

**Organic Reactivity in Ionic Liquids:
Nucleophilic Substitutions on Methyl *p*-
Nitrobenzenesulphonate**

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The relative nucleophilicity of chloride, bromide and iodide anions in a range of ionic liquids have been determined by studying the reaction of these anions with methyl *p*-nitrobenzenesulphonate. Values of ΔH^\ddagger and ΔS^\ddagger for this reaction have been estimated. This reaction is illustrated (scheme 1) below.



Scheme 1

The reaction was followed by UV spectroscopy, the ionic liquids being prepared to high quality, and exhibiting UV cut off points <240 nm. The range of ionic liquids studied is quite extensive and is outlined (figure 1) below.

