

Electronic Supplementary Information (ESI)

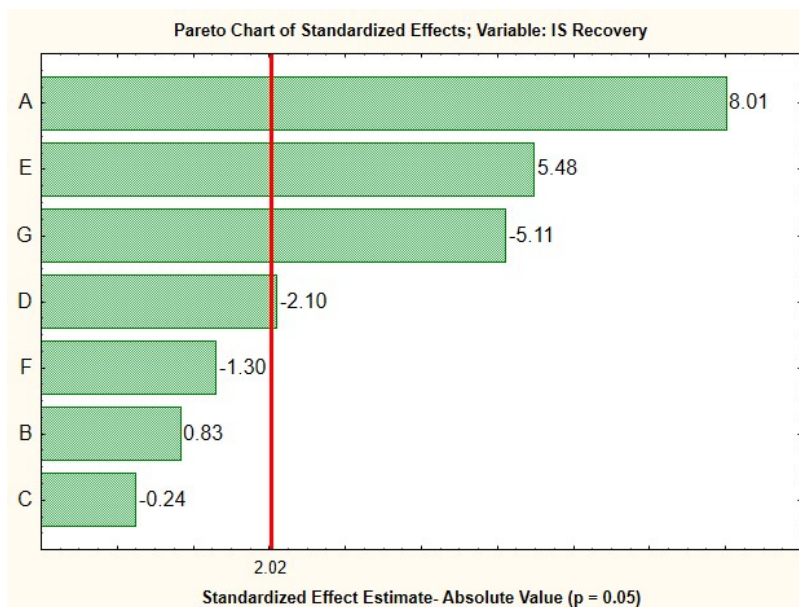


Figure 1S. Pareto graph for IS recovery. Red line defines a 95% confidence level. A = volume of chloroform, B = volume of isopropyl alcohol, C = NaCl (%), D = sample pH, E = agitation time, F = centrifugation time and G = 50 mM of sodium phosphate solution volume.

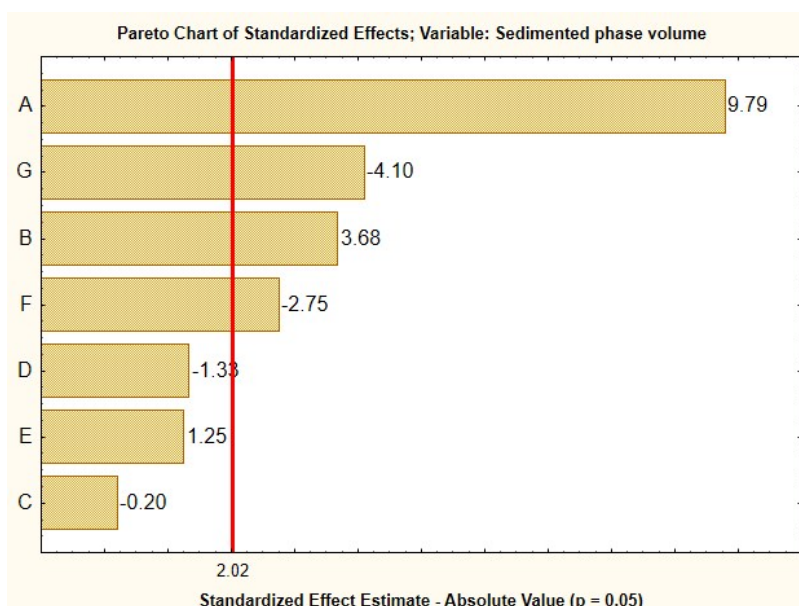


Figure 2S. Pareto graph for sedimented phase volume. Red line defines a 95% confidence level. A = volume of chloroform, B = volume of isopropyl alcohol, C = NaCl (%), D = sample pH, E = agitation time, F = centrifugation time and G = 50 mM of sodium phosphate solution volume.

Table 1S. Analysis of variance (ANOVA) for FFD – response is FLU recovery

Variable	Sum of square	Degree of freedom	Mean square	F-value	<i>p</i> -value
A	12062.48	1	12062.48	88.31	0.000
B	530.34	1	530.34	3.88	0.056
C	9.92	1	9.92	0.07	0.789
D	344.83	1	344.83	2.54	0.120
E	1460.84	1	1460.84	10.69	0.002
F	150.77	1	150.77	1.10	0.300
G	8500.40	1	8500.40	62.23	0.000
Error	5327.11	39	136.59		
Total	28276.89	46			
R-square	0.81				

The variables colored in red are the ones with p -value ≤ 0.05 .

Table 2S. Analysis of variance (ANOVA) for CCD – response is FLU recovery

Variable	Sum of square	Degree of freedom	Mean square	F-value	<i>p</i> -value
A (L)	5545.20	1	5545.20	940.65	0.000
A (Q)	262.99	1	262.99	44.61	0.000
E (L)	2.59	1	2.59	0.44	0.510
E (Q)	0.17	1	0.17	0.03	0.867
G (L)	19846.20	1	19846.20	3366.58	0.000
G (Q)	813.92	1	813.92	138.07	0.000
A by E	0.90	1	0.90	0.15	0.698
A by G	14.79	1	14.79	2.51	0.120
E by G	0.26	1	0.26	0.04	0.836
Error	294.75	50	5.90		
Total	26885.60	59			
R-square	0.99				

The variables colored in red are the ones with p -value ≤ 0.05 .

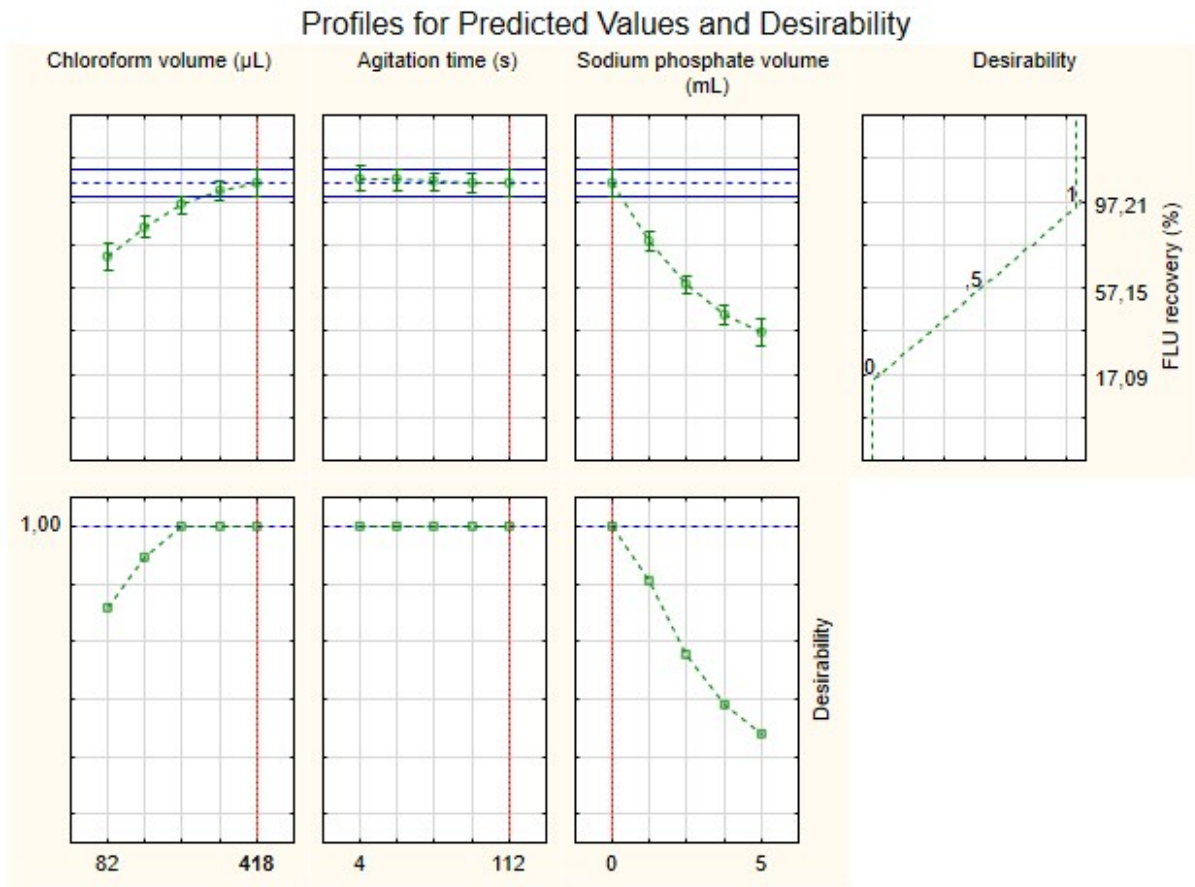


Figure 3S. Profiles for predict values and desirability function for FLU recovery (%). Red dashed lines indicate the optimum variables values that results in desirability of 1.0.