foundations of Switzerland, USA, Belgium, Finland).

- Chairperson of Workshop 'small scale radiocarbon' ETH Zurich, September 2011
- Doctoral Thesis committee member (Switzerland, Sweden, Finland, Germany, Spain)
- Licentiate committee member (Sweden)
- Invited lecturer and speaker (Switzerland, Germany, Netherlands, USA, Norway, Sweden)
- Co-convenor of sessions at academic conferences
- Professional education: University Pedagogy (SU, 7.5 ECTS)

Teaching

- 2011 - Environmental Geochemistry (SU. 3rd yr BSc, 15 ECTS) - course leader
- 2012 - Biogeochemistry (SU. 1st yr MSc, 7.5 ECTS) - co-teacher
- 2018 - Basics of Geochemistry (SU. 1st yr BSc, 7.5 ECTS) - co-teacher
- 2018 - Geochemistry in the field and laboratory (SU. 1st yr BSc, 7.5 ECTS) - co-teacher
- 2010 - 2017. Geochemistry I (SU. 1st yr BSc, 15 ECTS) - co-teacher
- 2008-2009. Topics in Geochemistry (ETH. MSc. 6 ECTS) - co-teacher.
- 2010. Soil Science II (UniZ. BSc. 6 ECTS) - co-teacher.
- 2011. Soil Science III (UniZ. MSc. 6 ECTS field work) -organizing teacher

Research Funding

Swedish Research Council, No. 2017-04430: "TERRACASE: A Terrestrial Carbon Source Hypothesis for Deglacial CO₂ rise" (2018-2021).

Bolin Centre for Climate Research (SU). "Linking paleohydrology, landscape evolution and societal change of Sweden – PAYLESS" (2018)

Bolin Center for Climate Research (SU): molecular scale analysis and purification of macromolecular organic matter (2012)

Swedish Research Council. No. 621-2011-4916. "Reconstruction of the South East Asian hydroclimate using biomarkers and their hydrogen isotopic composition: method development and application". (2012-2016).

Swiss National Science Foundation "Compound-Specific Radiocarbon Analysis of Lake Sediments: A New Tool for Dating and Reconstruction of Carbon Dynamics of Soils Through the Holocene" in two parts (2008-2011; 2011-2013).

MOLTER (MOlecular structures as drivers and tracers of TERrestrial C fluxes): workshop grant (2011)

Field Work / Expeditions

Drammensfjord (1998); Palau, West Pacific (2004); Galapagos (2004); Christmas Island, central Pacific (2005); Chesapeake Bay, USA (2006); Lofoten; Norway (2008); Myanmar (2013)

Memberships of societies

- European Association of Organic Geochemists (EAOG)
- American Geophysical Union (AGU)

Private interests and experience

Free time: sailing, rowing, skiing (skitouring, cross country), ice skating. Used to be skipper on a traditional Frisian large sailing vessel without motor. Licensed sailing instructor. Gardening and do-it-yourself. Gained a lot of insight in house building during a new house building project (2014-2016) from almost exclusively sustainable & ecological materials, yet done in a modern way.