

of water cannot be attained without a comprehensive knowledge of the environment,” Ruttner already stressed the interdisciplinary nature of limnology at this time. Subsequent research in Lunz included conceptual work on diel vertical migration and ‘Uferflucht’ (avoidance of the shore) of planktonic crustaceans, mating strategies of rotifers, high population densities in gravel streambeds, and on interconnected groundwater–riparian systems maintaining high levels of habitat heterogeneity. Sadly, the Biological Station Lunz was unable to continue its limnological research and closed in 2003.

In a joint effort to reinvigorate limnological research in Lunz, scientists at the University of Vienna, the University for Natural Resources and Applied Life Sciences, and the Danube University at Krems, as well as local and provincial politicians, designed an interuniversity concept for limnological research. The scientific collaboration of three universities encouraged the province of Lower Austria and the city of Vienna to provide base funding for the recently established interuniversity centre for aquatic ecosystem research, ‘WasserCluster Lunz – Biologische Station’, that officially opened in May 2007. Research funding will be generally acquired through successful grant applications at national and international science foundations.

The research centre pursues basic, as well as applied, aquatic ecosystem research, including:

- a) Biogeochemical functions: research and management at multiple scales (BIOFRAMES; Thomas Hein lab),
- b) Biofilm and ecosystem research group (BERG; Tom Battin lab),
- c) Aquatic lipid and ecotoxicology research (LIPTOX; Martin Kainz lab).

The WasserCluster Lunz is located in a former guest house, owned by the province of Lower Austria. We greatly acknowledge the substantial financial contribution of the province of Lower Austria and the city of Vienna for reconstructing this former guest house and for state-of-the-art laboratory infrastructure. Situated on the pre-alpine Lake Lunz, we started scientific collaboration with national and international aquatic research groups. Please contact us at [www.wasserkluster-lunz.ac.at](http://www.wasserkluster-lunz.ac.at). We look forward to hearing from you!

## OCEAN CARBON AND BIOGEOCHEMISTRY: AN EYE TOWARD INTEGRATED RESEARCH

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The newly formed Ocean Carbon and Biogeochemistry (OCB) program will focus on the ocean’s role as a component of the global Earth system, bringing together research in geochemistry, ocean physics, and ecology that advances our understanding of ocean biogeochemistry. OCB was created in February 2006 by the NSF, NASA, and NOAA to promote, plan, and coordinate collaborative, multidisciplinary research opportunities within the U.S. and with international partners.

The scientific mission of OCB is to establish the evolving role of the ocean in the global carbon cycle, in the face of environmental change, through studies of marine biogeochemical cycles and associated ecosystems. The overarching scientific themes of OCB include: 1) Oceanic uptake and release of atmospheric CO<sub>2</sub> and other greenhouse gases, and 2) Climate sensitivities of biogeochemical cycles and interactions with ecosystem structure.

The scope of OCB-related activities encompasses a variety of ongoing programs including the Ocean Carbon and Climate Change (OCCC) program and the North American Carbon Program (NACP); U.S. contributions to IMBER (Integrated Marine Biogeochemistry and Ecosystem Research), SOLAS (Surface–Ocean Lower Atmosphere Study), and CARBOOCEAN; numerous U.S. single- and multi-investigator research projects funded by NASA, NOAA, and NSF; and critical ocean observing efforts, such as the HOT (Hawaii Ocean Time–Series), BATS (Bermuda Atlantic Time–Series), and CARIACO (Carbon Retention In A Colored Ocean) time series, Repeat Hydrography CO<sub>2</sub> surveys, satellite remote sensing, and ORION (Ocean Research Interactive Observatory Networks). A key objective of OCB is to coordinate and enhance interactions among these various activities.

OCB will also promote new research initiatives. NSF Chemical Oceanography has up to \$3 million/year that will be targeted towards new OCB-related research beginning in FY08, with proposals encouraged for the Feb. 2008 submission target date. OCB-related proposals can also be submitted to NSF Biological Oceanography. NSF OCE is especially encouraging new proposals to do ocean acidification research. Funding from NASA for OCB-related programs is also anticipated through the ROSES FY08 announcement, which will focus on oceans, ice, and climate. The NOAA Global Carbon Cycle Program’s FY09 announcement will solicit research proposals in the OCB-related areas of ocean acidification and ecosystem impacts.

In addition to annual summer science meetings that focus on broader interdisciplinary themes, OCB will convene targeted workshops to give the research community a public venue for discussing implementation approaches to address specific OCB research priorities. A workshop on ocean acidification is planned for this fall with subsequent targeted workshops running each spring, providing enough lead time for the February NSF proposal submission targets. OCB is currently soliciting ideas for spring workshops, particularly those that address the following scientific priorities:

- Ocean acidification
- Terrestrial/coastal carbon fluxes and exchanges
- Climate sensitivities of and change in ecosystem structure and associated impacts on biogeochemical cycles
- Mesopelagic ecological and biogeochemical interactions
- Benthic–pelagic feedbacks on biogeochemical cycles
- Ocean carbon uptake and storage

More detailed information about OCB, links to data management, and research opportunities can be found on the program web page (<http://us-ocb.org/>).