

# Janina Pažusienė

## CONTACT INFORMATION

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Address Verkių Str. 98, Vilnius, LT-12201, Lithuania  
Tel. no.: +370 6 003 34 23  
E-mail: [janina.pazusiene@gamtc.lt](mailto:janina.pazusiene@gamtc.lt)  
[orcid.org/0000-0002-2210-9993](https://orcid.org/0000-0002-2210-9993)  
<https://www.researchgate.net/profile/Janina-Pazusiene>

## EDUCATION AND ACADEMIC DEGREE

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- 2016 – 2020      Doctoral degree of Natural Sciences, Ecology and environmental Sciences (N 012) in Vilnius University and Nature Research Centre.  
The thesis: “Environmental Genotoxicity and Cytotoxicity Studies in Fish Blood Erythrocytes and Genotoxicity Risk Assessment in the Gotland Basin of the Baltic Sea”. Academic supervisor – Dr. Habil. J. Baršienė, academic consultant – Dr. Milda Stankevičiūtė.
- 2013 – 2015      Master of Ecology and Environmental studies in Vilnius University.  
Master thesis: “Genotoxicity studies in fish blood cells from the eastern Gotland basin of Baltic Sea”.
- 2009-2013      Bachelor of Biology in Vilnius University.  
Bachelor thesis: “Bivalves of Unionidae and Dreissenidae families as interim hosts of flukes (Trematoda) in Lithuanian water bodies”.

## PROFESSIONAL EXPERIENCE

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- 2021 10 – now      **Researcher**  
(Nature Research centre, Institute of Ecology, Laboratory of Ecotoxicology)
- 2018 10 – 2021 10      **Junior Researcher**  
(Nature Research centre, Institute of Ecology, Laboratory of Genotoxicology)
- 2014 02 – 2015 08      **Biologist**  
(Nature Research centre, Institute of Ecology, Laboratory of Genotoxicology)

## RESEARCH INTERESTS

Studies of the cytogenetic effects of chemical materials and their mixtures using the micronuclei and other nuclear abnormalities assay, studies of genotoxic damage using the single-cell gel electrophoresis assay (Comet assay) in fish at various ontogenetic stages and in different tissues. Studies of haematological parameters (leukogram, erythrocytes, leukocytes, platelets count) in aquatic organisms. Assessment of genotoxic and cytotoxic effects caused by environmental pollution and risk determination using micronuclei and other nuclear abnormalities assay in different aquatic organisms.

## PUBLICATIONS

*Scientific articles published in journals (books), indexed in „Clarivate Analytics Web of Science“ database (with citation index):*

1. Jurgelėnė, Ž., Montvydienė, D., Semčuk, S., Stankevičiūtė, M., Sauliutė, G., **Pažusienė, J.**, Morkvėnas, A., Butrimienė, R., Jokšas, K., Pakštas, V., Kazlauskienė, N., Karabanovas, V. (2022) The impact of co-treatment with graphene oxide and metal mixture on *Salmo trutta* at early development stages: The sorption capacity and potential toxicity. *Science of the Total Environment*, 838: art. no. 15652
2. Jakubowska, M., Bialowas, M., Stankevičiūtė, M., Chomiczewska, A., Jonko-Sobus, K., **Pažusienė, J.**, Hallmann, A., Bučaitė, A., Urban-Malinga, B. (2022) Effects of different types of primary microplastics on early life stages of rainbow trout (*Oncorhynchus mykiss*). *Science of the Total Environment*, 808: art. no. 151909.
3. **Pažusienė, J.**, Valskienė, R., Grygiel, W., Stankevičiūtė, M., Butrimavičienė, L., Baršienė, J. (2021) Cytogenetic damage in native Baltic Sea fish species: environmental risks associated with chemical munitions dumping in the Gotland Basin. *Environmental Science and Pollution Research*. <https://doi.org/10.1007/s11356-021-14827-0>.
4. Stankevičiūtė, M., Makaras, T., **Pažusienė, J.**, Čapukoitienė, B., Sauliutė, G., Jurgelėnė, Ž., Raudonytė-Svirbutavičienė, E., Jokšas, K. (2021) Biological effects of multimetal (Ni, Cd, Pb, Cu, Cr, Zn) mixture in rainbow trout *Oncorhynchus mykiss*: Laboratory exposure and recovery study. *Ecotoxicology and Environmental Safety*, 216: art. no. 112202.
5. Jakubowska, M., Bialowas, M., Stankevičiūtė, M., Chomiczewska, A., **Pažusienė, J.**, Jonko-Sobus, K., Hallmann, A., Urban-Malinga, B. (2020) Effects of chronic exposure to microplastics of different polymer types on early life stages of sea trout *Salmo trutta*. *Science of the Total Environment*, 740: art. no. 139922.
6. Valskienė, R., Baršienė, J., Butrimavičienė, L., **Pažusienė, J.**, Grygiel, W., Stankevičiūtė, M., Rybakovas, A. (2019) Induction of nuclear abnormalities in herring (*Clupea harengus membras*), flounder (*Platichthys flesus*), and Atlantic cod (*Gadus morhua*) collected from the southern part of the Gotland Basin the Baltic Sea (2010-2017). *Environmental Science and Pollution Research*. 26 (13): 13366-13380.
7. Stankevičiūtė, M., Jakubowska, M., **Pažusienė, J.**, Makaras, T., Otremba, Z., Urban-Malinga, B., Fey, D.P., Greszkiewicz, M., Sauliutė, G., Baršienė, J., Andrulewicz, E. (2019) Genotoxic and cytotoxic effects of 50 Hz 1 mT electromagnetic field on larval rainbow trout (*Oncorhynchus mykiss*), Baltic clam (*Limecola balthica*) and common ragworm (*Hediste diversicolor*). *Aquatic Toxicology*. 208: 109-117.
8. Butrimavičienė, L., Baršienė, J., **Greiciūnaitė, J.**, Stankevičiūtė, M., Valskienė, R. (2018) Environmental genotoxicity and risk assessment in the Gulf of Riga (Baltic Sea) using fish, bivalves, and crustaceans. *Environmental Science and Pollution Research*. 25 (25): 24818-24828.
9. Baršienė J., Butrimavičienė L., Grygiel W., Stunžėnas V., Valskienė R., **Greiciūnaitė J.**, Stankevičiūtė, M. (2016) Environmental genotoxicity assessment along the transport routes of chemical munitions leading to the dumping areas in the Baltic Sea. *Marine Pollution Bulletin*. 103 (1-2): 45-53.
10. Stankevičiūtė M., Butrimavičienė L., Valskienė R., **Greiciūnaitė J.**, Baršienė J., Vosyliene M.Z., Svecevičius G. (2016) Analysis of nuclear abnormalities in erythrocytes of rainbow trout (*Oncorhynchus mykiss*) treated with Cu and Zn and after 4-, 8-, and 12-day depuration (post-treatment recovery). *Mutation Research-Genetic Toxicology and Environmental Mutagenesis*. 797: 26-35.

## **PARTICIPATION IN INTERNATIONAL AND NATIONAL SCIENTIFIC PROGRAMMES AND PROJECTS**

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- 2022 – 2025 **Additional project implementer**, researcher groups project „ Assessment of risk from tire fire accidents and micro-/nano-particle-related pollution in the aquatic environment (ARFA)“ Nr. S-MIP-22- 51. Project is funded from Research Council of Lithuania.
- 2021 – 2024 **Primary project implementer**, researcher groups project „The impact of the interaction between parasites and pollution on aquatic organisms (MULTIS)“, Nr. S-MIP-21-10. Project is funded from Research Council of Lithuania.
- 2017 – 2020 **Additional project implementer**, researcher groups project „Assessment of cumulative toxicity impact in the aquatic organisms induced by different types of stressors (ACTIS)“, Nr. S-MIP-17-10. Project is funded from Research Council of Lithuania.

## **PARTICIPATION IN SCIENTIFIC CONFERENCES**

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### ***International scientific conferences:***

1. Sauliutė, G., Stankevičiūtė, M., **Pažusienė, J.**, Makaras, T., Čapukoitienė, B., Markovskaja, S., Markuckas, A. Induction of catalase and metallothionein in salmonid fish under multiple stress exposure. *Protection and Restoration of the Environment XVI*, July 5-8, 2022, Kalamata, Greece.
2. Jurgelėnė, Ž., Montvydienė, D., Šemčuk, S., Stankevičiūtė, M., Sauliutė, G., **Pažusienė, J.**, Morkvėnas, A., Butrimienė, R., Kazlauskas, M., Kazlauskienė, N., Karabanovas, V. Acute toxicity assessment of graphene oxide nanoderivatives on *Salmo trutta* at early development stages. *Protection and Restoration of the Environment XVI*, July 5-8, 2022, Kalamata, Greece.
3. Stankevičiūtė, M., Jurgelėnė, Ž., **Pažusienė, J.**, Valskienė, R., Sauliutė, G., Markovskaja, S. Bio-effects of saprolegniasis disease in *Salmo trutta* larvae. *Protection and Restoration of the Environment XVI*, July 5-8, 2022, Kalamata, Greece.
4. Martusevičius, G., Sauliutė, G., **Pažusienė, J.**, Jurgelėnė, Ž., Šemčuk, S., Stankevičiūtė, M. 2021. Investigations of biological effects of graphene oxide nanostructures on brown trout (*Salmo trutta*). *64th International conference for students of physics and natural sciences OPEN READINGS'2021*. Vilnius, Lithuania, March 16-19 th, 2021.
5. Bučaitė, A., Stankevičiūtė, M., **Pažusienė, J.** Genotoxic and cytotoxic effects of microplastics on *Oncorhynchus mykiss*: exploratory data analysis using machine learning. 64th International Conference for Students of Physics and Natural Sciences „Open Readings 2021“. March 16-19, 2021. Vilnius, Lithuania.
6. Bučaitė, A., Stankevičiūtė, M., **Pažusienė, J.** Long-term genotoxic and cytotoxic effects of microplastics on larval-stage *Salmo trutta*. International Conference the COINS 2021, 27th of February 2021, Vilnius, Lithuania.
7. **Pažusienė, J.**, Baršienė, J., Valskienė, R., Stankevičiūtė, M. Research on genotoxicity impacts of CWAs on marine organisms. The permanent representations of the republic of Lithuania and the republic of Poland to the Organization for Prohibition of Chemical Weapons (OPCW). Side event in the framework of the 24 CWC Conference of State Parties. Sea-dumped chemical weapons: research and international co-operation – current state of play. 26 November 2019, The Hague, The Netherlands.
8. **Pažusienė, J.**, Valskienė, R., Stankevičiūtė, M., Butrimavičienė, L., Baršienė, J. Environmental genotoxicity and risk assessment in herring (*Clupea harengus*), Atlantic cod (*Gadus morhua*) and flounder (*Platichthys flesus*) caught in the Gotland Basins from the

- Baltic Sea (2010-2017). 16th International Conference on Environmental Science and Technology. 4-7 September 2019, Rhodes, Greece.
9. Stankevičiūtė, M., Turja, R., Butrimavičienė, L., **Pažusienė, J.**, Ahvo, A., Lehtonen, K.K., Jørgensen, K.S. Geno- and cytotoxic effects of crude oils on the mussel *Mytilus* spp. from the Baltic Sea. SETAC EUROPE 29th annual meeting 26-30 May 2019, Helsinki, Finland.
  10. **Pažusienė, J.**, Butrimavičienė, L., Baršienė, J., Stankevičiūtė, M., Valskienė, R. Environmental genotoxicity and risk assessment in the gulf of Ryga (Baltic Sea) using fish, bivalves and crustaceans. 62nd International Conference for Students of Physics and Natural Sciences „Open Readings 2019“. March 19-22, 2019. Vilnius, Lithuania.
  11. **Pažusienė, J.**, Stankevičiūtė, M., Valskienė, R., Butrimavičienė, L., Baršienė, J. Environmental genotoxicity and risk assessment in herring (*Clupea harengus*) caught in the Bornholm and Gotland Basins from the Baltic Sea (2009-2017). 8th young environmental scientists meeting 05-10 February 2019, Ghent University, Belgium.
  12. Stankevičiūtė, M., Jurgelėnė, Ž., **Greiciūnaitė, J.**, Markovskaja, S., Kazlauskienė, N., Baršienė, J. Geno-, cytotoxicity and toxicity induced by *Saprolegnia parasitica* and cadmium alone and in combination to *Oncorhynchus mykiss*. Protection and Restoration of the Environment July 3-6, 2018, Thessaloniki, Greece.
  13. Jakubowska, M., Urban-Malinga, B., Stankevičiūtė, M., **Greiciūnaitė, J.**, Otremba, Z., Andruliewicz, E. The effect of electromagnetic field on behaviour, bioenergetics, geno- and cytotoxic responses in marine polychaete *Hediste diversicolor*. International Conference on Aquaculture and Marine Biology. June 25-27, 2018. Rome, Italy.
  14. **Greiciūnaitė, J.**, Valskienė, R., Butrimavičienė, L., Baršienė, J. Genotoxicity studies in blood cells of fish collected in the Gotland Basin (the Baltic sea). 60th International Conference for Students of Physics and Natural Sciences „Open Readings 2017“. March 14-17, 2017.

## OTHERS

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1. **Pažusienė J.** „Lietuva nuosekliai kelia Baltijos jūroje paskandinto cheminio ginklo klausimą“. 2019-11-26 <https://urm.lt/default/lt/naujienos/lietuva-nuosekliai-kelia-baltijos-juroje-paskandinto-cheminio-ginklo-klausima>
2. **Pažusienė J.** A presentation was presented in the science popularization lecture series "Sea Stories" organized by the Palanga Resort Museum. 2020-02-26 <https://kurortomuziejus.lt/esdamas-tradicija-palangos-kurorto-muziejus-ketvirta-karta-rengia-susitikimu-cikla-juros-istorijos-labai-dziugu-kad-susitiki-su-palangiskiais-ir-miesto-sveciais-atvyks-penki-lekt/>