

Name	Rüdiger Stein
Position	Professor
Affiliation	Bremen University, MARUM
Higher education	<ul style="list-style-type: none"> • 1990 Habilitation in Geology, University of Giessen, Germany, • 1984 PhD in Geology, University of Kiel, Germany • 1980 Diplom (M.S. degree) in Geology, University of Kiel, Germany • 1977 Vordiplom (B.S. degree) in Geology, University of Clausthal-Zellerfeld, Germany,
Academic career	<ul style="list-style-type: none"> • 2003 to present Professor "Paleoceanography of the Arctic Ocean", Bremen University, Germany • 1991-2002 Privat-Dozent, Bremen University, Germany • 1991-present (Senior) Research Scientist at the Alfred Wegener Institute for Polar and Marine Research, Bremerhaven, Germany • 1986-1990 Assistant Professor in Geology, Giessen University • 1984-1986 Research Scientist, Institute for Petroleum and Organic Geochemistry, KFA Jülich, Germany
Teaching activities	<p>Bremen University</p> <p>M.Sc.: The role of high-latitude oceans in climate change</p> <p>B.Sc.: Geological field mapping</p>
Research and development projects during the past 5 years	Quaternary/Neogene paleoclimate and paleoceanography of the Arctic Ocean and adjacent Eurasian continental margin; circum-Arctic ice-sheet history; history of Arctic sea-ice cover; paleoenvironment of the early (Mesozoic/Cenozoic) Arctic Ocean and its transition from Greenhouse to Icehouse conditions.
Significant publications during the past 5 years	<p>Selected publications from overall 51 (2012-2017)</p> <p>Stein, R., Fahl, K., Gierz, P., Niessen, F., Lohmann, G., 2017. Arctic Ocean sea ice cover during the penultimate glacial and the last interglacial. Nature Communications 8: doi: 10.1038/s41467-017-00552-1.</p> <p>Stein, R., Fahl, K., Schade, I., Manerung, A., Wassmuth, S., Niessen, F., Nam, S.-I., 2017. Holocene variability in sea ice cover, primary production, and Pacific-Water inflow and climate change in the Chukchi and East Siberian Seas (Arctic Ocean). Journal of Quaternary Science 32, 362-379.</p> <p>Stein, R., K. Fahl, Schreck, M., Knorr, G., Niessen, F., Forwick, M., Gebhardt, C., Jensen, L., Kaminski, M., Kopf, A., Matthiessen, J., Jokat, W., and Lohmann, G., 2016. Evidence for ice-free summers in the late Miocene central Arctic Ocean. Nature Communications 7:11148, doi:10.1038/ncomms11148.</p>

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	<p>Hoff, U., Rasmussen, T.L., Stein, R., Ezat, M., Fahl, K., 2016. Sea ice and millennial scale climate change in the Nordic seas 90 ka BP to Present. Nature Communications 7:12247, DOI: 10.1038/ncomms12247.</p> <p>Xiao, X., Fahl, K., Müller, J., Stein, R. 2015. Sea-ice distribution in the modern Arctic Ocean: biomarker records from Trans-Arctic Ocean surface sediments. Geochim. Cosmochim. Acta 155, 16-29.</p> <p>Stein, R. and Fahl, K., 2013. Biomarker proxy IP₂₅ shows potential for studying entire Quaternary Arctic sea-ice history. Org. Geochemistry 55, 98-102; doi: 10.1016/j.orggeochem.2012.11.005.</p> <p>Müller, J., Stein, R., 2014. High-resolution record of late glacial and deglacial sea ice changes in Fram Strait corroborates ice-ocean interactions during abrupt climate shifts. Earth Plan. Sci. Lett. 403, 446-455.</p> <p>Fahl, K. and Stein, R., 2012. Modern seasonal variability and deglacial/Holocene change of central Arctic Ocean sea-ice cover: New insights from biomarker proxy records. Earth Planetary Science Letters 351-352C , 123-133; doi:10.1016/j.epsl.2012.07.009.</p>
<p>Activities in scientific organizations and associations during the past 5 years</p> <p>Memberships without any function are not needed</p>	<ul style="list-style-type: none"> • since 2012 Member of Arctic in Rapid Transition (ART) Scientific Advisory Board • 2011-2015 Member of the Magellan-Plus Steering Committee • 2011-2013 Member of the IODP Scientific Implementation and Policy Committee (SIPCOM) • since 2007 Member of the ECORD Science Support and Advisory Committee (ESSAC); ESSAC Chair 2009-2011 • since 2001 Editorial board of GeoMarine Letters • since 1998 Editorial board of International Journal of Earth Sciences