

**PhD position (with scholarship) and possible junior researcher position: Analysis of the hydrology and land-based contaminant delivery of a complex catchment.**

Klaipeda University Marine Research Institute (Lithuania) is looking for motivated students to join and pursue a PhD in Ecology and Environmental sciences (2019-2023). Proposed thesis topic: Analysis of the hydrology and land-based contaminant delivery of a complex catchment.

**Brief description of the topic:** Understanding of the catchment hydrology is an essential prerequisite in the management of water resources, flood protection, optimization of conservative and consumptive uses, lowland reclamation and monitoring of contaminant transport. This knowledge is important when considering systems whose morphology has been intensely modified, as the drainage basin of the Venice Lagoon. The behavior of this system is complex and different from that of natural catchments. This study should analyze and create a set of tools (models) that would be able to provide an estimate of the annual, monthly and daily transfer of freshwater and pollutants from the catchment to the lagoon. Furthermore, an analysis of coupled catchment-lagoon models should be undertaken. The developed framework should be tested and used to conduct assessments in some pilot sites, such as the Nemunas basin and the Venice Lagoon basin.

**Requirements for a candidate:** Good English language skills are necessary. Understanding laws of physics, basic chemistry and willingness to conduct individual research are essential. Applicant should have experience in using GIS and statistical methods in analysis of environmental data, as well as willingness to work with various datasets. Knowledge and experience in programming and/or scripting languages will be given a preference during evaluation. Experience with SWAT (or other hydrologic modeling tools) will be considered as an advantage. The candidate will also need to have a high willingness to mobility that will allow longer stays in Venice (Italy) and Istanbul (Turkey). The candidate is expected to move to Lithuania (student dormitories are available on campus) for the duration of the studies.

**Scholarship and support:** all accredited PhD students in Lithuania receive a state scholarship:

First year students: 722 EUR;

Second to last year: 836 EUR.

Depending on the candidate's performance, the institute will provide financial support to attend conferences, summer schools and workshops. The candidate is also expected to work on other projects and may be employed as a junior researcher in the institute.

Candidates outside EU will receive support on attaining EU visa and permits for the duration of the study.

More detail on the application procedure and other calls here: <https://www.ku.lt/studies/english-degree-studies/application-procedure/application-procedure-for-doctoral-studies/application-procedure-for-doctoral-studies-2019/#1501228248381-ef7c338d-b716>

The topic description: [http://www.ku.lt/studies/wp-content/uploads/sites/20/2019/06/KU\\_PhD-Topic-2019\\_Umgiesser.docx](http://www.ku.lt/studies/wp-content/uploads/sites/20/2019/06/KU_PhD-Topic-2019_Umgiesser.docx)

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