Personal information:

## Portrait

Name: Katalin Mária Dudás

Position / position: scientific assistant

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## Name of organizational unit, institute:

MATE, Institute of Environmental Sciences, Research Centre for Agricultural and Environmental Sciences

**Professional experience:** *Previous jobs, positions, assignments important from a professional point of view:* 

• From 2021, Hungarian University of Agricultural and Life Sciences, scientific assistant

- 2019-2021 NAIK Agricultural-Environmental Research Institute, scientific assistant
- 2014-2017 Szent István University Doctoral School of Environmental Sciences, PhD student
- 2012 NEKI National Environmental Institute (predecessor of the General Water Directorate), intern

•Main projects:

o 2018-2021 SIMONA (Sediment-quality Information, Monitoring and Assessment System to support transnational cooperation for joint Danube Basin water management) DTP Interreg project evaluation working group leader

o 2019-2021 Leading expert of the second review of the Hungarian River Basin Management Plan (VGT3), area of expertise: chemical status assessment of surface waters, emission inventory of hazardous substances and planning of necessary measures

o 2013-2015 expert for the review of the Hungarian River Basin Management Plan (VGT2), area of expertise: chemical status assessment of surface waters

**Qualification, qualification:** *Name of institution providing education/training, duration, name of qualification* 

• 2014 environmental engineer (MSc), Budapest University of Technology and Economics, Faculty of Chemistry and Bioengineering, specialization Environmental Technology

• 2011 environmental engineer (BSc), Budapest University of Technology and Economics, Faculty of Chemistry and Bioengineering, specialization Environmental Technology

## Area of research and activity:

Water quality protection of surface waters, with special regard to micropollutants: hazardous substances from municipal, industrial and agricultural sources (according to Directive 2013/39/EU):

• Investigation of the sources and transport routes of hazardous substances and analysis of their potential environmental effects. Regular review of the surface waters' environmental quality standards based on ecotoxicology.

• Recommendations for relevant micropollutants of surface waters that should be qualified based on emission data (river basin specific pollutants).

• The fate of hazardous substances in river basin sediments.

• Modelling of bioavailable concentrations of metals and semi-metals (potentially toxic elements) with Bio-met Biotic Ligand Model, and estimation of the metals' natural background concentrations in surface waters.