Supplementary Material

Table S1. Variations of physico-chemical parameters (Mean ±SD) of industrial wastewater, Leeuwkuil WWTP inflow and final effluents across different seasons.

Parameters	Seasons	Sampling sites						
		Industry 1	Industry 2	Industry 3	Industry 4	Industry 5	WWTP Inflow	WWTP effluent
Temperature (ºC)	Summer	27.4 ±0.7	26.6 ±0.7	28.2 ±0.7	27.7 ±0.7	27.9 ±0.8	26.3 ±0.8	26.6 ±0.7
	Autumn	24.2 ±1.0	23.8 ±1.1	24.3 ±1.1	24.4 ±1.1	24.1 ±1.0	22.7 ±1.1	27.0 ±1.0
	Winter	16.4 ±0.8	15.7 ±0.8	16.2 ±0.8	15.8 ±0.7	16.0 ±0.9	16.6 ±0.7	16.7 ±0.8
	Spring	20.8 ±1.0	20.9 ±1.1	20.3 ±1.1	20.7 ±1.0	21.2 ±1.0	20.8 ±1.1	20.7 ±1.0
pH	Summer	6.9 ±1.1	8.7 ±1.1	9.2 ±1.1	10.8 ±1.0	10.5 ±1.0	9.0 ±1.0	7.7 ±1.1
	Autumn	6.8 ±0.9	8.2 ±1.0	10.2 ±1.0	7.7 ±1.0	10.3 ±1.0	7.9 ±0.9	8.2 ±0.9
	Winter	8.2 ±1.5	8.7 ±1.5	10.0 ±1.5	12.5 ±1.5	12.2 ±1.5	8.5 ±1.5	8.4 ±1.4
	Spring	7.0 ±1.8	6.4 ±1.8	9.4 ±1.8	12.5 ±1.7	11.5 ±1.9	7.8 ±1.7	7.7 ±1.8
BOD (mg/l)	Summer	5.8 ±1.8	5.6 ±1.8	4.2 ±1.8	5.4 ±1.6	6.5 ±1.8	4.9 ±1.8	3.3 ±1.8
	Autumn	5.7 ±2.3	7.0 ±2.3	6.6 ±2.2	5.1 ±2.2	6.7 ±2.3	3.7 ±2.2	3.1 ±2.2
	Winter	6.8 ±1.8	5.4 ±1.8	5.3 ±1.8	6.3 ±8.1	5.2 ±1.8	2.6 ±1.8	4.4 ±1.8
	Spring	5.6 ±1.8	5.9 ±1.8	5.3 ±1.8	6.9 ±1.8	5.3 ±1.8	2.1 ±1.8	4.2 ±1.8
DO (mg/l)	Summer	1.4 ±1.2	2.0 ±1.2	1.7 ±1.2	1.8 ±1.2	1.0 ±1.2	1.7 ±1.2	2.9 ±1.2
	Autumn	1.7 ±1.3	0.7 ±1.3	1.0 ±1.3	1.6 ±1.3	0.8 ±1.3	1.6 ±1.3	3.0 ±1.3
	Winter	1.2 ±1.59	2.1 ±1.6	2.2 ±1.7	2.1 ±1.6	1.1 ±1.6	1.3 ±1.6	2.2 ±1.7
	Spring	1.9 ±1.2	2.1 ±1.2	1.6 ±1.2	2.1 ±1.2	1.9 ±1.2	1.0 ±1.0	2.8 ±1.2
COD (mg/l)	Summer	228 ±189	277 ±206	909 ±589	621 ±423	275 ±21	456 ±368	3.4 ±2.3
	Autumn	320 ±280	1172 ±785	872 ±535	1128 ±783	670 ±460	360 ±29	3.0 ±2.7
	Winter	184 ±120	174 ±145	878 ±786	1209 ±934	200 ±16	468 ±32	136 ±99
	Spring	292 ±257	218 ±187	1493 ±936	714 ±635	95 ±7	452 ±35	0.3 ±0.1
TDS (mg/l)	Summer	1892 ±1145	2122 ±1256	22 ±15.7	2452 ±1632	3901 ±1987	328 ±304	265 ±204
	Autumn	2434 ±1436	1826 ±1189	19 ±14.9	3117 ±1826	2468 ±1357	354 ±323	253 ±199
	Winter	1845 ±1168	2223 ±1164	14 ±12.3	1417 ±1106	3636 ±1969	337 ±303	281 ±225
	Spring	1301 ±1127	1138 ±988	12 ±8.12	2335 ±1236	4611 ±2865	321 ±299	232 ±200
EC (µS/cm)	Summer	3603 ±2673	3782 ±2563	45 ±32.8	1954 ±1347	1425 ±1256	669 ±55	627 ±568
	Autumn	2743 ±1893	3594 ±2363	39 ±26.9	1797 ±1539	1109 ±986	710 ±68	505 ±475
	Winter	1845 ±1535	2223 ±1453	14 ±8.9	1417 ±1209	3636 ±2987	337 ±30	281 ±169
	Spring	2600 ±1895	2276 ±1468	25 ±18.9	4673 ±3673	9224 ±7869	642 ±54	464 ±370
Salinity (psu)	Summer	2.1 ±1.4	2.1 ±1.6	24.8 ±18.9	1.5 ±1.0	6.2 ±5.2	0.3 ±0.2	0.26 ±0.20
	Autumn	6.8 ±5.4	1.9 ±1.0	23.8 ±19.5	0.9 ±0.6	5.8 ±3.5	0.4 ±0.2	0.26 ±0.19
	Winter	2.0 ±0.9	2.4 ±1.7	17.9 ±13.9	0.9 ±0.6	6.0 ±4.8	0.3 ±0.2	0.28 ±0.20
	Spring	1.4 ±0.7	1.2 ±1.0	14.4 ±11.2	2.5 ±1.6	5.2 ±4.2	0.3 ±0.2	0.24 ±0.22

Table S2. Mean (±SD) elemental composition (mg/L) of different industrial wastewater, Leeuwkuil WWTP inflow and final effluents samples (n=27)

	Industry 1	Industry 2	Industry 3	Industry 4	Industry 5	WWTP Inflow	WWTP effluent
Ag	0.2 ±0.04	0.2 ±0.03	<MDL	0.2 ±0.08	0.2 ±0.00	0.4 ±0.2	2.1 ±0.1
Al	11.8 ±1.16	0.28 ±0.05	1.95 ±1.05	14.0 ±2.34	2.56 ±1.56	0.18 ±0.03	0.20 ±0.02
B	0.6 ±0.04	0.7 ±0.02	5.4 ±0.8	0.5 ±0.15	16.1 ±2.5	0.16 ±0.0	0.19 ±0.04
Ca	186 ±16.5	38 ±3.9	143 ±13.8	472 ±45.8	294 ±21.3	35.2 ±2.1	33.9 ±7.5
Cr	0.18 ±0.02	0.8 ±0.12	0.15 ±0.04	0.02 ±0.0	0.05 ±0.03	0.8 ±0.08	0.2 ±0.03
Cu	0.72 ±0.04	0.24 ±0.04	0.19 ±0.02	0.18 ±0.02	0.19 ±0.02	0.22 ±0.02	0.18 ±0.02
Fe	14.0 ±1.3	16.7 ±1.5	0.7 ±0.1	13.1 ±1.2	6.4 ±0.6	3.2 ±0.3	1.5 ±0.02
K	8.5 ±0.8	8.6 ±0.9	63.2 ±5.6	6.6 ±0.6	9.7 ±0.9	8.5 ±0.5	8.6 ±0.9
Mg	83.5 ±7.9	5.7 ±0.5	70.6 ±7.0	25.9 ±2.3	12.4 ±1.0	12.0 ±1.0	11.8 ±1.0
Na	213 ±18.7	432 ±78.6	49 ±4.8	97 ±9.0	866 ±85	52.8 ±5.0	59 ±6.0
Ni	0.3 ±0.01	0.26 ±0.02	0.2 ±0.01	0.4 ±0.12	0.2 ±0.0	0.24 ±0.04	0.18 ±0.02
P	6.2 ±0.04	1.1 ±0.02	0.8 ±0.04	2.6 ±0.06	2.3 ±0.04	4.5 ±0.01	4.0 ±0.04
Pb	4.8 ±0.17	0.18 ±0.02	0.18 ±0.03	0.19 ±0.03	0.21 ±0.0	0.20 ±0.03	0.19 ±0.03
S	3503 ±105	15.1 ±4.2	21.5 ±1.2	21.0 ±2.1	7.9 ±1.9	167 ±37.8	20 ±0.9
Se	<MDL	<MDL	<MDL	<MDL	<MDL	3.3 ±0.36	1.4 ±0.18
Si	11.5 ±8.1	6.4 ±0.0	0.2 ±0.01	2.9 ±0.0	0.2 ±0.06	4.3 ±0.6	1.8 ±0.3
Sr	1.8 ±0.4	1.8 ±0.6	0.8 ±0.08	0.4 ±0.1	<MDL	0.3 ±0.1	<MDL
Zn	7.41 ±2.04	56.7 ±19.03	1.47 ±0.74	4.07 ±0.21	0.26 ±0.05	0.20 ±0.01	0.16 ±0.03

[α] MDL, minimum detectable limit of the instrument