

## Guest Lecture

**Dr. Lidija Globevnik**

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### How multiple stressors affect European rivers & what are the management challenges to reach good ecological status

A *stressor* is any environmental change in a factor that exceeds the normal variation and causes some response by the system of interest. Multiple stressors such as water abstractions, flow modifications, drought, flooding, pollution and alien species affect Europe's surface waters. In 2010 more than 40% of European water bodies were negatively impacted. The most common two-stressor combination is diffuse water pollution combined with hydro-morphological alternations. New research suggests that such stressors can either intensify or neutralize their individual effects. A knowledge deficit poses challenges, particularly in the context of climatic change. The project MARS provides knowledge and tools to address multiple stressor-response relationships on three levels i.e. experimental, catchment and European level, using two approaches i.e. conceptual empirical modelling and classification/regression three pattern search. A great amount of data was selected and processed. The MARS geographical database represents a rich resource for knowledge discovery and decision support in water management. The talk will present conceptual and analytical framework of the MARS project and interpret the first results of stressors-response knowledge discovery as derived from data mining techniques.

*Dr. Lidija Globevnik is expert in hydrology, catchment management planning and water information system. She participated in the first environmental indicator report for water resources in Slovenia. In 2003-2006 she lead an expert group at the Institute for Water within the Water Framework Directive implementation in Slovenia. In 2010 she prepared and implemented the Sava River Basin Management Plan. At present she works as water expert in the "European Topic Center for Inland Coastal and Marine Water (ETC/ICM)" and the project MARS. Dr. Globevnik is involved in the development of the Water Information System for Europe. She is responsible for yearly collection, quality control and assessment of data and information reported for bathing water quality of more than 20000 locations in Europe.*

**Tuesday, May 24th, 2016, 3:00 pm**

**Room Z.1.09**

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