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[Cu (lys bipy)]Cl/GO Synthesis, Identification and Application in oxidation of olefine

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In this research, [Cu (lys bipy)] Cl complex[۱] was prepared. Graphene oxide was synthesized by the modified Hummers method [۲] and functionalized with ۳-chloropropyltrimethoxysilane and the complex is deposited on functionalized graphene oxide ([Cu (lys bipy)] Cl /GO) [۳]. [Cu lys bipy]Cl and [Cu (lys bipy)] Cl /GO used as a catalyst in the oxidation of olefins. The synthesized complexes was identified by EDX, ICP, SEM, FTIR and XRD[٤] processes. The catalytic results of the prepared complex analyzed by GC and GC–MS instruments and showed that the catalytic activity of [Cu (lys bipy)] Cl / GO in oxidation reaction in of α-methylstyrene optimal conditions ٤ hours, Acetonitrile solvent, ۰,۰۲۵ g of catalysts and using tert-butyl hydroperoxide as an oxidant ۹۷٪ conversion with selectivity of ۸٤٪ of acetophenone .

Keywords: Graphen oxide, Oxidation, Bipyridine, Lysine

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