

Supplementary Material for the article **Water Quality Changes during Riverbank Filtration in Budapest, Hungary**, Zsuzsanna Nagy-Kovács ^{1,*}, János Davidesz ¹, Katalin Czihat-Mártonné ¹, Gábor Till ¹, Ernő Fleit ¹ and Thomas Grischek ²

Table S1. Parameters and analytical methods.

Parameter	Abbrev	Unit	Method/Equipment
Physical parameters			
Temperature	T	°C	E-M-MV2007/2 v3:2017 unique method/Testo 106 digital thermometer
Electric Conductivity	EC	µS/cm	MSZ EN 27888:1998
Turbidity	Turb	NTU	MSZ EN ISO 7027:2000 6.3
Chemical parameters			
pH			MSZ 1484-22:2009/Multi 9620 IDS
Dissolved Oxygen	DO	mg/l	ISO 17289:2014
Alkalinity	Alk	mmol/l	MSZ EN ISO 9963-1:1998 8.2.2.
Total organic carbon	TOC	mg/l	MSZ EN 1484:1998 (catalytic combustion with IR detection)
UV-absorbance at 254 nm	UV ₂₅₄	m ⁻¹	Standard methods for the Examination of Water and Wastewater 1998 (5910/Ultraviolet Absorption Method)
Chemical Oxygen Demand	COD	mg/l	COD/KMnO ₄ titrimetric method
Calcium	Ca ²⁺	mg/l	MSZ EN ISO 14911:2000
Magnesium	Mg ²⁺	mg/l	MSZ EN ISO 14911:2000
Sodium	Na ⁺	mg/l	MSZ EN ISO 14911:2000
Potassium	K ⁺	mg/l	MSZ EN ISO 14911:2000
Ammonium	NH ₄ ⁺	mg/l	MSZ EN ISO 14911:2000/MSZ ISO 7150-1:1992
Total Hardness	Hardness	mg/l CaO	Determined by calculation / EDTA Titrimetric Method
Bicarbonate	HCO ₃ ⁻	mg/l	Determined by calculation
Chloride	Cl ⁻	mg/l	MSZ EN ISO 10304-1:2009/EPA 325.1:1971 photometric method
Nitrate	NO ₃ ⁻	mg/l	MSZ EN ISO 10304-1:2009/EPA 353.1:1978 photometric method
Nitrite	NO ₂ ⁻	mg/l	MSZ EN ISO 10304-1:2009/EPA 354.1:1971 photometric method
Sulphate	SO ₄ ²⁻	mg/l	MSZ EN ISO 10304-1:2009 /
Phosphate	PO ₄ ³⁻	mg/l	EPA 365.1: revision 2-1993 photometric method with ascorbic acid reduction
Fluoride	F ⁻	mg/l	MSZ EN ISO 10304-1:2009 /
Iron	Fe	µg/l	MSZ 1484-3:2006 Chapter 5./ICP-OES
Manganese	Mn	µg/l	MSZ 1484-3:2006 Chapter 5./ICP-OES
Aluminum	Al	µg/l	MSZ EN ISO 17294-2:2005
Antimony	Sb	µg/l	MSZ EN ISO 17294-2:2005
Arsenic	As	µg/l	MSZ EN ISO 17294-2:2005
Barium	Ba	µg/l	MSZ EN ISO 17294-2:2005
Bismuth	Bi	µg/l	MSZ EN ISO 17294-2:2005
Boron	B	mg/l	MSZ EN ISO 17294-2:2005
Cadmium	Cd	µg/l	MSZ EN ISO 17294-2:2005
Chromium	Cr	µg/l	MSZ EN ISO 17294-2:2005

Cobalt	Co	µg/l	MSZ EN ISO 17294-2:2005
Copper	Cu	mg/l	MSZ EN ISO 17294-2:2005
Cyanide	CN ⁻	µg/l	EPA Method 335.2:1980/photometric method
Lead	Pb	µg/l	MSZ EN ISO 17294-2:2005
Lithium	Li	µg/l	MSZ EN ISO 17294-2:2005
Mercury	Hg	µg/l	MSZ EN ISO 17852:2008
Molybdenum	Mo	µg/l	MSZ EN ISO 17294-2:2005
Nickel	Ni	µg/l	MSZ EN ISO 17294-2:2005
Selenium	Se	µg/l	MSZ EN ISO 17294-2:2005
Silicium	Si	mg/l	MSZ EN ISO 17294-2:2005
Silver	Ag	µg/l	MSZ EN ISO 17294-2:2005
Strontium	Sr	mg/l	MSZ EN ISO 11885:2009
Zinc		mg/l	MSZ EN ISO 17294-2:2005

Microbiological parameters

Heterotrophic	HPC 22	count/ml	MSZ EN ISO 6222:2000
Plate Count	22		
°C			
Heterotrophic	HPC 37	count/ml	MSZ EN ISO 6222:2000
Plate Count	37		
°C			
Total Coliform	TCC	count/100 ml	MSZ EN ISO 9308-1:2015
Count			
Escherichia coli	E. coli	count/100 ml	MSZ EN ISO 9308-1:2015
Enterococci	Enteroc.	count/100 ml	MSZ EN ISO 7899-2:2000
Clostridium	Clostr.	count/100 ml	MSZ EN 26461-2:1994/MSZ EN ISO 14189:2017
Pseudomonas	Pseudom.	count/100 ml	MSZ EN ISO 16266:2008
aeruginosa			

Biological parameters

Algae and cyanobacteria	Algae	ind./l	
Protozoa	Protozoa	i/l	
Other protozoa	Other prot.	i/l	
Nematodes	Nematodes	i/l	
Other worms	Other worms	i/l	MSZ 448-36: 1985 , Light microscopic assay of compressed and unstained samples
Testate amoebae (with shell)	Amoebae	i/l	
Fungi	Fungi	i/l	
Iron and manganese bacteria	Fe/Mn bact.	i/l	