

Curriculum Vitae

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 Date of birth: 22.04.1977
 Nationality: German

Employment

2021- Professor, Department of Earth Science, University of Bergen, Norway
 2019 -2021 Associate Professor, Department of Earth Science, University of Bergen, Norway
 2015-2019 Researcher, Department of Earth Sciences, University of Bergen, Norway
 2014 Oberassistent, Geological Institute, Department of Earth Sciences, ETH Zürich, Switzerland
 2010- 2014 Postdoctoral Researcher, Geological Institute, Department of Earth Sciences, ETH Zürich, Switzerland
 2009- 2010 Guest researcher (6 months)
 Department for Meteorology and Oceanography, University of Oslo, Norway
 2007- 2009 Postdoctoral Research Scholar
 Department of Earth and Planetary Sciences, California Institute of Technology, Pasadena, California, USA
 2006- 2007 Postdoctoral Researcher
 Department of Environmental Sciences, ETH Zürich, Switzerland

Education

2006 PhD, Department of Earth Sciences, ETH Zürich, Switzerland
 2002 Diplom (Master) in Geoecology; Faculty of Biology, Chemistry and Earth Sciences, University of Bayreuth, Germany

Career breaks

2010, 2012 Maternity leaves
 2011- 2014 80 % position

Major research grants

2021-2026 PI, ERC Consolidator Grant "Fluid inclusion microthermometry in speleothems (FluidMICS)" (~20 Mio NOK)
 2021-2026 PI, Researcher Project "Deep Ocean Temperatures in the Paleogene Greenhouse (DOTpaleo)", Norwegian Research Council (NFR; ~12 Mio NOK)
 2017-2021 PI, Researcher Project "Tropical Temperature Reconstruction Across 0.5 million years from Cave formations (T-TRAC)"; NFR (~10 Mio NOK)
 2015- 2020 PI, ERC Starting Grant "Climate change across Cenozoic cooling steps reconstructed with clumped isotope thermometry (C4T)" (~19 Mio NOK)
 2015- 2019 Trond Mohn Foundation Recruitment Grant "Clumped isotope thermometry as a

- 2015 new tool for transforming paleo-oceanography (CLIP)", (~16 Mio NOK)
 Co-PI, Norwegian National Infrastructure grant "FARLAB" for major upgrade of the stable isotope laboratory at the University of Bergen, NFR

Fellowships and awards

- 2022 Member of the Norwegian Academy of Science and Letters
 2015 Marie Heim-Vögtlin Award; Swiss National Science Foundation (SNF) (20k CHF)
 2012- 2014 Marie-Heim-Vögtlin Postdoc grant from SNF, 2 years
 2008- 2010 Postdoctoral Fellowship from German Research Foundation (DFG), 2 years
 2007- 2008 Postdoctoral Fellowship from SNF, 1 year

Organization of scientific meetings

- 2022 Leader of the organizing committee and member of the scientific committee for the International Conference on Paleoceanography (ICP14) in Bergen
 2020 Member of the scientific committee and session chair for the Climate Change, The Karst Record (KR9) conference, Innsbruck, Austria (postponed to 2022)
 2018 Co-theme chair for theme 8 "Climate of the Past, Present, Future" at the international Goldschmidt Conference for Geochemistry, Boston, US
 2017 Co-chair of session CL1.17 "The speleothem archive: understanding processes and interpreting Quaternary climate change", EGU Vienna
 2016 Member of the science committee, 5th International Clumped Isotope Workshop, St. Petersburg, FL, USA
 2015 Co-convenor of clumped isotope session, Goldschmidt conference, Prague
 2014 Member of organizing committee for the 4th International Clumped Isotope Workshop, ETH Zürich, Switzerland

Commissions of trust

- 2020 PhD evaluation committee for Kristian Agasøster Haaga, University of Bergen
 2019 PhD evaluation committee for Susanne Alfken, University of Bremen
 2019 PhD evaluation committee for Henrik Sadatzki, University of Bergen
 2018 PhD committee member for Marion Peral, LSCE, Gif-sur-Yvette, France
 2017 - Member of the **scientific advisory board**, MARUM Center for Marine Environmental Science, University of Bremen, Germany

Institutional responsibilities

- 2019 - **Research theme leader** at Bjerknes Centre for Climate Research
 2017-2018 Establishment and interim lead of research theme "Climate Hazards" at the Bjerknes Centre
 2010- 2014 Elected co-chair of the department-wide association of scientific staff, ETHZ
 2003- 2004 Elected representative of scientific staff at the Geological Institute, ETH Zürich

Referee service

Journals: Nature, Nature Communications, PNAS, Geology, Paleoceanography, Geochimica et Cosmochimica Acta, JGR-Oceans, Quaternary Science Reviews, Chemical Geology, Global and Planetary Change, Quaternary Research, Biogeosciences, Climate of the Past, G-cubed
Grant proposals: German Research Foundation, US National Science Foundation, South African National Research Foundation, Global Exploration Fund (National Geographic)

Selected outreach and communication activities

- 2020 Talk at Bjerknes Centre Anniversary Celebration and Bjerknes Centre Christmas calendar: "Dryppsteinenes hemmeligheter" (The secrets of dripstones) (Youtube, in Norwegian)
<https://www.youtube.com/watch?v=8rY9s07RvXQ&feature=youtu.be>
- 2020 Innsikt article in <2° magazine: "Slik vet vi hvordan klimaet var i fortiden" (This is how we know what climate was like in the past), with Lars Ursin
- 2020 Contribution to exhibition in Grieghallen (Bergen concert hall) about paleoclimate archives alongside "Neste Steg - Klima" concert
- 2019 Borneo cave fieldwork featured in German GEO magazine
- 2018 Presentation for His Royal Highness Crownprince Haakon and His Excellency, President of Slovakia, Andrej Kiska, at the Bjerknes Center for Climate Research, Bergen: "New tools for old climate"
- 2018 Contribution to exhibition "tidmaskin in naturen" (nature's time machine) at political festival week in Arendal, Norway
- 2018 - Instagram presence (@muluclimatescience) during fieldwork in Borneo
- 2017 Public science lecture for the Geological Society of Zürich: "Natürliche Datenlogger im Untergrund" (natural data loggers underground)
- 2016, 2017 Invited talks for university board: "New ways to reconstruct old climate", University of Bergen
- 2016 Public science lecture and podcast for "Forskning i front" event, University of Bergen: "Climate detectives: deciphering clues from underground"
<https://www.podbean.com/ew/pb-r4nba-634469>
- 2005 Project responsible for exhibit "Nachrichten aus dem Untergrund" at ETH science fair, explaining the use of sediments as archives

Other communication

- 2018 Invitation to speak for UiB's university board in the context of strategy revisions
- 2015 Invitation by Norwegian Ministry of Education and Research to speak before Prime Minister Erna Solberg, the Minister of Education, and invited guests about supporting excellence and recruiting young scientists.

Invited talks at international conferences

- Meckler, A.N., Sexton, P., Piasecki, A.M., Leutert, T.J., Marquardt, J., Ziegler, M., Agterhuis, T., Rae, J., Barnet, J., Tripathi, A., Bernasconi, S.M.: Cenozoic evolution of deep-sea temperature from clumped isotope thermometry, Invited keynote, Goldschmidt Conference, 2021.
- Plenary lecture "Clumped isotope thermometry in Cenozoic paleoceanography", International Conference of Paleoceanography, Sydney, 2019.
- Meckler, A.N., Bernasconi, S.M., Ziegler, M., Tripathi, A.: Clumped isotope thermometry as new tool for paleoceanography. Plenary keynote lecture, GeoTiro, Innsbruck, 2016.
- Meckler, A.N., Ziegler, M., Millán, I., Breitenbach, S.F.M., Kele, S., Benning, L.G., Rodriguez-Blanco, J.D., Bernasconi, S.M.: Improving carbonate clumped isotope thermometry for application to foraminifera-based paleoceanography. AGU Fall Meeting, San Francisco, 2014.
- Meckler, A.N., Röhl, U., Martínez-García, A., Adkins, J.F., and Haug, G.H.: Controls of the Northern Hemisphere Hadley circulation over the last five glacial cycles. AGU Fall Meeting, San Francisco, 2012.
- Meckler, A.N., Clarkson, M.O., Adkins, J.F., Eiler, J.M., and Cobb, K.M.: Three glacial-interglacial cycles in a speleothem record from Borneo. INQUA, Bern, 2011.

Selected publications

Total number of peer-reviewed publications: 34; Total number of citations (excluding self-citations): 1264; H-index: 19 (from Web of Science, July 6, 2022)

*Publications with supervised master / PhD students or Postdocs as first authors are marked with **

Meckler, A.N., Sexton, P., Piasecki, A.M., Leutert, T.J., Marquardt, J., Ziegler, M., Agterhuis, T., Lourens, L.J., Rae, J.W.B., Barnet, J., Tripathi, A., Bernasconi, S.M., 2022, Cenozoic evolution of deep ocean temperature from clumped isotope thermometry, *Science* 377, 86-90.

*Meinicke, N., Reimi, M., Ravelo, A.C., **Meckler, A.N.**, 2021, Coupled Mg/Ca and Clumped Isotope Measurements Indicate Lack of Substantial Mixed Layer Cooling in the Western Pacific Warm Pool During the Last similar to 5 Million Years, *Paleoceanography and Paleoclimatology* 36 (8), e2020PA004115.

*Caldarescu, D.E., Sadatzki, H., Andersson, C., Schäfer, P., Fortunato, H., **Meckler, A.N.**, 2021, Clumped isotope thermometry in bivalve shells: A tool for reconstructing seasonal upwelling, *Geochimica et Cosmochimica Acta* 294, 174-191.

*Leutert, T.J., Auderset, A., Martinez-Garcia, A., **Meckler, A.N.**, 2020, Coupled Southern Ocean cooling and Antarctic ice sheet expansion during the middle Miocene, *Nature Geoscience* 13, 634–639.

*Meinicke, N., Ho, S.L., Hannisdal, B., Nürnberg, D., Tripathi, A., Schiebel, R., **Meckler, A.N.**, 2020, A robust calibration of the clumped isotopes to temperature relationship for foraminifers, *Geochimica et Cosmochimica Acta* 270, 160-183.

*Leutert, T.J., Sexton, P.F., Tripathi, A., Piasecki, A., Ho, S.L., **Meckler, A.N.**, 2019, Sensitivity of clumped isotope temperatures in fossil benthic and planktic foraminifera to diagenetic alteration, *Geochimica et Cosmochimica Acta* 257, 354-372.

Bischoff, T., Schneider, T., **Meckler, A.N.**, 2017, A Conceptual Model for the Response of Tropical Rainfall to Orbital Variations, *Journal of Climate* 30, 8375-8391.

Meckler, A.N., Affolter, S., Dublyansky, Y.V., Krüger, Y., Vogel, N., Bernasconi, S.M., Frenz, M., Kipfer, R., Leuenberger, M., Spötl, C., Carolin, S., Cobb, K.M., Moerman, J., Adkins, J.F., Fleitmann, D., 2015, Glacial–interglacial temperature change in the tropical West Pacific: A comparison of stalagmite-based paleo-thermometers, *Quaternary Science Reviews* 127, 90-116.

Meckler, A.N., Ziegler, M., Millán, I., Breitenbach, S.F.M., Bernasconi, S.M., 2014, Long-term performance of the Kiel carbonate device with a new correction scheme for clumped isotope measurements, *Rapid Communications in Mass Spectrometry* 28, 1705-1715.

Straub, M., Sigman, D.M., Ren, H., Martínez-García, A., **Meckler, A.N.**, Hain, M., Haug, G.H., 2013, Changes in North Atlantic nitrogen fixation controlled by ocean circulation. *Nature* 501, 200-203.

Meckler, A.N., Sigman, D.M., Gibson, K.A., François, R., Martínez-García, A., Jaccard, S.L., Röhl, U., Peterson, L.C., Tiedemann, R., Haug, G.H., 2013, Deglacial pulses of deep-ocean silicate into the subtropical North Atlantic Ocean. *Nature* 495, 495-498.

Meckler, A.N., Clarkson, M.O., Cobb, K.M., Sodemann, H., and Adkins, J.F., 2012, Interglacial hydroclimate in the tropical West Pacific through the late Pleistocene. *Science* 336, 1301-1304.

Other publications:

Meckler, A.N., 2016, An extended yardstick for climate variability, invited News & Views commentary, *Nature* 534, 626-628.