

Abstract

In this work, we report the study of the catalytic activity of newly prepared coordination compounds of nickel(II) (complexes were prepared by prof. Kyritsis, University of Athens). The activities in model reactions of Kumada and Suzuki coupling and polymerization of 2,5-dibromo-3-hexylthiophene were tested. For Kumada coupling, the activity is comparable with known complex $[\text{Ni}(\text{dppp})\text{Cl}_2]$. On the other hand, selected complexes exhibit only limited activity for Suzuki coupling. GRIM polymerization of 2,5-dibromo-3-hexylthiophene was successful. Properties of prepared polymers are comparable with polymers prepared via known route with $[\text{Ni}(\text{dppp})\text{Cl}_2]$.