

## Supplementary Information to accompany

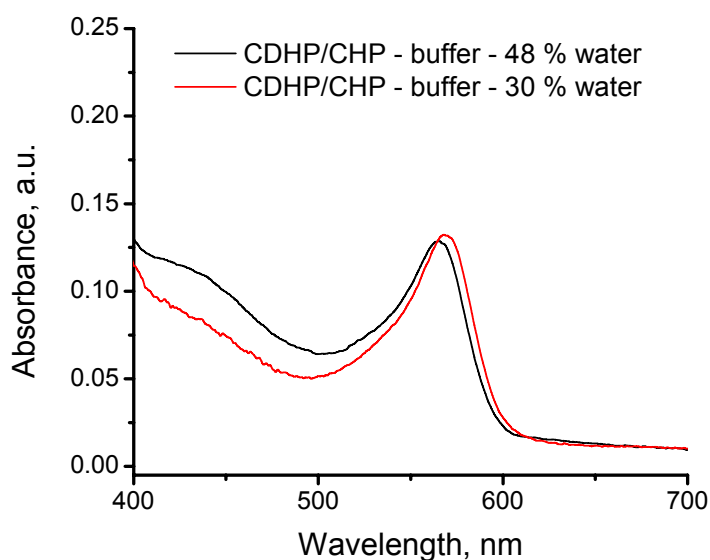
# Ionic Liquid “Buffers” – pH control in Ionic Liquid Systems

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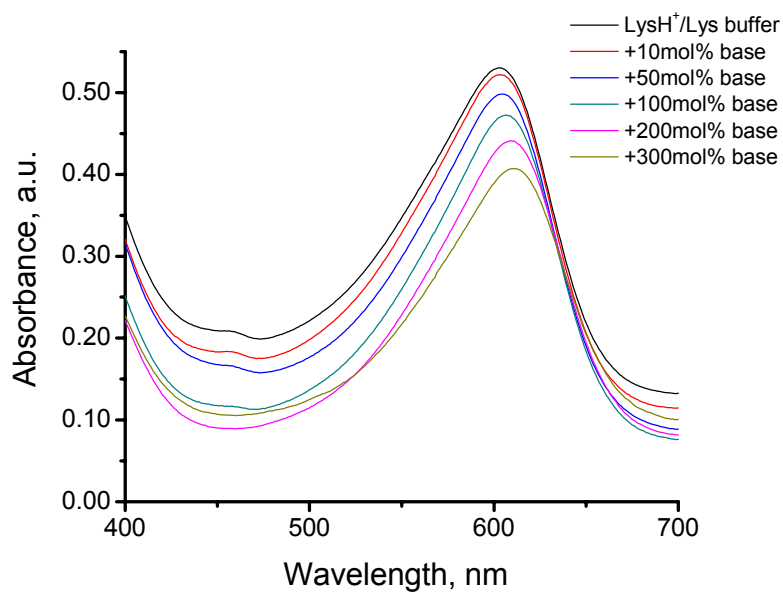
**Table S1.** Compositions of Ionic Liquid Buffer Systems Studied (apparent pH indicates the value that would be expected in a dilute aqueous environment)

Buffer	Composition	'Apparent' pH
Choline H <sub>2</sub> PO <sub>4</sub> /HPO <sub>4</sub>	Equimolar CDHP / CDP + H <sub>2</sub> O 20-50 %w/w	~ 7.2
Choline Tar <sup>-</sup> /Tar <sup>2-</sup>		~ 4.2
LysH <sup>+</sup> /Lys	1 mol Lys / 0.5 mol HCl + H <sub>2</sub> O – 46% w/w	~ 9.0

**Figure S1.** Effect of reducing water content of the CDHP/CHP buffer



**Figure S2.** LysH<sup>+</sup>/Lys hydrated IL buffer containing thymol blue indicator challenged with additions of base. The dye is insensitive when excess base is added, whereby only a dilution effect can be observed.



**Figure S3.** Choline tar<sup>-</sup>/tar<sup>2-</sup> hydrated IL buffer containing phenol red indicator.

