

Topic - Ionic Liquids.

The first known ionic liquid ethyl ammonium nitrate was discovered by Walden in 1914, but since then a large variety of ionic liquids with m.p. $< 100^{\circ}\text{C}$ have been prepared. They possess highly ionic character, low vapour pressure, non-flammability and ease of use. Ionic liquid is generated in the course of reaction itself, and it absorbs HCl, which is an unwanted by-product.

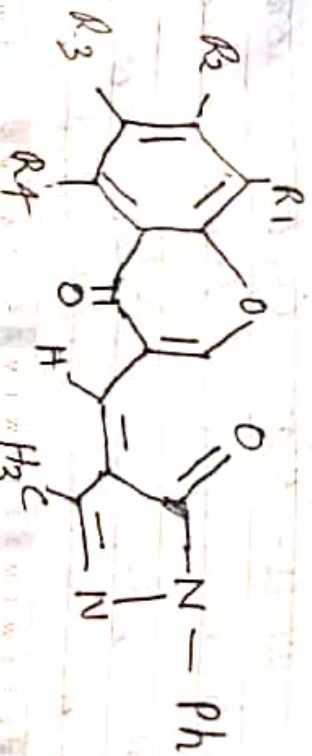
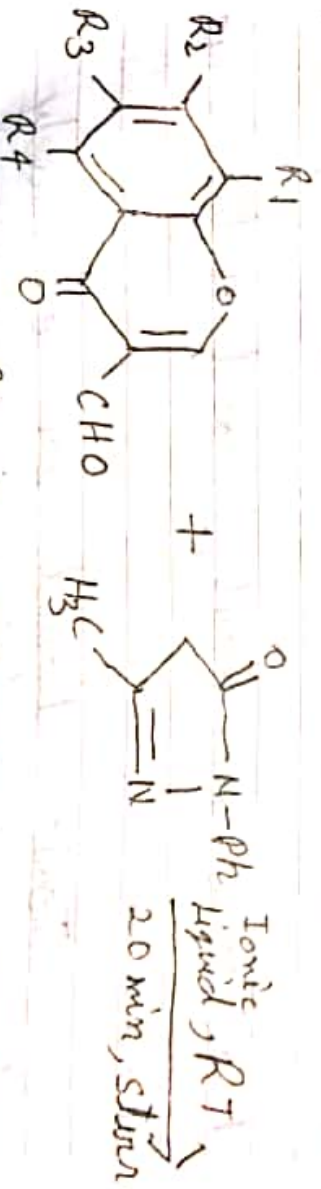
Reactions in Neutral and Acidic Ionic liquid:-

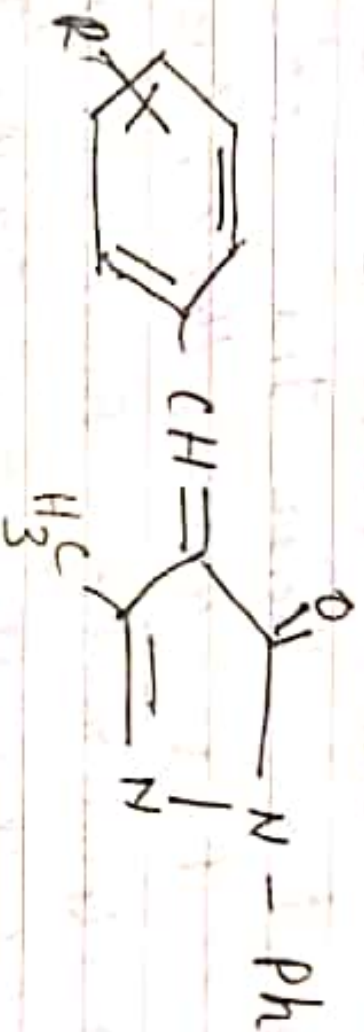
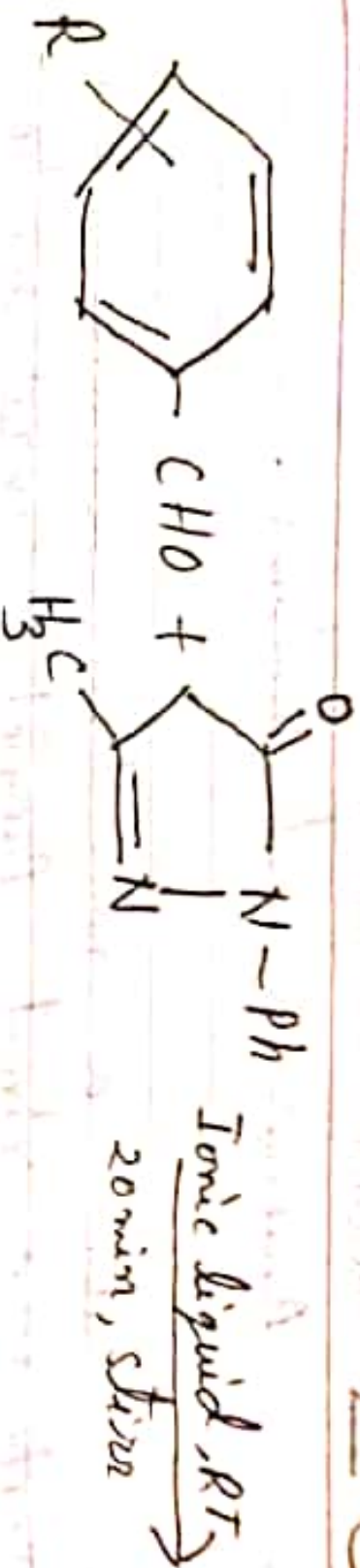
Ionic liquids are extensively used in Diels-Alder Cycloadditions, hydrogenation and Friedel-Crafts.

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ionic liquids have been reported by Sedon and Stark. The condensation reaction of 4-oxo-(4H)-1-benzopyran-3-carbaldehydes and of aromatic aldehydes with 3-methyl-1-phenylpyrazolin-5-(4H)-one were carried out in ionic liquid-ethyl ammonium nitrate at room temperature in lesser times with higher yields than conventional methods.





Bromated acidic ionic liquid 1-methyl-3-imino-2-oxobut-3-en-1-yl phenylborate (a green catalyst) was used in the esterification of carboxylic acids with alcohols.

