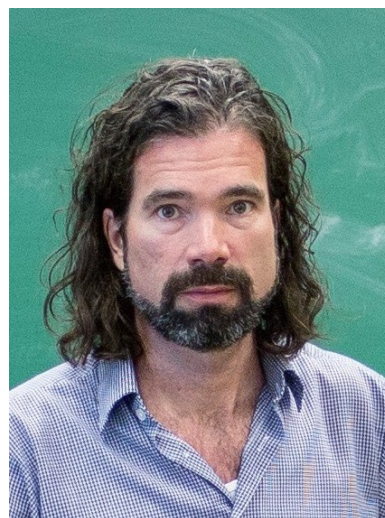


## Curriculum Vitae

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### Coordination & leadership:

- 2019-2020 US-Norway Fulbright Arctic Chair
- 2015 - Member of the CliC Scientific Steering Group (Climate and the Cryosphere, WCRP)
- 2014 - Coordinating Chair of Arctic ECRA (European Climate Research Alliance)
- 2014 - Leader of the Polar Science Network at University of Bergen
- 2015 - 2019 Project leader TRACEICE: Trans-Arctic Change: Extending Interdisciplinary Collaborations on the Environment
- 2014-2017 Ocean Work Package Leader - Norwegian Young Sea Ice Cruise (N-ICE2015)
- 2013 - 2017 Coordinating PI: BCCR Research Group on Atmosphere, Cryosphere & Ocean
- 2007 Cruise leader, Coast Guard Svalbard, 2 weeks experiment, Barents Sea
- 2005 Leader of fieldwork on Arctic supercooling and frazil ice formation.

### Administration, Reviewing, Teaching, Supervision:

- 2014 - 2021 Professor II at University Centre in Svalbard (UNIS)
- 2007 - 2021 Teaching Master and Bachelor level: Data analysis (2007 and 2013), Polar Oceanography (2013 - 2021), Physics of the Atmosphere and Ocean (2014 - 2020)
- 2007 - 2021 Supervision of PhD and Master students:  
Ongoing: 2 PhD students,  
Finished: 7 PhD students (2011 - 2021), 8 Master students (2012 - 2020)
- 2006 Coordination, web pages, reporting, outreach  
(Norwegian Ocean Climate and Polar Ocean Climate projects)
- 2002 - 2018 Editorial work, Guest Editor:  
Forum for Research on Ice Shelf Processes, Annals of Glaciology, Oceanography
- 2000 - 2021 Reviewer for international scientific journals; Nature, Science, J. Clim.,  
J. Geophys. Res., Deep Sea Research, The Cryosphere, Geophys. Res. Letters,  
Ocean Science, Annals of Glaciology
- 1994 - 1999 Student member of the Geophysical Institute board, University of Bergen.

## Education:

- 1988 Graduated at Kongsberg college, natural sciences
- 1990 Appointed second-lieutenant in the Royal Norwegian Navy
- 1996 Graduated as Master of Science in Physical Oceanography, Faculty of natural sciences, University of Bergen, March 26. (Thesis graded as 1.5 on a scale from 1.0 to 4.0)
- 2000 Graduated as a Doctor of Science in Physical Oceanography, Faculty of natural sciences, University of Bergen, March 17.

## Outreach & Media:

- 2006 Producer: The Svalbard collection - 4 films from freezing conditions
- 2008 Exporting Ice (Nature 23. October 2008)
- 2009 Pancake ice takes over the Arctic (Nature 23. March 2009)
- 2009 - 2010 Blog on forskning.no: <http://www.forskning.no/blog/larshsmedsrud>
- 2008 - 2021 About 100 stories in Norwegian and International press, [see personal web page](#).

## Research Experience:

- 1994 CTD observations, two week cruise, R/V Håkon Mosby, the Norwegian Sea.
- 1995 Field assistant, current and CTD data, Norwegian Institute for Water Research.
- 1996 Observations of under ice topography using acoustic sonar, four weeks, R/V Lance, Barents Sea. ICE BAR 1996, Norwegian Polar Institute.
- 1996 - 1997 Participated in INTERICE I. Worked with salinity, temperature, frazil ice and current measurements. HSVA, Hamburg, Germany.
- 1998 Worked with numerical modelling at CSIRO - division of Marine Research, Hobart, Australia, for 5 months during the Ph.D.
- 1998 Participated in INTERICE II. Worked with salinity, temperature, sediment, frazil ice and current measurements. HSVA, Hamburg, Germany.
- 1999 - 2000 Worked with numerical modelling of sediment entrainment in the "Transport and faith of contaminants in the northern Seas" project. Norwegian Polar Institute.
- 2000 - 2001 Laboratory experiments, sea ice formation, Cosmos project, University of Bergen.
- 2001 - 2002 Marie Curie Fellow at the British Antarctic Survey, Cambridge, UK.  
Modelling frazil ice crystal formation below Antarctic ice shelves
- 2001 - 2004 Post Doc at the Geophysical Institute, University of Bergen.  
Dynamics of warming of the deep water in the Weddell Sea.
- 2003 - 2006 Researcher at the Bjerknes Centre for Climate Research, Bergen.  
Field work and numerical modelling, Polar Ocean Climate Processes.
- 2007 - 2013 Researcher at the Bjerknes Centre for Climate Research and Uni Research, Bergen.  
Numerical modelling and field work: Barents Sea, Arctic and Antarctica
- 2013 - 2014 Associate Professor at the Geophysical Intitute, Research based teaching.
- 2014 - 2021 Professor at the Geophysical Institute, Research based teaching and supervision

## 56 Publications in International Journals: h-index of 32, and 3674 citations in August 2021

- Le Bras, I., F. Straneo, M. Muilwijk, **L. H. Smedsrud**, F. Li, M. S. Lozier, and N. P. Holliday (2021) How much Arctic fresh water participates in the subpolar overturning circulation? *Journal of Physical Oceanography*, doi:10.1175/JPO-D-20-0240.1
- Rheinländer, J. W., **L. H. Smedsrud** and K. H. Nisancioglu (2021) Internal Ocean Dynamics and the Long-term Evolution of Weddell Sea Polynya Activity *Front. Clim.* 3:718016, doi: 10.3389/fclim.2021.718016
- Haumann, F. A., R. Moorman, S. Riser, **L. H. Smedsrud**, T. Maksym, A. P. S. Wong, E. A. Wilson, R. Drucker, L. D. Talley, K. S. Johnson, R. M. Key, and J. L. Sarmiento (2020) Supercooled Southern Ocean waters. *Geophysical research Letters*, 2020, 47, e2020GL090242. doi:10.1029/2020GL090242
- Duarte, P., A. Sundfjord, A. Meyer, S.R. Hudson, G. Spreen and **L.H. Smedsrud** (2020) Warm Atlantic Water explains observed sea ice melt rates north of Svalbard, *Journal of Geophysical Research: Oceans*, 125, e2019JC015662. doi:10.1029/2019JC015662
- Skagseth, Ø., T. Eldevik, M. Årthun, H. Asbjørnsen, V. Lien and **L.H. Smedsrud** (2020) Reduced efficiency of the Barents Sea cooling machine. *Nature Climate Change*, doi:10.1038/s41558-020-0772-6
- Kimmritz, M. F. Counillon, **L. H. Smedsrud**, I. Bethke, N. Keenlyside, F. Ogawa, Y. Wang (2019) Impact of ocean and sea ice initialisation on seasonal prediction skill in the Arctic, *J. of Advances in Modeling Earth Systems*, 11, 4147–4166, doi:10.1029/2019MS001825
- Muilwijk, M., M. Ilicak, S. B. Cornish, S. Danilov, R. Gelderloos, R. Gerdes, V. Haid, T. W. N. Haine, H. L. Johnson, Y. Kostov, T. Kovács, C. Lique, J. M. Marson, P. G. Myers, J. Scott, **L. H. Smedsrud**, C. Talandier, and Q. Wang (2019) Arctic Ocean response to Greenland Sea wind anomalies in a suite of model simulations. *Journal of Geophysical Research: Oceans*, 124. doi:10.1029/2019JC015101
- Anhaus, P., **L. H. Smedsrud**, M. Årthun and F. Straneo Sensitivity of submarine melting on North East Greenland towards ocean forcing (2019) *The Cryosphere Discuss.* doi:10.5194/tc-2019-35.
- Graham, R. M., P. Itkin, A. Meyer, A. Sundfjord, G. Spreen, **L. H. Smedsrud**, G. E. Liston, B. Cheng, L. Cohen, D. Divine, I. Fer, A. Fransson, S. Gerland, J. Haapala, S. R. Hudson, A. M. Johansson, J. King, I. Merkouriadi, A. K. Peterson, C. Provost, A. Randelhoff, A. Rinke, A. Rösel, N. Sennéchaël, V. P. Walden, P. Duarte, P. Assmy, H. Steen, and M. Granskog (2019) Winter storms accelerate the demise of sea ice in the Atlantic sector of the Arctic Ocean, *Scientific Reports*, 9, #9222, doi:10.1038/s41598-019-45574-5
- Årthun, M., T. Eldevik, and **L. H. Smedsrud** (2019) The role of Atlantic heat transport in future Arctic winter sea ice loss, *J. Climate*, doi:10.1175/JCLI-D-18-0750.1
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