

IRMA VYBERNAITÉ-LUBIENĖ CURRICULUM VITAE

First Name	Irma	Scientific degree,	PhD in Ecology and Environmental Science
Last Name	Vybernaitė-Lubienė		
Data of Birth	26/05/1983	Nationality	Lithuanian
Address	Klaipeda University, H. Manto 84, LT-92294, KLAIPĖDA, LITHUANIA		
Phone	+ 370 46 398776		
E-mail	irma.lubiene@apc.ku.lt		
Current position	2019–present, Senior researcher, Marine Research Institute, Klaipėda University		
Fields of scientific interest	Estuarine biogeochemistry, water ecology, eutrophication processes, assessment of water quality.		
Education	2013–2018 - PhD studies, Ecology and Environmental Science, KU, Lithuania. 2006–2008 - Master studies, Chemistry (analytical chemistry), Vilnius University, Lithuania. 2002–2006 - Bachelor studies, Chemistry, Vilnius University, Lithuania		
Employment record	2015–2018 - engineer, Ecosystem laboratory, Open Access Centre for Marine, Klaipėda University, Lithuania. 2014–2015 – junior researcher, Marine Science and Technology Centre, Klaipėda University, Lithuania. 2009–2010 - teacher in chemistry, Vytautas Magnum Gymnasium, Klaipeda, Lithuania. 2005–2008 - chemist, UAB "Švyturys - Utenos alus", Klaipeda, Lithuania		
Completed grants and projects	<p>BONUS ERA-NET PLUS 2018–2018: RETROUT – Development, promotion and sustainable management of the Baltic Sea Region as a coastal fishing tourism destination.</p> <p>2015–2017: COCOA – Nutrient Cocktails in Coastal zones of the Baltic Sea.</p> <p>2010–2011: AMBER – Assessment and Modelling Baltic Ecosystem Response. Projects of National Research Council</p> <p>Nuo 2022 06: CYCLON "Azoto ciklo virsmai ir juos vykdantys mikroorganizmai trijose didžiausių Europos lagūnose".</p> <p>2017–2021: INBALANCE – Invertebrate-bacterial associations as hotspots of benthic nitrogen cycling in estuarine ecosystems).</p> <p>2017–2020: NitFix (The role of atmospheric nitrogen fixation in the largest eutrophicated European lagoon).</p> <p>2017–2020: PatCHY – Phosphorus as driver of Cyanobacterial Hyperblooms in the Curonian Lagoon.</p> <p>2016–2017: RETRO – Implication of species and functional diversity for aquatic ecosystem services under increasing eutrophication and chemical pollution.</p> <p>2015–2016: MAURAKUMA – Distribution of Charophyte in the Curonian Lagoon and impact of environmental factors.</p> <p>2014–2015: CISOCUR – Water masses circulation features in the Curonian Lagoon, using stable isotope tags and finite element model.</p> <p>2012–2014: INSIST -Invasive species' adaptation and their impact on aquatic ecosystems of various complexities.</p>		

2012–2014: DREISENA – The role of the *Dreissena polymorpha* for the water ecosystems functioning and the quality of water.

2012–2013: NETBIOGEK - Sediment transport and biogeochemical processes in the Curonian Lagoon.

2011-2011: SATYRAS - Investigating Invasivity of Higher Crustaceans: Metabolic Rate and Trophic Niche.

Projects of Environmental Protection Agency

2015–2016: KUMADUBI – investigation of sediment nutrients and their effect on the ecosystem functioning of the Curonian Lagoon.

Projects of Ministry of Education and Science

2012–2015: MTEP - Lithuanian Maritime Sector's Technologies and Environment research development.

South Baltic Program

The use of active barriers for the nutrient removal and local water quality improvement in Baltic lagoons II (Live lagoons2).

Experience in analytics	Nutrient analysis with continuous flow analyser, pigment HPLC analysis, ICP-MS and GC-IRMS analytics, measurement of dissolved nutrient and gasses transport across the sediment-water interface in laboratory (with intact core, batch and flow-through systems) and in situ, application of ¹⁵ N for assessment of benthic and water column nitrogen cycle.																
Computer skills	Windows and Mac OS. Experience with Sigma Plot, Statistica, Brodgar, Adobe Photoshop programs.																
Language skills	Lithuanian is mother language <table border="1"><thead><tr><th></th><th>English</th><th>Russian</th><th>German</th></tr></thead><tbody><tr><td>Reading skills</td><td>B2</td><td>A1</td><td>A1</td></tr><tr><td>Writing skills</td><td>A2</td><td>A1</td><td>A1</td></tr><tr><td>Verbal skills</td><td>B2</td><td>A2</td><td>A1</td></tr></tbody></table>		English	Russian	German	Reading skills	B2	A1	A1	Writing skills	A2	A1	A1	Verbal skills	B2	A2	A1
	English	Russian	German														
Reading skills	B2	A1	A1														
Writing skills	A2	A1	A1														
Verbal skills	B2	A2	A1														
Other skills	Word, Excel, Access, PowerPoint, Statistica, Primer, R.																
ISI publications	<ol style="list-style-type: none">1. Vybernaite-Lubiene, I., Zilius, M., Bartoli, M., Petkuviene, J., Zemlys, P., Magri, M., Giordani, G. 2022. Biogeochemical Budgets of Nutrients and Metabolism in the Curonian Lagoon (South East Baltic Sea): Spatial and Temporal Variations. Water, 14(2), 164.2. Zilius, M., Vybernaite-Lubiene, I., Vaiciute, D., Overlinge, D., Grinienė, E., Zaiko, A., Bonaglia, S., Liskow, I., Voss, M., Andersson, A., Brugel, S., Politi, T., Bukaveckas, P.A. 2021. Spatiotemporal patterns of N₂ fixation in coastal waters derived from rate measurements and remote sensing. Biogeosciences 18: 1857–1871. DOI:10.5194/bg-18-1857-20213. Voss, M., Asmala, E., Bartl, I., Carstensen, J., Conley, D. J., Dippner, J. W., Humborg, C., Lukkari, K., Petkuviene, J., Reader, H., Stedmon, C., Vybernaite-Lubiene, I., Wannicke, N., Zilius, M. 2021. Origin and fate of dissolved organic matter in four shallow Baltic Sea estuaries. Biogeochemistry, 154(2), 385-403.4. Broman, E., Zilius, M., Samuiloviene, A., Vybernaite-Lubiene, I., Politi, T., Klawonn, I., Voss, M., Nascimento, F.J.A. Bonaglia, S. 2021. Active DNRA and denitrification in oxic hypereutrophic waters. Water Research 194: 116954. DOI:10.1016/j.watres.2021.116954																

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5. Politi, T., Barisevičiūte, R., Bartoli, M., Bonaglia, S., Cardini, U., Castaldelli, G., Kančauskaitė, A., Marzocchi, U., Petkuviene, J., Samuiloviene, A., **Vybernaite-Lubiene, I.**, Zaiko, A., Zilius, M. 2021. A bioturbator, a holobiont, and a vector: The multifaceted role of *Chironomus plumosus* in shaping N-cycling. Freshwater Biology 66(6):1036-1048. DOI: 10.1111/fwb.13696
 6. Marzocchi, U., Bonaglia, S., Zaiko, A., Quero, G.M. **Vybernaite-Lubiene, I.** Politi, T., Samuiloviene, A., Zilius, M., Bartoli, M., Cardini, U. 2021. Zebra mussel holobionts fix and recycle nitrogen in lagoon sediments. Frontiers in Microbiology 11: 610269. DOI: 10.3389/fmicb.2020.610269
 7. Bartoli, M., Benelli, S., Lauro, M., Magri, M., **Vybernaite-Lubiene, I.**, Petkuviene, J. 2020. Variable oxygen levels lead to variable stoichiometry of benthic nutrient fluxes in a hypertrophic estuary. Estuaries and Coasts, 1-15.
 8. Samuiloviene, A., Bartoli, M., Bonaglia, S., Cardini, U., **Vybernaite-Lubiene, I.**, Marzocchi, U., Petkuviene, J., Politi, J., Zaiko, A., Zilius, M. 2019. The effect of chironomid larvae on nitrogen cycling and microbial communities in soft sediments. Water, 11(9), 1931. DOI:10.3390/w11091931.
 9. Petkuviene, J., Vaiciute, D., Katarzyte, M., Gecaite, I., Rossato, G., **Vybernaite-Lubiene, I.**, Bartoli, M. 2019. Feces from piscivorous and herbivorous birds stimulate differentially phytoplankton growth. Water, 11(12), 2567. DOI:10.3390/w11122567.
 10. Benelli, S., Bartoli, M., Zilius, M., **Vybernaite-Lubiene, I.**, Ruginis, T., Vaiciute, D., Petkuviene, J., Fano, E. A. 2019. Stoichiometry of regenerated nutrients differs between native and invasive freshwater mussels with implications for algal growth. Freshwater Biology, 64(4), 619-631. DOI:10.1111/fwb.13247.
 11. Bartoli, M., Zilius, M., Bresciani, M., Vaičiūtė, D., **Vybernaite-Lubiene, I.**, Petkuvienė, J., Giordani, G., Daunys, D., Ruginis, T., Benelli, S., Giardino, C., Bukaveckas, P. A., Zemlys, P., Grinienė, E., Gasiūnaitė, Z., Lesutienė, J., Pilkaitytė, R., Razinkovas-Baziukas, A. 2018. Drivers of cyanobacterial blooms in a hypertrophic lagoon // Frontiers in marine science. Lausanne: Frontiers in Marine Science 5, 434, 1-12. DOI:10.3389/fmars.2018.00434.
 12. Zilius, M., **Vybernaite-Lubiene, I.**, Vaiciute, D., Petkuviene, J., Zemlys, P., Liskow, I., Voss, M., Bartoli, M., Bukaveckas, P. A. 2018. The influence of cyanobacteria blooms on the attenuation of nitrogen throughputs in a Baltic coastal lagoon. Biogeochemistry, 1-23. DOI:10.1007/s10533-018-0508-0.
 13. **Vybernaite-Lubiene, I.**, Zilius, M., Saltyte-Vaisiauske, L., Bartoli, M. 2018. Recent Trends (2012–2016) of N, Si, and P Export from the Nemunas River Watershed: Loads, Unbalanced Stoichiometry, and Threats for Downstream Aquatic Ecosystems. Water, 10(9), 1178. DOI:10.3390/w10091178.
 14. Benelli, S., Bartoli, M., Zilius, M., **Vybernaite-Lubiene, I.**, Ruginis, T., Petkuviene, J., Fano, E.A. 2018. Microphytobenthos and chironomid larvae attenuate nutrient recycling in shallow-water sediments. Freshwater Biology, 63(2), 187-201. DOI:10.1111/fwb.13052.
 15. Ruginis, T., Zilius, M., **Vybernaite-Lubiene, I.**, Petkuviene, J., Bartoli, M. 2017. Seasonal effect of zebra mussel colonies on benthic processes in the temperate mesotrophic Plateliai Lake, Lithuania. Hydrobiologia,

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- 802(1), 23-38. DOI:10.1007/s10750-017-3237-9.
16. Remeikaitė-Nikienė, N., Lujanienė, G., Malejevas, V., Barisevičiūtė, R., Zilius, M., **Vybernaitė-Lubienė, I.**, Stankevičius, A. 2017. Assessing nature and dynamics of POM in transitional environment (the Curonian Lagoon, SE Baltic Sea) using a stable isotope approach. *Ecological Indicators*, 82, 217-226. DOI:10.1016/j.ecolind.2017.06.035.
 17. **Vybernaite-Lubiene, I.**, Zilius, M., Giordani, G., Petkuviene, J., Vaiciute, D., Bukaveckas, P. A., Bartoli, M. 2017. Effect of algal blooms on retention of N, Si and P in Europe's largest coastal lagoon. *Estuarine, Coastal and Shelf Science*, 194, 217-228. DOI:10.1016/j.ecss.2017.06.020.
 18. Benelli, S., Bartoli, M., Racchetti, E., Moraes, P.C., Zilius, M., **Lubiene, I.**, Fano, E.A. 2017. Rare but large bivalves alter benthic respiration and nutrient recycling in riverine sediments. *Aquatic ecology*, 51(1), 1-16. DOI:10.1007/s10452-016-9590-3.
 19. Petkuviene, J., Zilius, M., **Lubiene, I.**, Ruginis, T., Gordani, G., Razinkovas-Baziukas, A., Bartoli, M. 2016. Phosphorus cycling in a freshwater estuary impacted by cyanobacterial bloom. *Estuaries and coasts*, 39(5), 1386-1402. DOI:10.1007/s12237-016-0078-0.
 20. Zilius, M., Giordani, G., Petkuviene, J., **Lubiene, I.**, Ruginis, T., Bartoli, M. 2015. Phosphorus mobility under short-term anoxic conditions in two shallow eutrophic coastal systems (Curonian and Sacca di Goro lagoons). *Estuarine, Coastal and Shelf Science*, 164: 134–146. DOI:10.1016/j.ecss.2015.07.004.
 21. Ruginis, T., Bartoli, M., Petkuviene, J., Zilius, M., **Lubiene, I.**, Laini, A., Razinkovas-Baziukas, A. 2014. Benthic respiration and stoichiometry of regenerated nutrients in lake sediments with *Dreissena polymorpha*. *Aquatic Science*, 76, 405-417. DOI:10.1007/s00027-014-0343-x.
 22. Zilius M., Bartoli, M., Bresciani, M., Katarzyte, M., Ruginis, T., Petkuviene, J., **Lubiene, I.**, Giardino C., Bukaveckas P.A., de Wit, R., Razinkovas-Baziukas, A. 2014. Feedback mechanisms between cyanobacterial blooms, transient hypoxia, and benthic phosphorus regeneration in shallow coastal environments. *Estuaries and Coasts* 37(3), 680-694. DOI:10.1007/s12237-013-9717-x.
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