

Template: CV and key publications

Name: Martyn Tranter

Born: 17.11.56

Personal website: [Martyn Tranter - Aarhus University \(au.dk\)](http://MartynTranter-AarhusUniversity.au.dk)

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Publication data: 21.06.2024

Peer-reviewed publications	230	h-index (<i>Web of Science</i>)	58
Citations (<i>Web of Science</i>)	10.963	Publications in top 10% journals by CiteScore Percentile (<i>SciVal</i>)	42

Research area: Glacial biogeochemistry

Main research interests: solute generation and fluxes through the cryosphere, nutrient transformations in the cryosphere, biological darkening of the Greenland Ice Sheet.

Education: PhD (1982), University of East Anglia (UEA), Environmental Sciences (ENV).

Employment: Lecturer: ENV, UEA (1985-6), Oceanography, Southampton (1986-1992), Geography Bristol (1992-2000, Professor 2000-2021). Professor ENV, Aarhus (2020-).

Eventual Grants as Principal Investigator the last 5 years - Amount to AU:

2. 2020-25 **ERC Synergy Grant (856416)** DEEP PURPLE: Essential field and laboratory measurements of critical physical and microbial processes which darken the Greenland Ice Sheet and accelerate sea level rise (with A. M. B. Anesio and L. G. Benning). **€11.007.344, €4.662.873 to AU.**

1. 2019-22 **NERC (NE/S013288/1)** CASCADA – Toxin or Treat? (with J. Wadham, P. Nienow, A. Hein and A. Beaton). **£433,244, £0 to AU.**

Funded advisory projects: total amount / amount to AU: minor, see Alex Anesio CV, PROM-BIO

Awards: 2021 Awarded the Julia and Johannes Weertman Medal, European Geosciences Union for pioneering work on the biogeochemistry of glaciers and ice sheets.

2020 The name of Tranter Glacier, on the Antarctic Peninsula, awarded by the UK Antarctic Place-Names Committee for pioneering biogeochemical research on the ice sheet.

2020- Elected as a Fellow of the Learned Society of Wales (FLSW)

Top 10 publications (by citation count):

- Hodson A, **Tranter M**, Anesio AM, Osborn M, Fountain A, Laybourn-Parry J, Sattler B, and Priscu J. 2008. Glacial ecosystems. **Ecological Monographs**, 78, 41-68. **393 citations.**
- Milner AM, Khamisa K, Battin TJ, Brittain JE, Barranda NE, Füreder L, Cauvy-Fraunie S, Gíslason GM, Jacobsen D, Hannah DM, Hodson AJ, Hood E, Lencionil V, Olafsson JS, Robinson CT, **Tranter M** and Brown LE 2017. Glacier shrinkage driving global changes in downstream systems. **Proceedings of the National Academy of Sciences**, doi: 10.1073/pnas.1619807114. **317 citations.**
- Raiswell R, **Tranter M**, Benning LG, Siegert M, De'ath R, Huybrechts P and Payne T 2006. Contributions from glacially derived sediment to the global iron (oxyhydr)oxide cycle: Implications for iron delivery to the oceans. **Geochimica et Cosmochimica Acta**, 70, 2765-2780. **198 citations.**
- Hawkings JR, Wadham JL, **Tranter M**, Raiswell R, Benning LG, Statham P, Tedstone A, Nienow P, Lee K and Telling J 2014. Ice sheets as a significant source of highly reactive nanoparticulate iron to the oceans. **Nature Communications**, 5, doi: 10.1038/ncomms4929. **197 citations.**
- Raiswell R, Benning LG, **Tranter M** and Tulaczyk S 2008. Bioavailable iron in the Southern Ocean: The significance of the iceberg conveyor belt. **Geochemical Transactions**, doi:10.1186/1467-4866-9-7. **195 citations.**
- Tranter M**, Sharp MJ, Lamb HR, Brown GH, Hubbard BP and Willis IC 2002. Geochemical weathering at the bed of Haut Glacier d'Arolla, Switzerland - a new model. **Hydrological Processes**, 16, 959-993. **194 citations.**
- Tranter M**, Brown GH, Raiswell R, Sharp MJ and Gurnell AM 1993. A conceptual model of solute acquisition by Alpine glacial meltwaters. **Journal of Glaciology**, 39, 573-581. **185 citations.**
- Sharp M, Parkes J, Cragg B, Fairchild IJ, Lamb H and **Tranter M** 1999. Widespread bacterial populations at glacier beds and their relationship to rock weathering and carbon cycling. **Geology**, 27, 107-110. **182 citations.**
- Yallop ML, Anesio AM, Perkins, Cook J, Telling J, Fagan D, MacFarlane J, Stibal M, Barker G, Bellas C, Hodson A, **Tranter M**, Wadham J and Roberts NW 2012. Photophysiology and albedo-changing potential of the ice algae community on the surface of Greenland Ice Sheet. **ISME Journal**, doi:10.1038/ismej.2012.107. **160 citations.**
- Sharp M, **Tranter M**, Brown GH and Skidmore M 1995. Rates of chemical denudation and CO₂ drawdown in a glacier-covered alpine catchment. **Geology**, 23, 61-64. **155 citations.**