Supplementary Material

"Effect of Oxidative Roasting on Selective Leaching of Lithium from Industrially Shredded Lithium Iron Phosphate Blackmass".

ANOVA Statistical analysis (DF = Degrees of Freedom):

- **Li – R^2 = 0.99**

	DF	Sum of Squares	Mean Square	F value	p-value
Roasting	1	2851.14	2851.14	76.98	0.000
Final pH	3	15051.52	5017.17	135.47	0.000
Roasting*Final pH	3	2510.13	836.71	22.59	0.000
Error	8	296.29	37.04	-	-
Total	15	20709.08	-	-	-

- **Fe – R^2 = 0.98**

	DF	Sum of Squares	Mean Square	F value	p-value
Roasting	1	18.88	18.88	0.65	0.44
Final pH	3	13170.19	4390.06	150.09	0.000
Roasting*Final pH	3	67.83	22.61	0.77	0.54
Error	8	233.99	29.25	-	-
Total	15	13490.89	-	-	-

- **P – R^2 = 0.99**

	DF	Sum of Squares	Mean Square	F value	p-value
Roasting	1	80.47	80.47	2.55	0.15
Final pH	3	18939.12	6313.04	199.98	0.000
Roasting*Final pH	3	854.23	284.74	9.02	0.01
Error	8	252.55	31.57	-	-
Total	15	20126.37	-	-	-

- **Al – R^2 = 0.99**

	DF	Sum of Squares	Mean Square	F value	p-value
Roasting	1	199.93	199.93	26.91	0.000
Final pH	3	6985.12	2328.37	313.39	0.000
Roasting*Final pH	3	574.26	191.42	25.76	0.000
Error	8	59.44	7.43	-	-
Total	15	7818.76	-	-	-

- **Cu – R^2 = 0.98**

	DF	Sum of Squares	Mean Square	F value	p-value
Roasting	1	222.94	222.94	2.89	0.13
Final pH	3	30091.88	10030.63	129.91	0.000
Roasting*Final pH	3	329.24	109.75	1.42	0.31
Error	8	617.72	77.22	-	-
Total	15	31261.77	-	-	-