

CURRICULUM VITAE

Nina Bednarsek, Ph.D.

RESEARCH INTEREST:

Ocean Acidification, Chemical and Biological Oceanography, Global Ocean Change, Pelagic Biogeochemistry.

EDUCATIONAL BACKGROUND:

- NRC post-doc: November 2012 onwards at National Oceanographic and Atmospheric Administration, Pacific Marine Environment Laboratory under supervision of Dr. Richard Feely. Research in biological and biogeochemical effects of ocean acidification.
- Ph.D. January 2007- October 2010: Marie Curie Fellowship, Collaboration between British Antarctic Survey, Cambridge and University of East Anglia, UK. Impact assessment of ocean acidification and climate change on marine organisms.
- M.Sc September 2005-2006. Environmental Diagnostics, Cranfield University, UK.
- B.Sc October 1998-February 2005. Interdepartmental Study of Microbiology, University of Ljubljana, Slovenia. Received award for Outstanding Diploma work.

PROFESSIONAL BACKGROUND:

- ⤴ National Research Council Fellowship at National Oceanographic and Atmospheric Administration, Pacific Marine Environment Laboratory, from 11/2012 onwards.
- ⤴ Research Associate and Lecturer at the University of Nova Gorica, Slovenia, 07/11-10/12.
- ⤴ Visiting Fellow at the Tyndall Centre for Climate Change Research, University of East Anglia, School of Environmental Sciences, Norwich NR4 7T from 02/11-03/11.
- ⤴ Early Stage Researcher (Marie Curie Fellow) at University of East Anglia, University of East Anglia, School of Environmental Sciences, Laboratory for Global Marine and Atmospheric Chemistry, Norwich NR4 7TJ, UK, 2007-2010.
- ⤴ Visiting Fellow at Woods Hole Oceanographic Institution, Woods Hole Oceanographic Institution, Woods Hole, MA 02543, 10/08-12/08.
- ⤴ Research Assistant at *3R Ltd.*, Anderson Group of Companies, London, 03/06-09/06.

TEACHING and OUTREACH EXPERIENCE:

- ⤴ Teaching lecturer for B.Sc. courses at the University of Nova Gorica, Slovenia:
- ⤴ Supervising students working towards their diploma and master thesis.
- ⤴ Various Outreach Activities (local and regional level in Washington and Oregon state)

FIELD EXPERIENCE:

- Fieldwork research on the research vessel RRS James Clark Ross in the Southern Ocean with British Antarctic Survey, Cambridge, UK.
- Fieldwork experience in sea-going instrumentation and equipment, fieldwork planning, logistics, sample collection and biological and chemical sample analysis, experimental designs for high-CO₂ on board conducted experiments.

PEER-REVIEWED PUBLICATIONS:

1. Bednaršek, N., Tarling, G. A., Bakker, D. C. E., Fielding, S., Jones, E.M., Venables, H. J., Ward, P., Kuzirian, A., B. Lézé, B., Feely, R. A. and E. J. Murphy, E.J. 2012. Extensive dissolution of live pteropods in the Southern Ocean. *Nature Geoscience* 5, 881-885

2. Bednaršek, N., Možina, J., Vogt, M., O'Brien, C., Tarling, G.A. 2012. The global distribution of pteropods and their contribution to carbonate and carbon biomass in the modern ocean. *Earth Syst. Sci. Data*, 4, 167-186.

3. Bednaršek, N., Tarling, G. A., Bakker, D. C., Fielding, S., Cohen, A., Kuzirian, A., McCorkle, D., Lézé, B. and Montagna, R. (2012), Description and quantification of pteropod shell dissolution: a sensitive bioindicator of ocean acidification. *Global Change Biology*, 18: 2378–2388.

4. Bednaršek, N., Tarling G., Bakker D., andd Fielding, S. 2012. Population dynamics and biogeochemical significance of *Limacina helicina ant.* in the Scotia Sea (Southern Ocean). *Deep Sea Research II*, 59-60. 105-116.

5. Buitenhuis E. T., Vogt M., Moriarty R., Swan C., Bednaršek N., Doney S., Leblanc K., Le Quéré C., Luo Y., O'Brien C., O'Brien T., Peloquin J., Schiebel R., Swan C. 2012. MAREDAT: Towards a World Ocean Atlas of Marine Ecosystem Data, *Earth System Science Data Discussions*, 5, 1077-1106,

6. Hunt, B., Strugnell, J., Bednarsek, N., Linse, K., Nelson R. J., Pakhomov, E., Seibel, B., Steinke D., Würzberg L. Poles Apart: The “Bipolar” Pteropod Species *Limacina helicina* Is Genetically Distinct Between the Arctic and Antarctic Oceans. *PLoS ONE* 5(3): e9835.

PUBLICATIONS in PREPARATION:

N. Bednarsek, R. A. Feely, J. ReuM, S. Alin, B. Hales. 2013. Is ocean acidification in the California Current Ecosystem driving coastal pteropod populations to decline? *Science*, submitted

SELECTED ABSTRACTS:

- ^ **Bednaršek, N., Tarling G., Bakker D., Fielding S. Pteropods as biogeochemical** indicator of saturation state, XXXI Scientific Committee on Antarctic Research, 2010.
- ^ **Bednaršek, N., Tarling G., Bakker D., Fielding S. Vulnerability of Southern Ocean** pteropods, Arctic Frontiers 2010 Conference; Marine Biodiversity Under Change, Norway, 2010.
- ^ **Bednaršek, N., Tarling G., Bakker D., Fielding S. Southern Ocean Pteropods and Ocean** Acidification: Where next? MARine Ecosystem Model Intercomparison Project, UK, 2009.
- ^ **Bednaršek, N., Tarling G., Bakker D., Fielding S. The end of polar pteropods?** Scientific Committee on Antarctic Research (SCAR), Japan, 2009.

- ⤴ **Bednaršek, N.**, Tarling G., Bakker D., Fielding S. Life cycle and the effect of ocean acidification on *Limacina helicina*, Second International Symposium on the Ocean in a high-CO₂ world, Monaco, 2008.
- ⤴ **Bednaršek, N.**, Tarling G., Bakker D., Fielding S. Ocean acidification experiment in the Scotia Sea, Climate driving of marine ecosystem changes (workshop), France, 2008.
- ⤴ **Bednaršek, N.**, Tarling G., Bakker D., Fielding S. Vulnerability of Southern Ocean pteropods to ocean acidification, 1st International Ocean Acidification Workshop, Sweden, 2007.

LANGUAGE SKILLS:

Fluent in English and Slovene, Advanced German and Croatian, Basic Spanish, Russian,

RECEIVED AWARDS

- Edith Fanta award for the most prominent young researcher and the best oral presentation, Scientific Committee on Antarctic Research (SCAR), Sapporo, Japan, July 2009. The award is given annually for the outstanding research in polar science.
- Award for the best oral presentation, British Antarctic Survey Ph.D. Annual Student Meeting, Cambridge, United Kingdom, October 2009.
- Marie Curie Doctoral Fellowship, Cambridge, United Kingdom, January 2007.
- Krka award for Outstanding Diploma work, Ljubljana, Slovenia, 2005.

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