

## **Dicationic imidazolium ionic liquids: synthesis, electrochemical behaviour, catalytic activity and biological applications**

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During the last decade, ionic liquids (ILs) were widely studied to identify their properties and evaluate their performance. Due to their low environmental impact (non-flammable and non-volatile), the easier procedures of purification and reuse, the low toxicity, ILs attracted interest in different fields, ranging from organic synthesis and electrochemistry, to applications in different biological processes. In this work dicationic imidazolium ionic liquids (DILs) were synthesized and studied for their electrochemical behaviour and their catalytic activity in organic synthesis. Moreover, possible applications in biological field are discussed.