Electrochemical reduction behavior of $K_2[Ni(II)(CN)_4]$ complex in the RTIL at different electrodes

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The electrochemical redox behavior in RTIL is emerging field to understand how ionic liquid behave on the mediator? Though, many metal complexes such as Ni(Salen) , Co (Salen), Ni(byp) have been widely investigated in the RTIL their solubility restricts to use in industrial applications. Cyanide ligand with metalation is a simple and strongest especially higly soluble nature. Based on this idea we have investigated reduction behavior of $[Ni(CN)_4]^{2-}$ complex in the 1-butyl-3-methylimidazolium hexa fluoro phosphate ([bmim]PF_6) RTIL at various electrode like Graphite, DSA, Ti. The effect of temperature, scan rate, and concentration of the Ni complex were analysed to derive electrochemical parameters towards industrial application.