

Changes in dissolved organic matter and oxygen consumption in different bank filtration simulations at different scales

Muhammad Zeeshan^{a,b*}, Sondra Klitzke^c, Aki Sebastian Ruhl^{a,b}

^a German Environment Agency, Section II 3.3, Schichauweg 58, 12307, Berlin, Germany

^b Technische Universität Berlin, Water Treatment, KF4, Str. des 17. Juni 135, 10623, Berlin, Germany

^c German Environment Agency, Section II 3.1, Schichauweg 58, 12307, Berlin, Germany

* muhammad.zeeshan@uba.de; enr.m.zeeshan@live.com

Supplementary Information

Table S1: Treated groundwater characteristics in the experiments with averages and standard deviations

Parameter	MO columns	SI and LI columns
pH	7.6 – 8.2	8.0 – 8.3
Conductivity ($\mu\text{S}/\text{cm}$)	1160 ± 40	789 ± 7
DOC (mg/L)	2.7 ± 0.2	3.0 ± 0.1
UV ₂₅₄ (1/m)	5.2 ± 0.4	9.8 ± 0.4
Dissolved oxygen	7.8 ± 0.4	8.8 ± 0.8
Nitrate (mg/L)	0.20 ± 0.05	3.59 ± 0.15
Ammonium (mg/L)	0.02 ± 0.01	0.02 ± 0.01

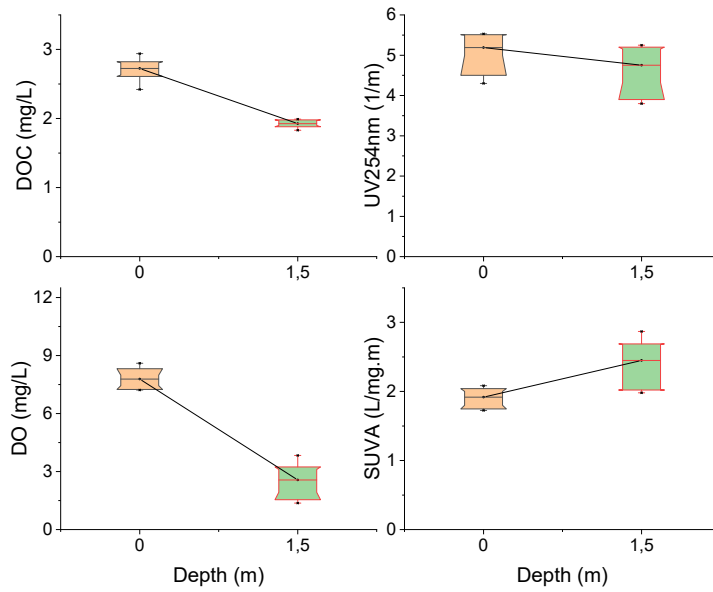


Figure S1 Data variance and trend of different parameters in MO columns

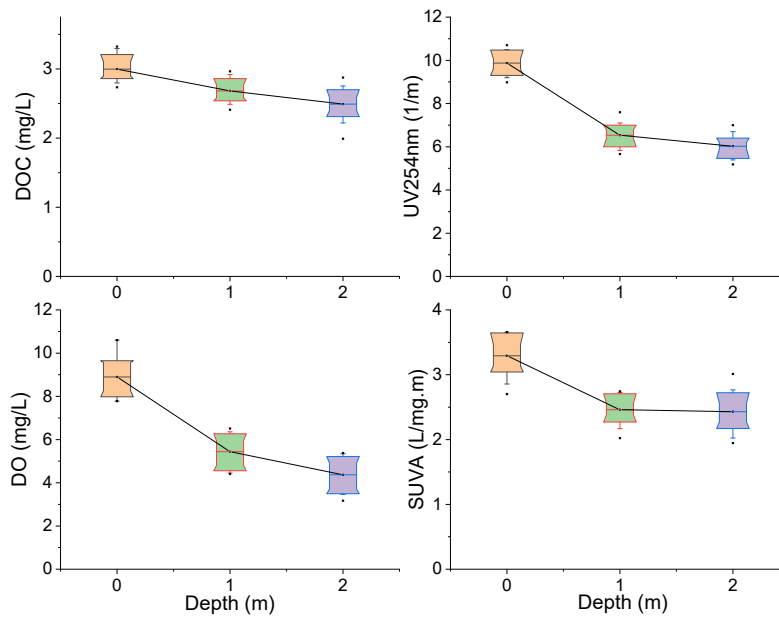


Figure S2 Data variance and trend of different parameters in SI columns

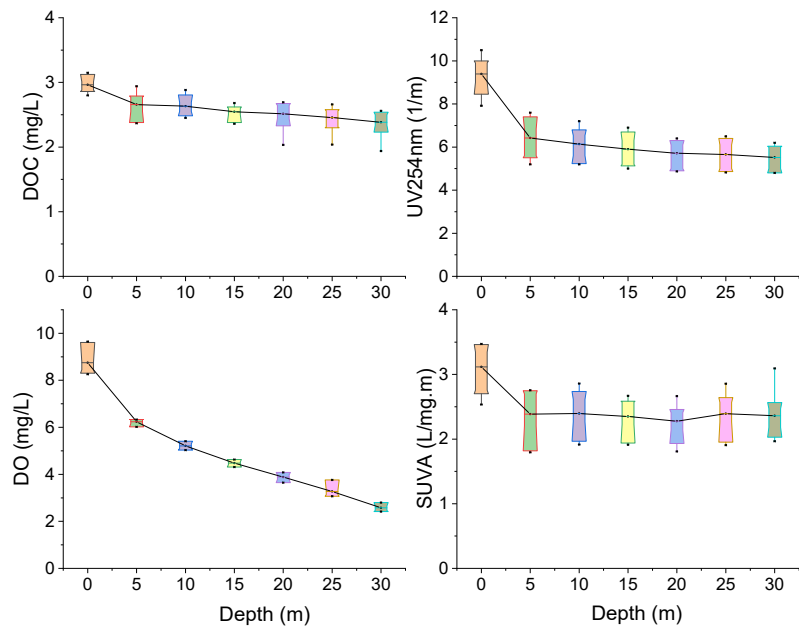


Figure S3 Data variance and trend of different parameters in LI columns

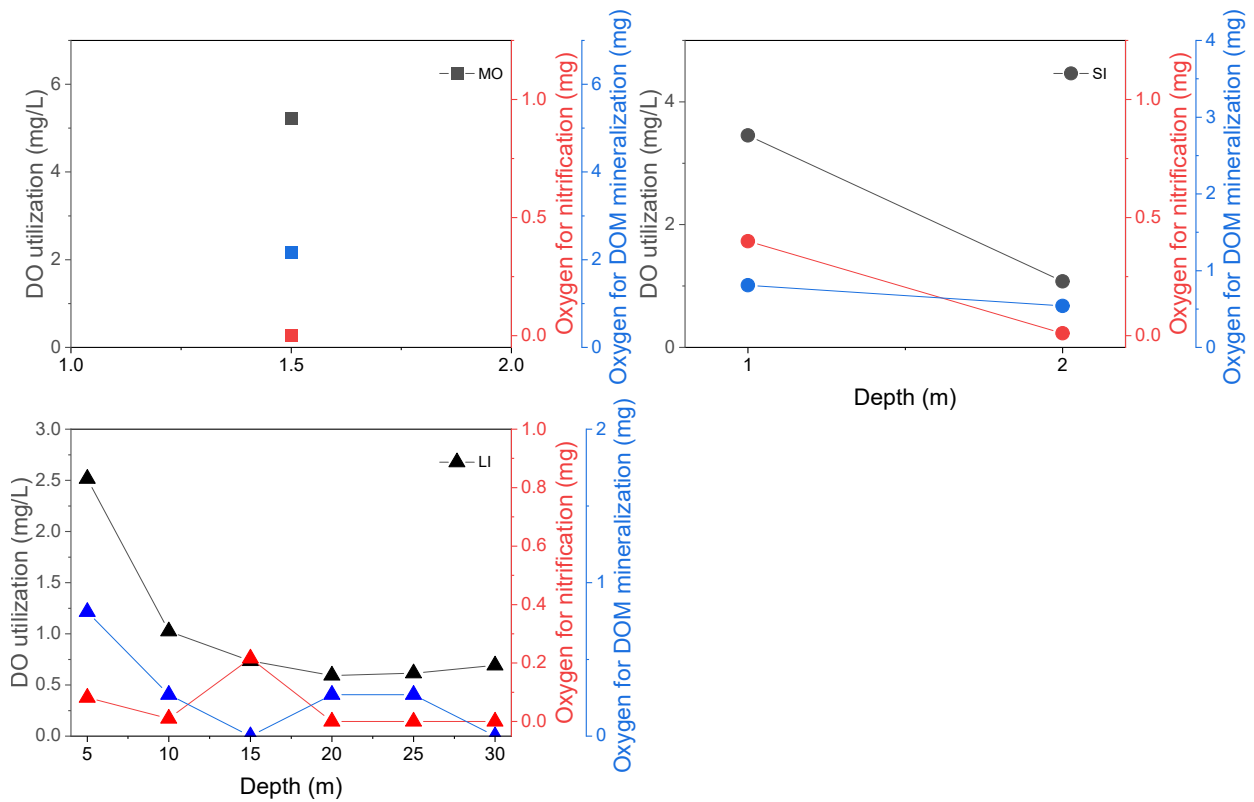


Figure S4 Averaged dissolved oxygen (DO) utilization and specific oxygen demand for DOM and nitrification in all systems.