

# Curriculum vitae with track record (for researchers)

**Role in the project**    Project participant

## Personal information

First name, Surname:	Anna Nele Meckler		
Date of birth:	22.04.1977	Sex:	Female
Nationality:	German		
Researcher unique identifier(s):	Researcher ID: AAC-2490-2020, ORCID: 0002-7225-8276		
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## Education

Year	Faculty/department - University/institution - Country
2006	Ph.D., Department of Earth Science, ETH Zürich, Switzerland
2002	Diplom (Master) in Geoecology, University of Bayreuth, Germany

## Positions - current and previous

Year	Job title – Employer - Country
2021 -	Professor, Department of Earth Science (GEO), University of Bergen, Norway
2019-2020	Associate Professor, Department of Earth Science (GEO), University of Bergen, Norway
2015-2019	Researcher, GEO, University of Bergen (UiB)
2010-2014	Postdoctoral researcher, later lecturer, ETH Zürich, Switzerland
2007-2009	Postdoctoral research scholar, California Institute of Technology, USA
2006-2007	Postdoctoral researcher, ETH Zürich, Switzerland

## Career breaks

Year	Reason
2010, 2012	Maternity

## Project management experience

Year	Project owner - Project - Role - Funder
2021-2026	UiB, "Fluid inclusion microthermometry in speleothems (FluidMICS)", <b>PI</b> , ERC Consolidator Grant
2021-2027	UiB, "Deep Ocean Temperatures in the Paleogene greenhouse (DOTpaleo)", <b>PI</b> , NFR
2007-2021	UiB, "Tropical Temperature Reconstruction Across 0.5 million years from Cave formations (T-TRAC)", <b>PI</b> , NFR
2015-2021	UiB, "Climate Change across Cenozoic cooling steps reconstructed with clumped isotope thermometry (C <sup>4</sup> T)", <b>PI</b> , ERC Starting Grant
2015-2020	UiB, "Clumped isotope thermometry as a new tool for transforming paleoceanography (CLIP)", <b>PI</b> , Trond Mohn Foundation

2012-2014	ETH, "Cenoclump", Marie-Heim Vögtlin personal postdoctoral Fellowship, Swiss National Science Foundation (SNF)
2007-2010	Personal postdoctoral scholarships from German Research Foundation (DFG) and SNF

### Supervision of graduate students and research fellows

(Total number of students; ongoing projects in brackets)

Master's students	Ph.D. students	Postdocs	University/institution - Country
11 (4)	6 (4)	8 (3)	University of Bergen, Norway 2 PhD students successfully graduated in 2020. 2 master student projects have resulted in first-author scientific publications (one in preparation)
1			ETH Zürich, Switzerland

### Other relevant professional experiences

#### Institutional responsibilities

Year	Description - Role
2019 – 2017 – 2018	<b>Research leader</b> at Bjerknes Centre for Climate Research (BCCR) Establishment and interim lead of BCCR research theme "Climate hazards"
2018 – 2019	Establishment and co-lead of a working group on abrupt climate change, BCCR
2017 –	Member of the <b>scientific advisory board</b> , MARUM Center for Marine Environmental Science, University of Bremen, Germany
2010 – 2014	<b>Elected co-chair</b> of the department-wide association of scientific staff, ETHZ

#### Organization of scientific meetings

Year	Description - Role
2022	Leader of the <b>local organizing committee</b> and member of the <b>scientific committee</b> for the International Conference on Paleooceanography, Bergen, Norway
2022	Member of the <b>scientific committee</b> and <b>session chair</b> for the Climate Change, The Karst Record (KR9) conference, Innsbruck, Austria
2018	<b>Co-theme chair</b> for theme 8 "Climate of the Past, Present, Future" at the international Goldschmidt Conference for Geochemistry, Boston, US
2016	<b>Science committee</b> , 5 <sup>th</sup> International Clumped Isotope Workshop, St. Petersburg, FL, USA
2014	<b>Organizing committee</b> , 4 <sup>th</sup> International Clumped Isotope Workshop, ETH Zürich

#### Commissions of trust

Year	Description - Role
2020	PhD evaluation committee for Kristian Agasøster Haaga, University of Bergen, Norway
2019	PhD evaluation committee for Susanne Alfken, University of Bremen, Germany

2019	PhD evaluation committee for Henrik Sadatzki, University of Bergen, Norway
2018	PhD committee member (“rapporteur”) for Marion Peral, LSCE, Gif-sur-Yvette, France
Proposal reviews	German Research Foundation, US National Science Foundation, South African National Research Foundation, Global Exploration Fund (National Geographic)

## Track record

Total number of publications: 35; Total number of citations (excluding self-citations): 1359; h-index: 19 (from Web of Science, Feb 3, 2023).

### Selected publications

*Publications with supervised 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., Barnett, J., Tripathi, A., Bernasconi, S.M., 2022, Cenozoic evolution of deep ocean temperature from clumped isotope thermometry, *Science* 377, 86-90. *Initialization, clumped isotope analyses, manuscript drafting.*
- \*Løland, M., Krüger, Y., Fernandez, A., Buckingham, F., Carolin, S.A., Sodemann, H., Adkins, J.F., Cobb, K.M., **Meckler, A.N.**, 2022, Evolution of tropical land temperature across the last glacial termination, *Nature Communications* 13: 5158. *Initialization and supervision.*
- \*Caldarescu, D.E., Sadatzki, H., Andersson, C., Schaefer, 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. *Initialization and supervision (master thesis).*
- \*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. *Initialization and supervision.*
- \*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. *Initialization and supervision.*
- 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 paleothermometers, *Quaternary Science Reviews* 127, 90-116 *Lead of method intercomparison study, clumped isotope analyses, manuscript drafting.*
- 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. *Lead of data compilation and manuscript drafting, contribution to data generation.*
- 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. *Contribution of dust proxy data, contribution to interpretation of results and manuscript drafting.*
- 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. *Initialization of the work, analyses and interpretation, manuscript drafting.*
- 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. *Analyses and interpretation, manuscript drafting.*

## Invited talks at international conferences and advanced schools

- Meckler, A.N., Sexton, P., Piasecki, A.M., Leutert, T.J., Marquardt, J., Ziegler, M., Agterhuis, T., Rae, J., Barnett, J., Tripathi, A., Bernasconi, S.M.: Cenozoic evolution of deep-sea temperature from clumped isotope thermometry, **Invited keynote**, Goldschmidt Conference, 2021.
- Meckler, A.N.: Clumped isotope thermometry in Cenozoic paleoceanography, **Plenary lecture** at International Conference of Paleoceanography, Sydney, 2019.
- Meckler, A.N.: Multiply substituted isotopologues (“clumped isotopes”) and its application to speleothems, Lecture at International Summer School on Speleothem Science (S4), 2017 and 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.

## Awards and honors

- 2022            Membership in the Norwegian Academy of Sciences
- 2015            Marie Heim-Vögtlin Award (20,000 CHF); Swiss National Science Foundation (SNF)

## Outreach 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 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 “tidsmaskin in naturen” (nature’s time machine) at political festival week in Arendal, Norway
- 2018 –  
2017            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 UiB university board: “New ways to reconstruct old climate”
- 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