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Supplementary Information

UV-Assisted Digestion of Petrochemical Industry Effluents Prior to the Determination of Zn, Cd, Pb and Cu by Differential Pulse Anodic Stripping Voltammetry

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Table S1. Instrumental conditions of the ICP OES

Parameter	Value
RF incident power / W	1200
Plasma argon flow rate / (L min^{-1})	12
Auxiliary argon flow rate / (L min^{-1})	1.0
Nebulizer argon flow rate / (L min^{-1})	0.65
Nebulizer	cross flow

RF: radio-frequency.

Table S2. Typical composition of the petrochemical effluent samples from Basic Petrochemicals Unit (Braskem, Camaçari, BA, Brazil)

Parameter	Effluent from organic system / (mg kg^{-1})			Effluent from inorganic system / (mg kg^{-1})		
	Mean	Min	Max	Mean	Min	Max
Benzene	5.84	0.14	59.83	< 0.01	< 0.01	0.02
Phenol	11.42	0.33	41.03	< 0.02	< 0.02	0.35
Toluene	3.64	0.12	39.81	0.01	< 0.01	0.18
p + *m* + *o*-Xylene	2.02	0.13	15.84	< 0.01	< 0.01	< 0.01
Oil and grease	17	< 5	262	7	< 5	50
pH	8.19	6.81	9.64	7.73	6.09	9.76
Suspended solid	77	16	447	21	< 1.0	144
Dissolved Solid	2760	14	7110	857	91	6370
Settleable Solid	0.7	< 0.1	3.0	2.6	< 0.1	45.0
Chloride	166.44	65.53	462.99	258.51	46.73	645.06
Phosphate	9.2	2.3	27.7	5.3	1.8	15.7
Sulfate	1277.13	171.35	3751.48	–	–	–
Sulfide	4.53	< 1.0	39.88	0.87	< 1.0	8.58
Biological oxygen demand	–	–	–	12	< 1.0	19
Chemical oxygen demand	–	–	–	45	8.0	240
N ammoniacal	26.45	3.15	54.08	1.44	< 1.0	5.00
Ba	2.06	0.20	7.20	1.20	< 0.10	4.44
Cu	–	–	–	0.18	< 0.10	1.01
Fe	2.42	0.69	8.88	1.01	0.19	5.10
Mn	0.16	< 0.10	0.70	< 0.10	< 0.10	0.69
Hg	0.83	< 0.5	14.37	1.19	< 0.50	49.31
Ni	–	–	–	0.14	< 0.10	0.66
Ag	< 0.01	< 0.01	< 0.01	–	–	–
Zn	0.85	< 0.10	2.50	1.16	0.16	4.20

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