

CURRICULUM VITAE (PUBLICATIONS BELOW)

Katrin Premke

- 1993-1996 Studies in Biology (Aquatic Ecology, Marine Geology and Landscape Ecology and Nature Conservation) at the Ernst-Moritz-Arndt University of Greifswald, Germany.
- 1997-1998 MSc thesis (Diploma) at the University of Cologne and University of Greifswald, Germany. Title: Predation on heterotrophic flagellates by protists: Food selectivity determined using a live-staining technique. Advisor: Prof. Hartmut Arndt.
- 2000 - 2003 PhD student at the Alfred Wegener Institute for Polar and Marine Research (AWI) Bremerhaven, Germany. Title: Aggregation of Arctic deep-sea scavenging amphipods at large food falls. Advisors: Dr. Michael Klages, Prof. Wolf E. Arntz.
- 2005 – 2006 Post-doctoral researcher at the Limnological Institute, University of Konstanz, Germany. Host: Prof. Karl-Otto Rothhaupt.
- 2006 – 2008 Post-doctoral researcher in the project ‘Lake Ecosystem Response to Environmental Change’ at the Limnological Institute, Uppsala University, Sweden. Host: Prof. Lars Tranvik.
- 2009 Post-doctoral researcher at the Limnological Institute, University of Konstanz, Germany. Host: Prof. Dr. Matthias Wantzen.
- 2010 - 2016 Scientist at the IGB and ZALF (Leibniz Centre for Agricultural Landscape Research, Müncheberg) and Head of the working group 'Carbon dynamics in aquatic systems'
- Since 2016 Scientist at the IGB and Head of the working group 'Carbon dynamics in aquatic systems'

LIST OF ALL PUBLICATIONS (ISI WEB) KATRIN PREMKE

2017

- Attermeyer K., Grossart H.-P., Flury S., **Premke K.** (2017) Bacterial processes and biogeochemical changes in the water body of kettle holes - mainly driven by autochthonous organic matter? *Aquatic Sciences*. DOI 10.1007/s00027-017-0528-1.
- Nitzsche K., Kalettka T, **Premke K.**, Lischeid G., Gessler A., Kayler Z.E. (2017) Hydroperiod and land-use impacts on kettle hole sediment biogeochemistry. *Science of the Total Environment*. 574:46-56. DOI: 10.1016/j.scitotenv.2016.09.003

2016

- Fabian J., Zlatanovic S, Mutz M., **Premke K.** (2016) Fungal-bacterial dynamics and their contribution to terrigenous carbon turnover in relation to organic matter quality. *ISME J* doi: 10.1038/ismej.2016.131

- McGinnis D.F., Bilsley N., Schmidt M., Fitzek P., Bodmer P., **Premke K.**, Lorke A., Flury S. (2016) Methane from a small Northern-European river: the role of bubbles and adjacent wetlands. *Environmental Science & Technology*
- von Rein, Kayler Z., **Premke K.**, Gessler A. (2016) Emergent aquatic macrophytes and global change – Desiccation of sediments affects assimilate transport within plants and carbon transfer to microorganisms. *Plant Biology*.
- Nitzsche K., Verch V., **Premke K.**, Gessler A., and Kayler K. (2016) Visualizing land-use and management complexity within biogeochemical cycles of an agricultural landscape. *Ecosphere*. DOI: 10.1002/ecs2.1282
- **Premke K.**, Attermeyer K., Augustin J., Cabelzas A., Casper P., Deumlich, D., Gelbrecht J., Gerke H.H., Gessler A., Grossart H.P., Hilt S., Hupfer, M., Kalettka T., Kayler Z., Lischeid G., Sommer M., Zak D. (2016) The importance of landscape diversity for carbon fluxes on the landscape level: Small-scale heterogeneity matters. *WIREs-water*. DOI: 10.1002/wat2.1147
- Bodmer P., Heinz M., Pusch M., **Premke K.** (2016) Carbon dynamics and their link to DOM quality across contrasting stream ecosystems. *Science of the Total Environment*. 553. 574–586.
- Weise L., Ulrich A., Moreano M., Gessler A., Kayler Z., Steger K., Zeller B., Rudolph K., Knezevic-Jaric J., **Premke K.** (2016) Water level changes affect carbon turnover and microbial community composition in lake sediments. *FEMS Microbiology Ecology* 2016 92 (5): DOI: 10.1093/femsec/fiw035
- von Rein I., Gessler A., Premke K., Keitel C., Ulrich A., Kayler Z. (2016) Forest understory plant and soil microbial response to an experimentally induced drought and heat-pulse event: the importance of maintaining the continuum. *Global Change Biology*. DOI:10.1111/gcb.13270
- Revere F., Grossart, H.P., **Premke, K.**, Lischeid G. (2016) Carbon and Nutrient Cycling in Kettle Hole Sediments Depending on Hydrological Dynamics: A Review. *Hydrobiologia*. DOI 10.1007/s10750-016-2715-9
- Attermeyer A., Flury S., Jayakumar R., Fiener P., Steger K., Arya V., Wilken F., van Geldern R. and **Premke K.** (2016) Invasive floating macrophytes reduce greenhouse gas emissions from a small tropical lake. *Scientific Reports*. doi:10.1038/srep20424

2015

- Lorke A., Bodmer P., Noss C., Alshboul Z., Koschorreck M., Somlao C., Bastviken D., Flury S., McGinnis D.F., Maeck A., Müller D., **Premke K.** (2015) Drifting versus anchored flux chambers for measuring greenhouse gas emissions from running waters. *Biogeosciences* 12:7013-7024.
- Flury S., Glud R.N., **Premke K.**, McGinnis D.F. (2015) The effect of gas presence in and ebullition from sediment on pore water solute fluxes. *Environmental Science & Technology* 07: 49(17).
- K. Steger, **Premke K.**, Gudasz C, Boschker HTS, Tranvik LJ (2015) A cross-system study on bacterial carbon sources in lake sediments: the role of methanotrophy. *Aquatic Microbial Ecology* 76:39 -47.
- Hölker F., Wurzbacher C., Weißenborn C., Monaghan MT, Holzhauer, IJS, Premke K. (2015) Microbial diversity and community respiration in freshwater sediments influenced by artificial light at night. *Philosophical Transactions the Royal Society B*. 370: 20140130

2014

- **Attermeyer K., Hornick T, Kayler ZE, Bahr A., Zwirnmann E, Grossart HP, Premke K. (2014)** Increasing addition of autochthonous to allochthonous carbon in nutrient-rich aquatic systems stimulates carbon consumption but does not alter bacterial community composition. *Biogeosciences*, 11, 6: 1479-1489

2013

- **Attermeyer K., Premke K., Hornick T., Hilt S., Grossart H.-P. (2013)** Ecosystem-level studies of terrestrial carbon reveal contrasting bacterial metabolism in different aquatic habitats. *Ecology*, 94, 12: 2754-2766

2012

- Gudas C., Bastviken D., **Premke K.**, Steger K., Tranvik L.J. (2012) Constrained microbial processing of allochthonous organic carbon in boreal lake sediments. *Limnology and Oceanography* 57: 163–175
- Bartels P., Cucherousset J., Gudas C., Jansson M., Karlsson J., Persson L., **Premke K.**, Steger K., Tranvik L.J. and Eklöv P. (2012) Allochthonous organic carbon in sediments: A subsidy to the benthic food web. *Oecologica*, DOI: 10.1007/s00442-011-2141-7

2011

- Steger K., **Premke K.**, Gudas C., Sundh I., Tranvik L.J. (2011) Microbial biomass and community composition in boreal lake sediments. *Limnology and Oceanography*, 56: 725-733.

2010

- Gudas C., Bastviken D., Steger K., **Premke K.**, Sobek S., Tranvik L.J. (2010) Temperature control of the organic carbon sink in lake sediments. *Nature*, 466: 478-481.
- **Premke K.**, Karlsson J., Steger K., Gudas C., von Wachenfeldt E., Tranvik L.J. (2010) Stable isotope analysis of benthic fauna and their food sources in boreal lakes. *Journal of the North American Benthological Society*, 29/4: 1339-1348.
- **Premke K.**, Fischer P., Hempel M., Rothhaupt K.-O. (2010) Ecological studies on the decomposition rate of fish carcasses by benthic organism: nutrient cycling in the littoral zone of Lake Konstanz, Germany. *Annales de Limnologie - International Journal of Limnology*, **46: 1-12.**

2009

- **Premke K.**, Graeve M. (2009). Metabolism and physiological traits of the deep sea amphipod *Eurythenes gryllus*. *Vie et Milieu - Life & Environment*, 59: 251-260.

2006

- **Premke K.**, Klages M., Arntz W.E. (2006). Aggregations of Arctic deep-sea scavengers at large food falls: temporal distribution, consumption rates and population structure. *Marine Ecology Progress Series*, 325:121-135.

2003

- **Premke K.**, Muyakshin S., Klages M., Wegner J. (2003). Evidence for long range chemoreceptive tracking of food odour in deep sea scavengers by scanning sonar data, *Journal of Experimental Marine Biology and Ecology*, 285-286, 283-294.
- Soltwedel T., Juterzenka K. v., **Premke K.**, Klages M. (2003). What a lucky shot! Photographic evidence for a medium-sized natural food-fall at the deep seafloor, *Oceanologica acta*, 26 (5/6): 623-628.

2000

- **Premke K.**, Arndt H. (2000). Predation on heterotrophic flagellates by protists: Food selectivity determined using a live-staining technique, *Archiv für Hydrobiologie*, 150, 17-28.

Book chapter

Premke, K. & Muyakshin, S. (2005). Finding food in the deep sea. In Wille P.C. (ed.) Sound images of the Ocean in research and monitoring. *Springer Verlag*, Chapter 6.3.2, 314-316.

Non-peer reviewed articles

Anger S, Arndt M, Braun B, Cullmann A, Hagemann U, Kraatz S, Mogilatenko A, **Premke K.**, Schwarzkopf J, Teney C, Thomas M, Wolf S. (2012) Verfügbare Potentiale in der Wissenschaft erkennen und Kompetenzen stärken! (2012) (<http://www.wissenschaftsmanagement-online.de/converis/artikel/1844>)

Premke K. (2003) Aggregation of Arctic deep-sea scavenging amphipods at large food falls. *Reports on Polar and Marine Research*, 531, 140 pp.

Brückner S., Hasemann C., Juterzenka K. v., **Premke K.**, Quéric N., Schewe I., Wegner J. (2002). Deep-sea Biology I. Causes and effects of physical, chemical and biological gradients in the deep sea. II. Investigations on the dynamics of benthic bacterial communities and their impact on small-scale heterogeneity patterns of Arctic deep-sea sediments. III. "Food-falls" - natural disturbances at the seafloor of the deep sea, *Reports on Polar and Marine Research*, 233, 36-40.

Hasemann C., **Premke K.** (2002). Einblicke in die Tiefsee, 20 Jahre Forschungsschiff "Polarstern", AWI Sonderdruck, 16-17.

Klages M., Arndt C., Muyakshin S., **Premke K.**, Robert F., Wegner J. (2001). Organic carbon flux to the deep sea - the relevance of large food falls, *Reports on Polar and Marine Research*. 389, 67-69.

Garstecki T., Güber A., **Premke K.**, Verhoeven R., Arndt H., Wickham S.A. (1999). Trophische Beziehungen innerhalb benthischer mikrobieller Nahrungsgewebe, *Bodden*, 8, 29-38.