Kristina Viršilaitė

Objective

Having remarkably graduated high school, I got involved in active scientific activities in my second year of university, and by 2021 I successfully completed the third scientific project financed by the Research Council of Lithuania.

I see myself in positions where creative and analytical thinking intersect. I am able to find original and innovative solutions for complex tasks and I am great at communicating and tactically stating my opinion

Education

2024-2026 **Vilnius University**
MSc Climate system studies

2017-2022 **Vilnius University**
BSc Meteorology and hydrology

Graduated Magna Cum Laude
Minored in Hydrology

Research experience

The main direction of my research is coastal processes. In 2022 I defended my bachelor's thesis – an overview of the methods for determining the upper swash flow limits in Lithuanian beaches, summarizing the research and experience carried out over several years .

2018-2019 **Distribution of heavy mineral concentration on a cross-shore beach profile**

Measures of the EU funds investment action program no. 09.3.3-LMT-K-712 "Education of scientific competence of scientists, other researchers, students through practical scientific activities", Research Council of Lithuania Grant No. 09.3.3- LMT-K-712-10-0072

During the research, magnetic susceptibility and topographic measurements were made on Lithuanian beaches. Based on the measured and hydrometeorological data, a statistical analysis was carried out. The obtained conclusions were presented at conferences.

2019-2020 **Estimation of swash flow upper limits at the seashore based on in situ and remote sensing methods**

Measures of the EU funds investment action program no. 09.3.3-LMT-K-712 "Education of scientific competence of scientists, other researchers, students through practical scientific activities", Research Council of Lithuania grant no. 09.3.3- LMT-K-712-16-0159.
A follow-up of the first study by including satellite and drone photographs.
In the course of the research, field research was carried out - measurements were taken on Lithuanian beaches, statistical data analysis was carried out based on measurement data, research conclusions were presented at conferences.

2020-2021

Determining swash flow upper limits on beaches of different lithological composition using remote sensing methods

Measures of the EU funds investment action program no. 09.3.3-LMT-K-712 "Education of scientific competence of scientists, other researchers, students through practical scientific activities", Research Council of Lithuania grant no 09.3.3-LMT-K-712-22-0169.

A final follow up of previous studies - beaches of different lithological composition were investigated using in situ and remote methods discussed in previous studies. Statistical analysis of data was performed, research findings were presented at conferences.

Current activity

2024-2025

Hydraulic analysis of the Vilnius Old Town rainwater sewage basin and solutions for flood mitigation

Measures of the EU funds investment action program no. 09.3.3-LMT-K-712 "Education of scientific competence of scientists, other researchers, students through practical scientific activities".

A new direction in the research career – the analysis of rainwater systems resilience in the face of a changing climate. During this new study, the research will involve hydraulic modeling of the rainwater drainage system using recent urban rainfall data, historical storm events, and future climate projections.

Employment History

2024

Junior Researcher, Caserta, Italy
CMCC, REgional Models and geo-Hydrological Impacts division

My primary focus is analyzing the effectiveness of stormwater systems in different urban areas (project the HUT). My responsibilities include evaluating current legislations and their impact on stormwater management, as well as the set-up of the hydraulic model. This ongoing role has provided me with valuable hands-on experience and has significantly contributed to my professional growth in the field.

2023 **Engineer,** Vilnius
UAB „GRINDA“, THE DEPARTMENT OF THE STORMWATER MANAGEMENT

In this position I was a specialist of the storm water drainage systems of the Vilnius City municipality. My duties included assessment of storm water infrastructure development projects, valuation of cadastral schemes, the preparation of technical conditions for new users' incorporation into the centralized storm water network. The fulfillment of my duties included using the **Geographical Information System (GIS)** as well as **CivilStorm** and **UtilityNetwork** modelling software.

2022 **Hydrologist,** Vilnius
Lithuanian hydrometeorological service under the Ministry of Environment, Department of Hydrological Observations

The position I held in LHMT consisted of statistical assessment of physical parameters of rivers, lakes and the sea, moreover I was a part of technical team which carried out the various measurements in the water.

2022 **Specialist,** Vilnius
Lithuanian hydrometeorological service under the Ministry of Environment, General Affairs Division

While working in the General Affairs Division of LHMT, I learned about the various activities of the institution as I oversaw most of the documentation. I registered requests, sent certificates, took care of document archiving, and communicated with clients.

2021 **Environmental protection specialist,** Vilnius
UAB „BALTIC RECYCLING GROUP“

The position I held was very diverse - I deepened my knowledge in the environmental documentation, as well as environmental laws of the Republic of Lithuania. I performed the accounting of waste, packaging, batteries, and electronic products in the GPAIS system. I made sure that companies were informed and correctly understood the changes in the law.

2020 **Intern,** Klaipėda
Klaipėda University, Labaratory of Geophysical Sciences of Marine Research Institute

I joined a group of coastal researchers and carried out the tasks assigned by them – went to field surveys, collected samples and processed them in the laboratory. I learned about the latest research conducted at KU and learned how to perform granulometric calculations.

Presentations in conferences

Virsilaite, K., Pupienis, D. (2020). A feasability study of determining the swash flow upper limit on the beaches of the South-Eastern Baltic Sea. 13th National Marine Science and Technology Conference MARINE AND COASTAL RESEARCH 2020. October 7-9, 2020

Virsilaite K., Pupienis, D. (2020). "Overview of Remote Sensing Methods for Run Up Tracing After High Energy Events on Sandy Beaches of the Southeastern Baltic Sea Coasts". Poster presentation at the 3rd Baltic Earth conference "Earth system changes and Baltic Sea coasts". June 1-5, 2020.

Virsilaite, K., Pupienis, D. (2020). „The influence of heavy minerals on the formation of the beach slope". Poster presentation at the conference "Climate change in Lithuania: global and national challenges, monitoring and policy guidelines" organized by the Department of Hydrology and Climatology of VU. May 22, 2020, Vilnius, Lithuania. (DOI: https://doi.org/10.15388/Klimatokaita.2020.6)

Dubikaltiene, A., Pupienis, D., Karloniene, D., Virsilaite, K., Jarmalavicius, D., Zilinskas, G. (2019). „Implication of grain-size trend analysis in sediment transport pathways determination (Southeastern Baltic Sea)".Making connections for the future: Baltic Sea science congress 2019, 19-23 August, Stockholm, Sweden: abstracts. Stockholm : Stockholm University. 2019. p. 198 (eLABa ID 42463443.).

Karloniene, D., Pupienis, D., Zilinskas, G., Jarmalavicius, D., Dubikaltiene A., Virsilaite, K. (2019). „Lithological and geochemical anomalies on the Baltic Sea coast (Curonian Spit, Lithuania)." Making connections for the future: Baltic Sea science congress 2019, 19-23 August, Stockholm, Sweden: abstracts. Stockholm : Stockholm University. 2019. p. 204. (eLABa ID 42463042).

Pupienis, D., Buynevich, I., Jarmalavicius, D., Zilinskas, G., Karloniene, D., Dubikaltiene, A., Virsilaite, K. „Assessment of spatial fluctuations in rhythmic shoreline patterns related to sediment magnetic characteristics." Making connections for the future: Baltic Sea Science Congress 2019, 19-23 August, Stockholm, Sweden : abstracts. Stockholm : Stockholm University. 2019. p. 118. (eLABa ID 42463247).

Virsilaite, K. (2019). „Distribution of heavy mineral concentration on a cross-shore beach profile." Oral presentation at a student scientific conference. Projects financed under EU funds investment action program measure no. 09.3.3-LMT-K-712 "Development of scientific competence of scientists, other researchers, students through practical scientific activities" activity "Development of students' abilities to carry out R&D activities", presentation. Vilnius.

Virsilaite, K. (2019). The use of heavy mineral concentration as a proxy for high energy event tracing. Student Conference „Breakthroughs in Science" May 7th, 2019, Institute of Foreign languages, Vilnius University, Vilnius

Languages

Lithuanian	Native language
English	C1 (IELTS Academic Overall Band Score 8,0/9,0)
Russian	A2
Italian	A2

Computer skills

R Programming Language	Have familiarity while working with data analysis
Microsoft Office package	Proficient. Excellent Word, Excel skills
Bentley's CivilStorm	Have familiarity with modelling simulations while working at UAB „GRINDA"
Utility Network	Have familiarity with modelling simulations while working at UAB „GRINDA"
GIS	Great GIS knowledge, familiar with ArcGIS, QGIS especially Spatial Analysis.
AutoCAD	Basic knowledge
EPA SWMM	Basic knowledge