

Watch your Danube



Jarmila Makovinska

Ms. Jarmila Makovinska (52 yrs) is Hydrobiologist at the Water Research Institute in Bratislava, Slovakia



What did you study, when, where and most importantly: why?

I have studied Biology and Chemistry at the Faculty of Natural Sciences of the Comenius University in Bratislava for teaching. Since my university study I was interested on algae. Algae play an important role in the freshwater ecosystem. I have started investigation of the phytoplankton on the small lowland river in my home town. Later on I get my Ph.D. at the Institute of Botany

of the Slovak Academy of Sciences in the field of Algology.

What will your role be on board of the JDS3 ships?

I will be responsible for sampling and analysis of the species diversity and biomass of the phytobenthos.

Why is this important? What can we learn?

Phytobenthos is an aquatic plant community consisting of microscopic and macroscopic algae and cyanophytes/cyanobacteria. All organisms are attached to the solid substrates like e.g. stones, wood or other solid material in the river or lake. This community is considered to be a suitable parameter to determine the impact of nutrient pollution, because the organisms are sessile and therefore represent the status of realised nutrients at the monitored site and for the Danube River the eutrophication is an important anthropogenic pressure threatening the quality of the river water.

What is an important gain from JDS3 specifically for your country of origin?

Slovakia recognizes JDS3 as highly professional international investigation that will be used for comparison of the results as well as the introduction of the new monitoring techniques. The data obtained for Slovak stretch of the Danube will be used for fulfilling the gaps for the second River Basin Management Plan.

What are you looking forward to regarding the JDS3?

I am looking forward to see almost the whole stretch of the Danube. However, the most important for me is the close cooperation of the core team as well as the experts from other Danube countries on the investigation of the aquatic flora and fauna.