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Extraction of Actinides by Tertiary Amines in Room Temperature Ionic Liquids: Evidence for Anion Exchange as a Major Process at High Acidity and Impact of Acid Nature

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ELECTRONIC SUPPLIMENTARY INFORMATION

1. NMR measurements

The mineral acids was DCl (35^%). The internal standard used in 1H NMR was trisodium citrate dehydrate (Sigma--Aldrich, 99 %) chosen because its protons are well separated from those of the studied IL cations. The standard used in 19F NMR was sodium trifluoroacetate (Alfa Aesar, 98 %). 1-methyl-3-octylimidazolium chloride had a purity >97 % (Aldrich) for the T1 measurements.

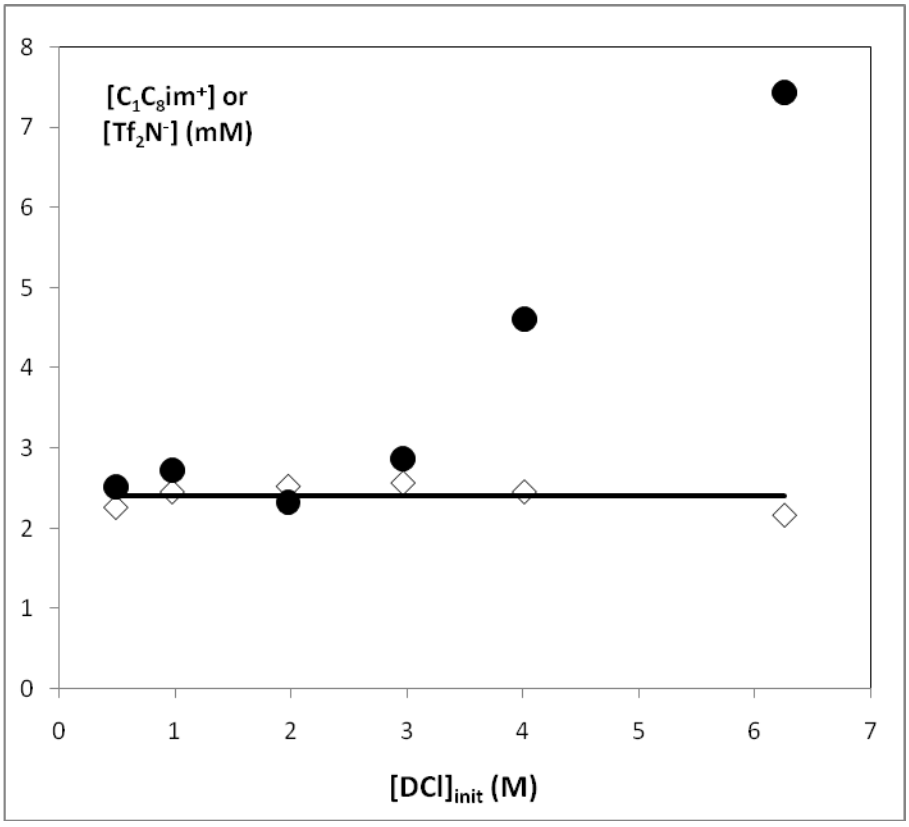

Fig. S-1: NMR data on C_8mim^+ (closed circle) and Tf_2N^- (empty diamond

2. Titration data

Table 1: Acid uptake by pure IL

Acid	C_4mimTf_2N	C_6mimTf_2N	C_8mimTf_2N
HCl	No solubilization	No solubilization	No solubilization
HNO_3	6% solubilization	6% solubilization	5% solubilization