Table S1. Determination of the optimal quantity (S/L ration) of fly ash required for neutralization of the acid mine water samples to pH 7.

FA Mass Fraction (%)	Mass (g)	Sample	Time (min)							
			15	30	60	120	240	1440	5760	10080
3	**1.5**	EF	2.59	2.63	2.68	2.67	2.7	2.95	3.35	3.36
		KOST	3.02	3.19	3.38	3.73	3.82	3.92	4.04	4.08
5	2.5	EF	2.88	3.16	3.6	3.71	3.71	3.96	4.04	4.07
		KOST	3.37	3.86	4.05	4.12	4.16	4.07	4.16	4.21
10	5	EF	3.69	4.04	3.92	3.94	3.97	4.11	4.27	4.31
		KOST	4.37	4.32	4.41	4.47	4.47	4.47	4.83	5.02
15	7.5	EF	4.11	4.06	4.15	4.22	4.29	4.48	4.64	4.86
		KOST	4.6	4.71	4.92	5.15	5.41	5.68	6.34	6.59
20	10	EF	4.18	4.3	4.26	4.54	4.83	5.51	6.32	6.3
		KOST	5.49	5.91	6.21	6.54	6.64	7.07	7.5	7.44
25	12.5	EF	4.38	4.58	4.9	5.54	5.98	6.26	6.85	7.16
		KOST	5.72	6.22	6.55	6.75	6.97	6.96	7.86	/
30	15	EF	4.43	4.74	5.57	6.03	6.48	6.69	7.5	7.68
		KOST	6.13	6.53	6.81	7.05	7.23	7.36	7.64	7.8
40	20	EF	5.24	6.58	7.67	7.96	8.28	8.1	8.34	8.37
		KOST	6.2	6.48	6.81	7.03	7.3	7.42	8.01	8.01

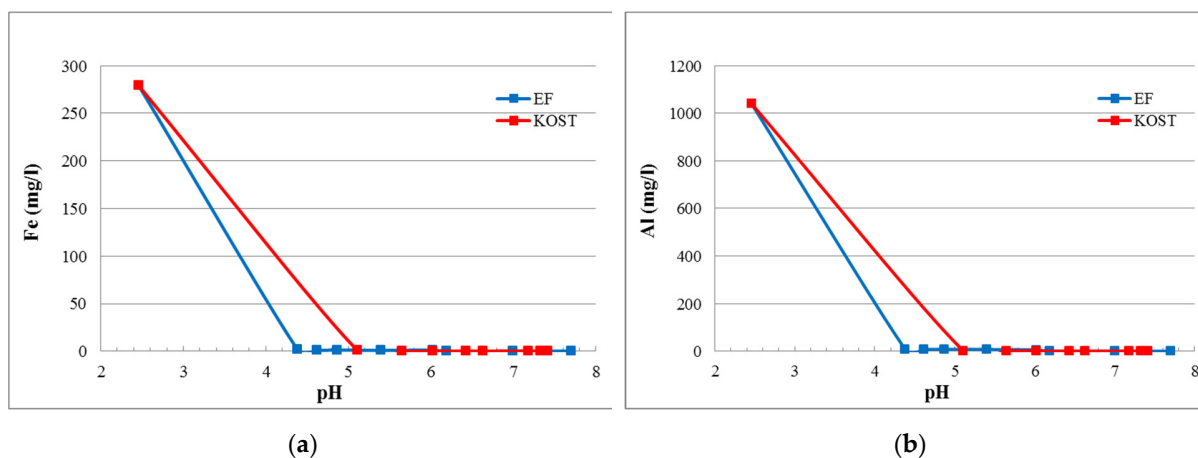(**a**)   (**b**)

Figure S1. Dependence of the Fe and Al concentration in solution on pH values during the AMD treatment.
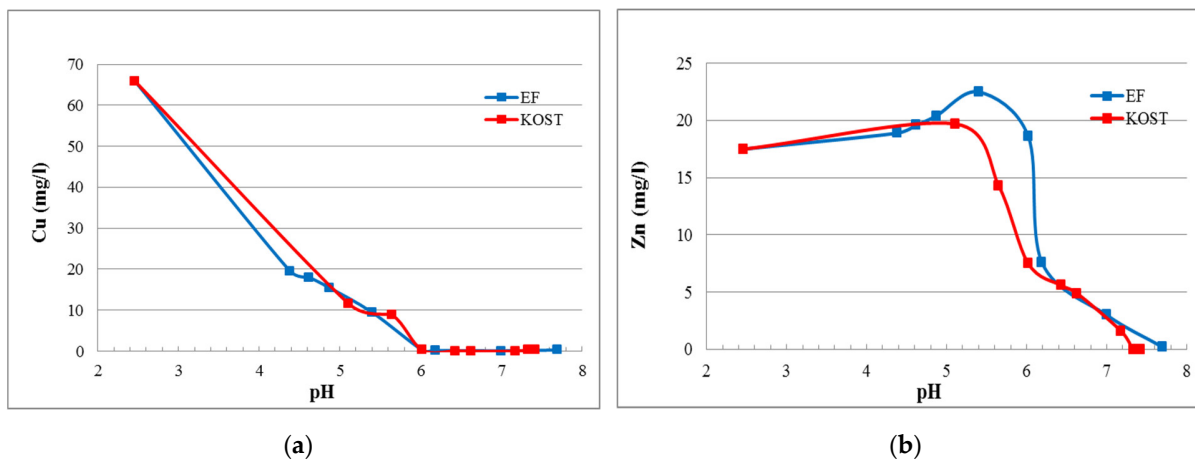
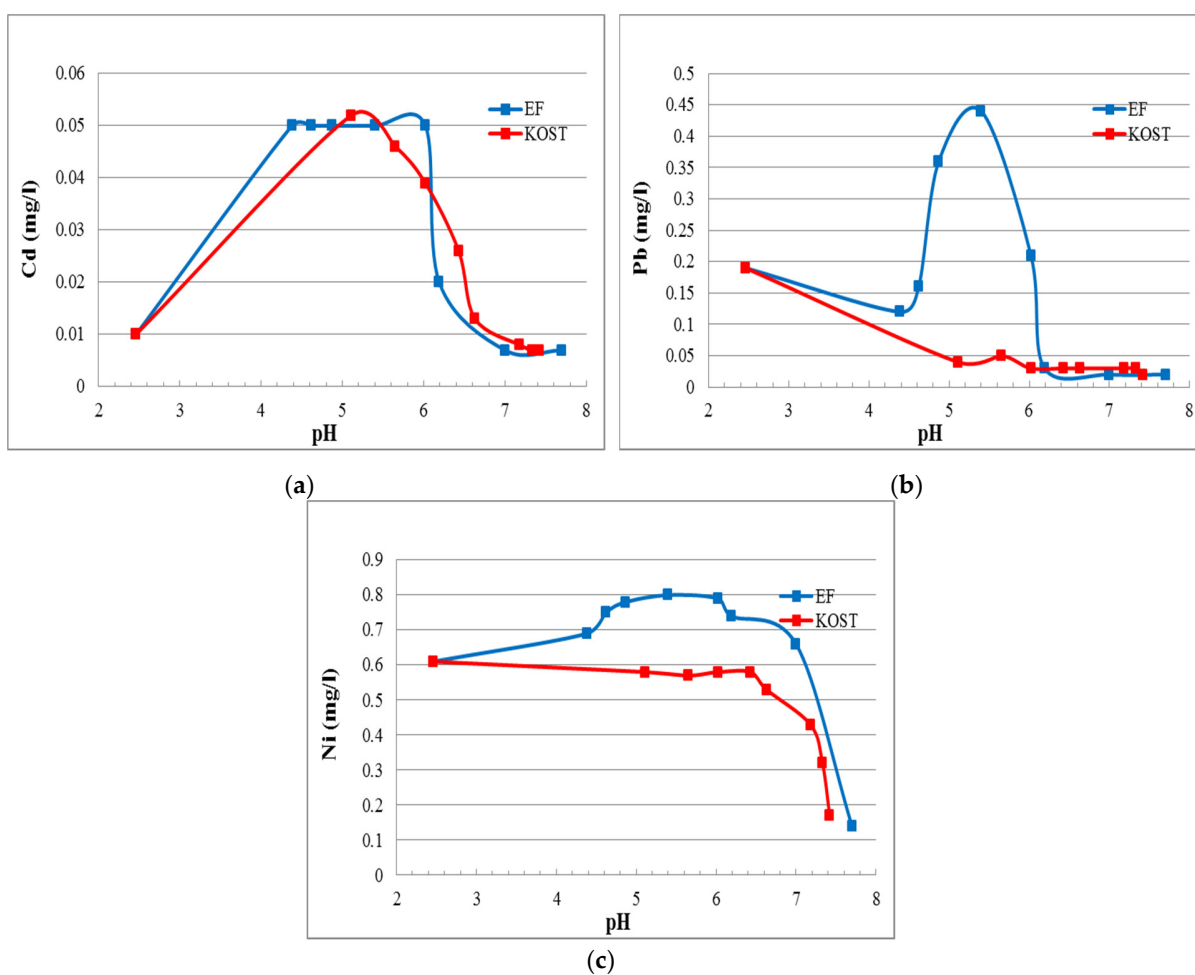**Figure S2.** Dependence of Cu and Zn concentration in solution on pH values during the AMD treatment.

Figure S3. Dependence of Ni, Pb and Cd concentration in solution on pH valuee during the AMD treatment.