Table S1. Experimental Surface Tension (γ) of water saturated ionic liquids.

[bmim][Tf_2N]		[bmim][PF_6]		[omim][BF_4]		[omim][PF_6]	
T	$\gamma \pm \sigma^a$	T	$\gamma \pm \sigma^a$	T	$\gamma \pm \sigma^a$	T	$\gamma \pm \sigma^a$
K	$mN.m^{-1}$	K	$mN.m^{-1}$	K	$mN.m^{-1}$	K	$mN.m^{-1}$
293.15	33.73 ± 0.02	303.15	43.57 ± 0.01	293.15	33.75 ± 0.04	298.05	34.01 ± 0.02
303.15	33.20 ± 0.01	313.15	42.66 ± 0.01	303.15	32.58 ± 0.01	303.25	33.78 ± 0.02
313.15	32.47 ± 0.02	323.15	42.36 ± 0.01	313.15	32.35 ± 0.03	313.35	33.01 ± 0.01
323.15	32.06 ± 0.02	333.15	41.56 ± 0.01	323.15	31.45 ± 0.03	323.25	32.51 ± 0.02
333.15	31.56 ± 0.02	343.15	40.89 ± 0.01	333.15	31.00 ± 0.03	335.05	31.70 ± 0.01
343.15	31.01 ± 0.02						

[a] Expanded uncertainty with an approximately 95% level of confidence

Table S2. Experimental Surface Tension (γ) *vs* IL water mole fraction (x_{H_2O}) at 303.15 K.

[bmim][PF_6]		[omim][PF_6]	
x_{H2O}	$\gamma \pm \sigma^a$ / mN.m^{-1}	x_{H2O}	$\gamma \pm \sigma^a$ / mN.m^{-1}
0.0031	43.27 ± 0.02	0.0599	34.19 ± 0.02
0.0123	43.09 ± 0.02	0.0640	34.15 ± 0.02
0.0144	43.02 ± 0.02	0.0629	34.10 ± 0.02
0.0104	43.08 ± 0.02	0.0650	34.07 ± 0.01
0.0318	42.69 ± 0.02	0.0513	34.08 ± 0.02
0.0329	42.57 ± 0.02	0.0780	34.19 ± 0.01
0.0530	41.74 ± 0.02	0.0730	34.17 ± 0.02
0.0578	41.65 ± 0.02		
0.0732	40.95 ± 0.02		
0.1452	43.57 ± 0.01		