Supporting Information

Influence of process variables on extraction of Cefalexin in a novel biocompatible ionic liquid based-aqueous two phase system

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Table S1 Experimental binodal curve mass fraction data for the system IL (1) + Tri-sodium Citrate (2) + H₂O (3) at 298 K

100w ₁	100w ₂	100w ₁	100w ₂
50.51562	1.24271	22.17431	6.218689
49.7264	1.345624	21.0859	6.639664
48.2854	1.781768	20.11526	7.076291
44.47773	2.188349	19.15154	7.491088
39.33174	2.440276	18.32296	7.933269
38.81171	2.768884	17.28729	8.590575
35.58132	3.059724	16.33246	9.200917
34.59334	3.318953	15.52345	9.814439
32.76797	3.466267	14.75288	10.41604
31.51096	3.720891	13.85003	11.24368
30.54443	3.907323	12.5217	12.62964
29.44937	4.129475	11.39386	14.09883
28.38935	4.330032	10.25887	15.69762
27.60244	4.481623	9.157667	17.59462
26.74911	4.606291	8.319028	19.81546
26.04182	4.804814	8.020199	22.28761
25.42175	5.12818	6.737054	24.13356
24.35881	5.453074	6.085741	35.66124
23.3751	5.807895	5.5	45

100w ₁	100w ₂	100w ₁	100w ₂
46.69344	1.611276	26.56864	4.125683
44.35467	1.785666	25.70833	4.287802
42.41799	1.951654	24.6593	4.609215
41.08577	2.008506	23.75731	4.850522
40.14202	2.135521	22.911	5.138916
38.94691	2.183939	22.07042	5.426374
38.47506	2.26812	21.24417	5.681402
37.65699	2.328182	20.3576	6.029713
37.00931	2.394564	19.4328	6.454317
35.54934	2.709008	18.1053	7.132786
34.33533	2.912703	17.16201	7.698844
33.10839	2.999034	15.87302	8.581246
32.3433	3.022738	15.03698	10.30562
31.63234	3.229183	14.70957	10.90441
30.83072	3.280335	13.34905	12.70212
30.20481	3.344027	12.701	14.99494
29.44671	3.556468	11.25535	17.93906
28.3133	3.745254	10.63544	23.38072
27.37575	3.936126	7.865521	35.81789

Table S2 Experimental binodal curve mass fraction data for the system IL (1) + Di-sodiumTartrate (2) + H2O (3) at 298 K

100w ₁	100w ₂	100w ₁	100w ₂
62.9406	1.004372	30.51556	3.629998
59.50926	1.208603	29.61971	3.781243
55.52915	1.288879	28.67925	3.994018
54.57787	1.425149	27.75849	4.187938
52.81731	1.532418	26.89502	4.369793
51.1445	1.706467	25.89927	4.621294
48.99424	1.776872	24.85178	4.83096
47.45909	1.858892	23.81975	5.079554
46.14035	1.874174	22.47029	5.541518
44.94119	2.086246	21.26866	6.109088
43.4424	2.205733	19.68269	6.909885
42.23115	2.266761	17.51201	8.256393
40.72597	2.422291	12.92088	12.98235
39.41428	2.515807	12.47853	13.93099
38.25671	2.608415	12.07579	14.94674
37.44059	2.715712	11.42549	15.86646
36.38324	2.85014	11.25053	17.15794
35.26051	2.966796	11.06945	18.53685
34.27299	3.032864	10.27553	20.17414
33.48596	3.206105	9.424255	22.05131
32.41924	3.339122	9.062062	26.68758
31.51636	3.474727	7.753557	36.78821

Table S3 Experimental binodal curve mass fraction data for the system IL (1) + Di-sodium Fumarate (2) + H_2O (3) at 298 K

100w ₁	100w ₂	100w ₁	100w ₂
43.50121	1.120987	28.142	3.20612
42.30897	1.147646	27.63024	3.26024
41.33097	1.289285	27.13295	3.34876
40.33351	1.312873	26.64957	3.46982
39.28253	1.491774	26.04122	3.637845
38.4457	1.56428	25.29088	3.876037
37.70659	1.687628	24.49327	4.085992
37.19944	1.816287	23.6248	4.357654
36.44816	1.878472	22.60121	4.689955
35.83994	2.04156	21.60907	5.070232
35.02039	2.08987	20.29821	5.671144
34.29552	2.139641	18.73175	6.529157
33.75059	2.334517	16.29124	8.374117
33.131	2.38153	15.53629	9.768378
32.74438	2.442559	14.29006	11.53202
32.30957	2.541586	13.18848	13.58466
31.79119	2.587043	12.4688	15.24504
31.47883	2.689705	11.76294	16.4366
30.79295	2.756391	11.50119	17.49937
30.31698	2.837139	10.90444	19.64771
29.63681	2.894074	10.54816	21.24173
29.32706	2.943377	9.408979	23.00788
29.02372	2.99166	9.267915	26.3989
28.63673	3.107128	7.450524	35.94806

Table S4 Experimental binodal curve mass fraction data for the system IL (1) + Di-sodium Succinate (2) + $H_2O(3)$ at 298 K

