

Title of the doctorate theme	MICROMETAZOANS IN THREATENED HABITATS OF POLAR AND TEMPERATE REGIONS IN CONTEXT OF CLIMATE CHANGE
Brief description of the topic	<p>Biodiversity loss is one of the consequences of global warming. Only few studies related to warming-induced changes deal with microscopic animals, which live in polar and other extreme habitats and can grow and reproduce in exclusively cold conditions (i.e. psychrophiles).</p> <p>The PhD topic addresses the fate of micrometazoan communities in the habitats, which are most threatened in warming era, for example periglacial habitats in close vicinity of receding glaciers in the Arctic, and ephemeral snow cover in temperate Europe (has a tendency to disappear in near future).</p> <p>The studies include experiments for assessment the survival rate and reproduction success of the micrometazoans (i.e. rotifers, tardigrades) isolated from above mentioned warming-affected habitats. It will contribute to the main scenarios of changes in the most vulnerable ecosystems in light of global warming.</p>
Requirements for a candidate	General experience of working in lab is mandatory as well as advanced knowledge of invertebrate zoology; freshwater and terrestrial ecology. The student is expected to distinguish main groups of microscopic invertebrates and should be familiar with main methods of light microscopy and microphotography. Biostatistics is required.
Existing research infrastructure and support	<p>Institute can provide all necessary facilities for work (microscopy lab, climate chambers, etc.). The samples of mosses, soil, lichens, snow and water, which have been collected from different parts of Arctic, Antarctic and Baltic states and can be used for microinvertebrate isolation, are stored in the institute.</p> <p>The PhD student will join two projects of the Institute which deal with the topic: SNOWLIFE "Microfauna emerging in seasonal snow patch ecosystems - losers or winners?" (P-MIP-23-374) and MP-ARCTIC "Microplastics and related persistent organic pollutants in post-glacial Arctic ecosystems and adjacent areas" (P-LLT-24-16)</p>
How the topic advances the research capacity of the Klaipeda University	The proposed topic will enhance efforts at Klaipeda University in studying polar ecosystems and contribute to understanding of the warming-affected changes in the environment
Potential scientific supervisor	<p>Prof. habil. dr. Sergej Olenin. Email: sergej.olenin@ku.lt Senior researcher at the Marine Research Institute, Klaipėda University.</p> <p>https://scholar.google.com/citations?user=3TuWI_0AAAAJ&hl=en&oi=ao%20/%20orcid.org/0000-0002-0773-1442/</p> <p>www.researchgate.net/profile/Sergej-Olenin?ev=hdr_xprf</p>
Potential scientific advisor	<p>Dr. Dzmitry Lukashanets</p> <p>https://www.researchgate.net/profile/Dzmitry-Lukashanets</p> <p>Dr. Krzysztof Zawierucha</p> <p>https://scholar.google.com/citations?user=zjGz3RwAAAAJ&hl=en&oi=ao</p>