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NEW IONIC LIQUIDS WITH IMIDAZOLE SKELETON BY ANION METATHESIS

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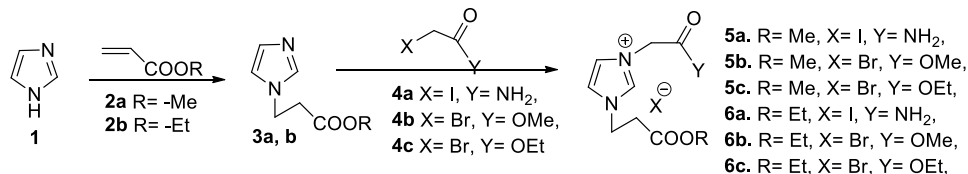
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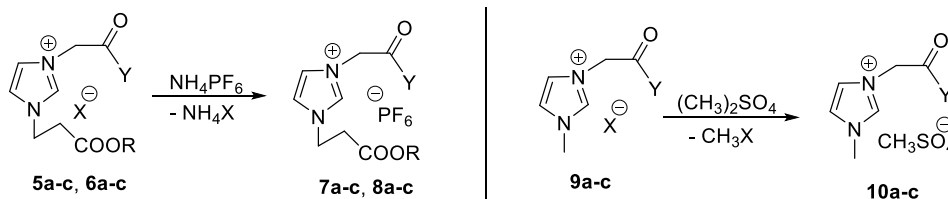
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Imidazole and its derivatives are well known biologically active compounds¹⁻³. Moreover, imidazolium salts are potent room temperature ionic liquids of current great interest in industry⁴.

Imidazolium salts were obtained in two steps: the N-alkylation of the acidic nitrogen of imidazole **1** via Michael addition of methyl- **2a** and ethyl- **2b** acrylate; followed by the quaternization of the second nitrogen atom with iodoacetamide **4a** and methyl- **4b** or ethyl- **4c** bromoacetate, respectively.



Using anion metathesis we changed the halide anion, from the obtained imidazolium halides, with a more bulky one - hexafluorophosphate or methylsulphate by the reaction with ammonium hexafluorophosphate and dimethylsulphate respectively.



The structure of the new compounds was proven by elemental (C, H, N) and spectral analysis (IR, 1H NMR, 13C NMR, 2D-COSY, HMQC, HMBC)..

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