



UFZ-Seminar „Wasser und Umwelt“



March 11th, 2013, 15.00am

Saal, Brückstr. 3a, Magdeburg

Nikolay Filatov, Director of Northern Water Problems Institute, Karelian Research Center, Russian Academy of Sciences, Petrozavodsk, Russia.

Lakes of northwest Russia and the White Sea: Environment and ecosystem dynamics influenced by global change.

Environmental pollution and depletion of natural resources have become a global problem. Although Russia is one of the world's richest countries in terms of availability of water resources, some problems with drinking water supply do exist here, too. Northwest part of Russia is a very vast area (more than 300.000 km²) stretching from the EU (Finland, Norway) border in the west towards the White Sea and central Russia in the east. This region is rich in water resources such as the White Sea and thousands of lakes and reservoirs (>60.000) including two Europe's largest lakes, Ladoga and Onego. The water bodies of northwest Russia are very precious source of pristine water and used for many important purposes such as drinking water supply, transportation, hydropower generation, recreation, fisheries and aquaculture like lake trout farming. Though the water availability does not limit the economic development of northwest Russia, there is a growing concern over the water quality due to natural and anthropogenic stressors such as climate change and industrial and municipal wastewater discharges from the residential areas located on the shores and in the catchment areas. Both the understanding of the importance of water resources in the region and concern over their use and water quality have already drawn the increased attention of both scientists and end-users but will still require better understanding of ecosystem functioning and developing more environmentally friendly and scientifically sound recommendations for the protection and sustainable use of water resources.

The presentation of Prof. Dr. Nikolay Filatov will address the contemporary state of major water bodies in the region including their watersheds under anthropogenic and climate changes, with a special emphasis given to feed-forward and feedback interactions between aquatic ecosystems, watershed hydrology and economy of the region. The statistical analysis of multi-year field observations and numerical modeling will be used to investigate the sensitivity of both aquatic systems and their watersheds to the respective counter impacts, as well as regional and global climate change.

Falls eine Videoübertragung nach Halle oder Leipzig gewünscht wird, bitte ich um eine E-Mail an nina.baumbach@ufz.de bis spätestens Freitag (08.03.), 12:00Uhr.