

PERSONAL INFORMATION

Maris Klavins



✉ maris.klavins@lu.lv

🌐 www.lza.lv/scientists/klavinsm.htm (ORCID 0000-0002-4088-9348)

1994 Dr. habil. chem. University of Latvia

01.08.1995 professor of University of Latvia (environmental chemistry and ecotoxicology)

Supervision of PhD thesis

Judīte Dipāne Soil and aquatic humic substances from Latvia and their role in degradation processes of environmental pollutants 2007, Rīga

Linda Egļīte Humic substances, their interaction with soil components and immobilisation of humic substances 2007, Rīga

Ilgā Kokorīte Chemical composition of surface waters in Latvia and the underlying factors 2007, Rīga

Iveta Šteinberga Ensemble analysis and modelling of Quasistatic atmospheric pollution levels 2007, Rīga

Sandra Poikāne EU-wide lake ecological classification based on phytoplankton 2009, Rīga

Jānis Šīre Composition and properties of rised bog peat humic acids 2010, Rīga

Inese Silamiķele The Character of Humification and Accumulation of Chemical Elements in Raised-Bog Peat Depending on Its Composition and Formation 2010, Rīga

Ēriks Leitis Ecotourism in protected areas 2012, Rīga

Diana Dudare Interaction of humic substances with metals, 2014 Rīga

Juris Burlakovs Contamination remediation with soil amendments by immobilisation of heavy metals, 2014 Rīga

Oskars Purmalis Peat humic substances and their properties 2015 Rīga

Artis Robalds Peat and its modification products for sorption of Tl(I), Cu(II), Cr (III) and phosphorus 2016 Rīga

Jānis Krūmiņš Low moor peat properties 2016 Rīga

Karina Stankeviča Character of sapropel properties based on its formation conditions and possibilities of its use, 2020, Rīga

Baiba Prūse Co-creation of knowledge: supporting the implementation of sustainable development goals through citizen science and ethnobotany 2020

Job-related skills

Study courses

Environmental pollution

Ecotoxicology

Environmental chemistry and geochemistry

Restoration of polluted environment

RESEARCH AND ORIGINAL ACHIEVEMENT

Major research fields are in environmental pollution and its chemical analysis, aquatic chemistry, sustainable management and environmental technologies. M.Klavins is supervisor of 5 Ph.D. students, author of numerous (368) scientific articles. In last few years M.Klavins has been involved in development of legislative system of environmental protection in Latvia regarding monitoring system. Is working on climate technologies, toxic wastes and especially is doing with the problems of analysis of environmental pollution.

M.Klavins has been leader of several projects related to the environmental issues mostly doing with

environmental pollution and management and quality of water, but including also political and social sciences.

RECENT KEY PUBLICATIONS

- T.Juhna, M.Klavins, L.Eglite (2003) Sorption of humic substances on aquifer material at artificial recharge of groundwater. *Chemosphere*, 51(9), 861-868
- M.Klavins, O.Purmalis (2013) Properties and structure of raised bog peat humic acids. *Journal of Molecular Structure* 1050, 103-113
- K.Stankevica, L.Kalnina, M.Klavins, A.Cerina, E.Kaup (2015) Reconstruction of the Holocene palaeoenvironmental conditions accordingly to the multiproxy sedimentary records from Lake Pilvelis, Latvia, *Quaternary International*, **72**, 1-14
- W.L.Filho, J.Platje, W.Gerstberger, R.Ciegis, J.Kaaria, M.Klavins, L.Kliucininkas (2015) The role of governance in realising the transition towards sustainable societies. *Journal of Cleaner Production*, DOI: 10.1016/j.jclepro.2015.11.060
- L.Mdlalose, M.Balogun, M.Klavins, C.Deeks, J.Treacy, L.Chimuka, A.Chetty (2018) The chemistry of Cr(VI) adsorption on to poly(p-phenylenediamine) adsorbent, *Water Science and Technology*, 78(12), 2481-2488 doi: 10.2166/wst.2018.531
- J.Kviesis, I.Kļimenkovs, L.Arbidans, A.Podjava, M.Kļaviņš, E.Liepiņš (2019) Evaluation of furanocoumarins from seeds of the wild parsnip (*Pastinaca sativa* L). *Journal of Chromatography B*, 1105, 54-56
- D.Porshnov, V.Ozols, M.Klavins (2019) Thermogravimetric analysis as express tool for quality assessment of refuse derived fuels used for pyro-gasification. *Environmental Technology*, DOI: 10.1080/09593330.2019.1584648
- I.Kukuļs, M.Kļaviņš, O.Nikodemus, R.Kasparinskis, G.Brūmelis (2019) Changes in soil organic matter and soil humic substances following the afforestation of former agricultural lands in the boreal-nemoral ecotone (Latvia) *Geoderma Regional* 15, <https://doi.org/10.1016/j.geodrs.2019.e00213>
- A.E.Krauklis, A.I.Gagani, K.Vegere, I.Kalnina, M.Klavins, A.T.Echtermeyer (2019) Dissolution Kinetics of R-Glass Fibres: Influence of Water Acidity, Temperature, and Stress Corrosion. *Fibers*, 7, 22; doi:10.3390/fib7030022
- Vincevica-Gaile Z., Stankevica K., Irtisheva K., Shiskin A., Obuka V., Celma S., Ozolins J., Klavins M. (2019) Granulation of fly ash and biochar with organic lake sediments – A way to sustainable utilization of waste from bioenergy production. *Biomass and Bioenergy*, **125**, 23-33 <https://doi.org/10.1016/j.biombioe.2019.04.004>
- K. Stankevica, Z. Vincevica-Gaile and M. Klavins (2019) Role of humic substances in agriculture and variability of their content in freshwater lake sapropel. *Agronomy Research*, 17 (3), 850-862
- M. Klavins, O. Purmalis, S. Grandovska and L.Klavina (2019) Properties of soil and peat humic substances from Latvia. *Agronomy Research*, 17 (2), 499-509
- M. Jemeljanova, R. Ozola and M. Klavins (2019) Physical-chemical properties and possible applications of clay minerals and humic acid composite materiāls. *Agronomy Research*, 17 (Special Issue 1), 1023-1033
- L. Klavins, J. Kviesis and M. Klavins (2019) Surface wax composition of wild and cultivated Northern berries. *Agronomy Research*, 17 (Special Issue 2), 1337-1346
- J.Burlakovs, M.Kriipsalu, D.Porshnov, Y.Jani, V.Ozols, K.M.Pehme, V.Rudovica, I.Grinfelde, J.Pilecka, Z.Vincevica-Gaile, T.Turkadze, W.Hogland, M.Klavins (2019) Gateway of Landfilled Plastic Waste Towards Circular Economy in Europe. *Separations*, 6, 25; doi:10.3390/separations6020025
- J.Krumins, M.Klavins, J.Krukovskis, A.Viksna, L.Busa (2019) The evaluation of use of stable isotopic ratios δC and δN in humic acids along a peat profile. In: *Proceedings of the 12th International and practical conference "Environment. Technology. Resources"*, 123-127

- D.Porshnov, D.Arina, M.Klavins (2019) Composition of refuse derived fuels in Latvia and Estonia in comparison with worldwide average values. In: Proceedings of the 12th International and practical conference “Environment. Technology. Resources”, 225 – 229
- W.L.Filho, V.R.Vargas, A.L.Salvia, L.L.Brandli, E.Pallant, M.Klavins, S.Ray, S.Moggi, M.Maruna, E.Conticelli, M.A.Ayanore, V.Radovic, B.Gupta, S.Sen, A.Paço, E.Michalopoulou, F.H.Saikim, H.L.Koh, F.Frankenberger, W.Kanchanamukda, D.A. da Cunha, N.A.M.Akib, A.Clarke, T.Wall, M.Vaccari (2019) The role of higher education institutions in sustainability initiatives at the local level. *Journal of Cleaner Production*, 233, 1004-1015, <https://doi.org/10.1016/j.jclepro.2019.06.059>
- R.Ozola, A.Krauklis, J.Burlakovs, M.Klavins, Z.Vincevica-Gaile, W.Hogland (2019) Surfactant-Modified Clay Sorbents for the Removal of p-nitrophenol. *Clays and Clay Minerals* DOI 10.1007/s42860-019-00015-2
- P.Trivedi, K.Karppinen, L.Klavins, J.Kviesis, P.Sundqvist, N.Nguyen, E.Heinonen, M.Klavins, L.Jaakola, J.Väänänen, J.Remes, H.Häggman (2019) Compositional and morphological analyses of wax in northern wild berry species. *Food Chemistry* 295, 441–448
- R.Muceniece, L.Klavins, J.Kviesis, K.Jekabsons, R.Rembergs, K.Saleniece, Z.Dzirkale, L.Saulite, U.Riekstina, M.Klavins (2019) Antioxidative, hypoglycaemic and hepatoprotective properties of five *Vaccinium* spp. berry pomace extracts *Journal of Berry Research* 9, 267–282 DOI:10.3233/JBR-180351