

Resume

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Education:

University of Freiburg, Germany	Vordiplom (BA) 1981
University of Kiel, Germany	Diplom (masters) 1985
University of Kiel, Germany	Ph.D 1989
Institut für Meereskunde, Kiel, Germany	Post-doc 1989-1990
Marine Science Institute, UC Santa Barbara	Post-doc 1991-1992
University of Kiel, Germany	Habilitation 2000

Present position:

2009-present Researcher. Marine Science Institute, UC Santa Barbara, USA.

Previous positions:

2000-2010 Tenured Lead-Researcher. Alfred-Wegener Institute, Bremerhaven, Germany.
1992-2000 Research Oceanographer. Marine Science Institute, UC Santa Barbara, USA.

Professional societies:

ASLO: Association for the Sciences of Limnology and Oceanography
TOS: The Oceanographic Society
AGU: American Geophysical Union

Current Synergistic Activities, examples

- Chair of MOSSFA (Marine Oil Snow Sedimentation and Flocculant Accumulation) GoMRI Working Group (since May 2013)
- Member of Marine Science Advisory Committee (UCSB; since 2012)
- Chair of the *ad hoc* ASLO committee on “Emerging Issue Workshops” (since 2011)
- Member of Executive Committee for ECOGIG (since 2011)
- Member-at-Large of the Board of Directors for the American Society of Limnology and Oceanography (since 2010)
- Session Chair: New Orleans SS58: Ocean Provinces, Food Web Structure and Particle Flux (GoMRI, New Orleans, January 2013)
- Session Chair: ASLO February 2010; Portland: BO16: Exploring the Ecological Variability of the Biological Pump (ASLO, New Orleans, February 2013)
- Various Outreach and Educational Activities including talks for educators and the public, and mentoring high school students, undergraduates and teachers

Selected publications (from > 70)

- Passow, U. (1991). "Species specific sedimentation and sinking velocities of diatoms." *Marine Biology* **108**: 449-455.
- Passow, U. and R. Peinert (1993). "The role of plankton in particle flux: Two case studies from the NE-Atlantic." *Deep-Sea Research II* **40**: 573-585.
- Passow, U., A. L. Alldredge, et al. (1994). "The role of particulate carbohydrate exudates in the flocculation of diatom blooms." *Deep-Sea Research I* **41**(2): 335-357.
- Crocker, K. M. and U. Passow (1995). "Differential aggregation of diatoms." *Marine Ecology Progress Series* **117**(1-3): 249-257.
- Logan, B. E., U. Passow, et al. (1995). "Rapid formation and sedimentation of large aggregates is predictable from coagulation rates (half-lives) of transparent exopolymer particles (TEP)." *Deep-Sea Research II* **42**(1): 203-214.
- Mopper, K., J. Zhou, et al. (1995). "The role of surface-active carbohydrates in the flocculation of a diatom bloom in a mesocosm." *Deep-Sea Research II* **42**(1): 47-73.
- Passow, U. and A. L. Alldredge (1995). "Aggregation of a diatom bloom in a mesocosm: The role of transparent exopolymer particles (TEP)." *Deep-Sea Research II* **42**(1): 99-109.
- Passow, U. and A. L. Alldredge (1995). "A dye-binding assay for the spectrophotometric measurement of transparent exopolymer particles (TEP)." *Limnology and Oceanography* **40**(7): 1326-1335.
- Passow, U. and A. L. Alldredge (1999). "Do transparent exopolymer particles (TEP) inhibit grazing by the euphausiid *Euphausia pacifica*?" *Journal of Plankton Research* **21**(11): 2203-2217.
- Passow, U. (2000). "Formation of Transparent Exopolymer Particles, TEP, from dissolved precursor material." *Marine Ecology Progress Series* **192**: 1-11.
- Passow, U., R. F. Shipe, et al. (2001). "Origin of transparent exopolymer particles (TEP) and their role in the sedimentation of particulate matter." *Continental Shelf Research* **21**: 327-346.
- Passow, U. (2002). "Production of transparent exopolymer particles (TEP) by phytoplankton and bacterioplankton." *Marine Ecology Progress Series* **236**: 1-12.
- Passow, U. (2002). "Transparent exopolymer particles (TEP) in aquatic environments." *Progress in Oceanography* **55**: 287-333.
- Passow, U. (2004). "Switching perspectives: Do mineral fluxes determine particulate organic carbon fluxes or vice versa." *Geochemistry, Geophysics, Geosystems* **5**(4): 1-5.
- Passow, U. and C. L. De La Rocha (2006). "Accumulation of mineral ballast on organic aggregates." *Global Biogeochemical Cycles* **20**(GB1013): 7.
- De La Rocha, C. and U. Passow (2007). "Factors influencing the sinking of POC and the efficiency of the biological carbon pump." *Deep Sea Research II* **54**: 639-658.
- Ploug, H. and U. Passow (2007). "Direct measurements of diffusivity of diatom aggregates containing transparent exopolymer particles." *Limnology and Oceanography* **52**: 1-6.
- Ploug, H., A. Terbrüggen, et al. (2010). "A novel method to measure particle sinking velocity in vitro, and its comparison to three other in vitro methods." *Limnology and Oceanography: Methods* **8**: 386-393.
- Gaerdes, A., M. H. Iversen, et al. (2011). "Diatom associated bacteria are required for aggregation of *Thalassiosira weissflogii*." *ISME Journal* **5**(3): 436-445.
- Passow, U., M. A. French, et al. (2011). "Biological controls on dissolution of diatom frustules during their descent to the deep ocean: Lessons Learned from Controlled Laboratory Experiments." *Deep Sea Research I* **58**: 1147-1157.
- Passow, U. and C. Carlson (2012). "The Biological Pump in a High CO₂ World." *Marine Ecology Progress Series* **470**: 249-271.
- Passow, U., K. Ziervogel, et al. (2012). "Marine snow formation in the aftermath of the Deepwater Horizon oil spill in the Gulf of Mexico." *Environmental Research Letters* **7**(035031): 11.