

**Table S1.** Values of Spearman rank correlation coefficient ( $r_s$ ) of the meteorological data, physicochemical parameters, ions and elements in rainfall. Statistically significant relations (at  $\alpha=0.05$ ) are marked in bold and highlighted in grey (modified after a previous work in Chemosphere [5]).

	<i>T</i>	<i>pH</i>	<i>SEC</i>	<i>DOC</i>	<i>Cl<sup>-</sup></i>	<i>SO<sub>4</sub><sup>2-</sup></i>	<i>nss</i>	<i>nss [%]</i>	<i>Ag</i>	<i>Al</i>	<i>As</i>	<i>Bi</i>	<i>Ca</i>	<i>Cd</i>	<i>Co</i>	<i>Cr</i>	<i>Fe</i>	<i>K</i>	<i>nsK</i>	<i>nsK [%]</i>	<i>Li</i>	<i>Mg</i>	<i>Mn</i>	<i>Mo</i>	<i>Na</i>	<i>Ni</i>	<i>Pb</i>	<i>Sb</i>	<i>Se</i>	<i>Sr</i>	<i>V</i>	<i>Zn</i>
<i>P</i>	-0.077	0.005	-0.068	-0.509	0.064	0.132	0.009	0.005	-0.378	-0.196	-0.032	0.023	-0.055	-0.397	-0.437	-0.064	0.342	0.146	-0.205	-0.082	0.128	0.009	-0.255	0.159	0.055	0.282	0.005	-0.055	-0.358	-0.083	0.018	-0.474
<i>T</i>	-0.464	-0.579	0.137	-0.655	-0.591	-0.169	0.655	0.209	-0.300	0.518	0.773	0.327	-0.219	0.345	0.145	-0.618	-0.136	0.428	0.645	0.333	-0.582	0.027	0.700	-0.645	0.191	-0.255	0.670	0.260	-0.202	0.727	0.064	
<i>pH</i>	0.542	0.433	0.600	0.591	0.246	-0.464	0.291	0.264	-0.236	-0.355	-0.118	0.073	-0.364	0.045	0.418	0.118	-0.319	-0.682	-0.178	0.555	-0.300	-0.282	0.555	-0.373	0.136	-0.606	-0.264	0.193	-0.173	-0.136		
<i>SEC</i>	-0.139	0.970	0.893	-0.021	-0.961	-0.164	0.560	0.041	-0.278	0.328	-0.112	0.169	0.405	0.196	0.542	-0.091	-0.888	0.315	0.989	0.187	-0.260	0.952	0.282	0.023	-0.370	-0.189	0.800	-0.205	-0.342			
<i>DOC</i>	-0.087	-0.009	0.374	0.255	0.478	0.032	-0.055	-0.073	-0.005	0.477	0.064	0.123	-0.018	-0.018	0.365	0.150	-0.256	-0.123	0.082	-0.164	-0.077	-0.702	0.014	-0.235	-0.057	-0.280	0.055	0.478				
<i>Cl<sup>-</sup></i>	0.964	0.146	-0.927	-0.155	0.573	-0.009	-0.345	0.273	-0.064	0.100	0.418	0.355	0.609	-0.055	-0.873	0.255	0.991	0.173	-0.309	0.991	0.218	0.091	-0.442	-0.251	0.716	-0.255	-0.318					
<i>SO<sub>4</sub><sup>2-</sup></i>	0.305	-0.809	-0.109	0.645	0.027	-0.291	0.345	0.027	0.164	0.445	0.464	0.727	0.105	-0.755	0.287	0.945	0.255	-0.218	0.982	0.227	0.173	-0.428	-0.241	0.697	-0.173	-0.191						
<i>nss</i>	0.169	0.597	0.415	0.205	0.073	-0.073	0.311	0.237	0.328	0.597	0.251	0.196	0.155	-0.055	0.096	-0.041	0.105	0.200	-0.064	0.574	0.053	0.384	-0.133	0.169	0.346							
<i>nss [%]</i>	0.282	-0.418	0.109	0.400	-0.164	0.128	-0.018	-0.318	-0.109	-0.445	0.187	0.918	-0.205	-0.936	-0.155	0.427	-0.891	-0.227	0.027	0.396	0.260	-0.688	0.382	0.409								
<i>Ag</i>	0.227	0.309	0.391	-0.209	0.337	0.227	0.300	-0.018	-0.200	-0.032	0.209	-0.032	-0.136	-0.236	0.255	-0.164	-0.136	0.582	0.374	0.747	-0.229	0.418	0.427									
<i>Al</i>	0.318	0.082	0.464	0.182	0.527	0.427	0.300	0.745	0.314	-0.209	0.401	0.600	0.582	0.109	0.645	0.445	0.291	0.105	0.273	0.596	0.182	0.318										
<i>As</i>	0.900	0.700	-0.150	0.764	0.736	-0.264	0.245	0.305	0.273	0.866	0.064	0.209	0.809	0.018	0.664	0.191	0.724	0.533	0.395	0.900	0.036											
<i>Bi</i>	0.527	-0.146	0.609	0.518	-0.418	0.018	0.264	0.491	0.733	-0.264	0.073	0.909	-0.327	0.582	0.182	0.843	0.597	0.147	0.964	0.100												
<i>Ca</i>	-0.087	0.727	0.545	-0.145	0.609	0.556	0.027	0.856	0.336	0.591	0.573	0.336	0.582	-0.136	0.246	-0.023	0.734	0.609	0.045													
<i>Cd</i>	0.210	0.096	0.096	-0.032	0.240	0.214	-0.116	-0.100	0.369	-0.269	-0.014	-0.396	0.647	-0.148	0.276	-0.092	-0.150	0.875														
<i>Co</i>	0.691	-0.264	0.445	0.620	0.264	0.715	0.182	0.609	0.500	0.173	0.555	0.227	0.569	0.547	0.523	0.591	0.373															
<i>Cr</i>	-0.255	0.518	0.446	-0.118	0.733	0.455	0.373	0.282	0.427	0.436	0.291	0.442	0.351	0.431	0.491	0.036																
<i>Fe</i>	0.164	-0.273	-0.227	-0.255	0.273	-0.218	-0.118	0.400	-0.091	0.345	-0.542	-0.169	0.083	-0.255	0.018																	
<i>K</i>	0.647	-0.236	0.469	0.618	0.709	0.036	0.682	0.445	-0.073	0.014	-0.191	0.560	0.091	0.027																		
<i>nsK</i>	0.396	0.331	-0.032	0.774	0.159	0.032	0.118	-0.159	0.288	-0.023	0.101	0.269	0.410																			
<i>nsK [%]</i>	0.005	-0.864	0.182	0.445	-0.809	-0.009	0.064	0.588	0.378	-0.541	0.427	0.545																				
<i>Li</i>	0.328	0.415	0.674	0.287	0.784	0.146	0.516	0.269	0.690	0.729	-0.046																					
<i>Mg</i>	0.200	-0.236	0.982	0.300	0.073	-0.360	-0.187	0.780	-0.182	-0.327																						
<i>Mn</i>	-0.036	0.264	0.282	-0.055	0.187	-0.018	0.376	0.055	0.500																							
<i>Mo</i>	-0.273	0.618	0.127	0.651	0.451	0.239	0.945	0.009																								
<i>Na</i>	0.255	0.118	-0.424	-0.232	0.743	-0.227	-0.236																									
<i>Ni</i>	0.100	0.592	0.355	0.615	0.527	-0.236																										
<i>Pb</i>	0.141	0.656	0.064	0.164	0.518																											
<i>Sb</i>	0.715	-0.074	0.706	0.150																												
<i>Se</i>	-0.005	0.510	0.433																													
<i>Sr</i>	0.220	-0.165																														
<i>V</i>	0.109																															
<i>Zn</i>																																