



## UFZ-Seminar „Wasser and Environment“



15th February 2016, 3pm

Saal, Brückstr. 3a, Magdeburg

### Eric von Elert

Institute for Zoology, Cologne Biocenter, University of Cologne

gives a talk on:

#### **Biochemical food quality - a major determinant of trophic transfer in ponds and lakes**

The identification of factors that control food web interactions is a key issue in ecology. In pelagic freshwater systems the efficiency with which biomass and energy are transferred through the food web and sustain the production of higher trophic levels is known to decline with nutrient loading, but the mechanisms are poorly understood. *Daphnia* sp. is a major herbivore of pelagic primary production and a major link to higher trophic levels. Here I discuss two major aspects of food quality for *Daphnia* and their ecosystem-wide effects: (i) the importance of polyunsaturated fatty acids and sterols in phytoplankton as determinants of the fitness of *Daphnia*, and (ii) effects of cyanobacterial toxins and inhibitors on *Daphnia* genotypes and populations.

**If you are interested to join via Video-Conference to UFZ Halle or UFZ Leipzig, please send a note to [nina.baumbach@ufz.de](mailto:nina.baumbach@ufz.de) by Friday, 12.02.16, 12am.**