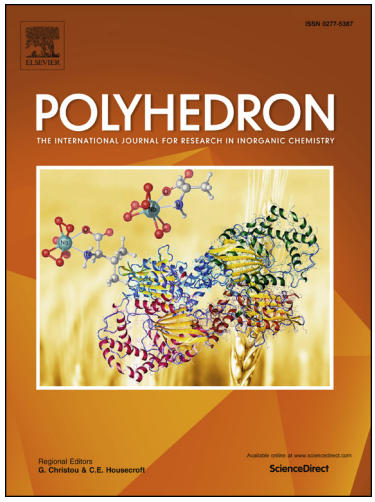

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New pallada- and platinacycle complexes of phosphorus ylide: synthesis, structural characterization, antioxidant capacity and catalytic behavior towards Mizoroki-Heck reactions

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Abstract

The reactions of α-keto stabilized phosphorus ylide $Ph_2P(CH_2)_2PPh_2C(H)C(O)C_6H_4$-*m*-Br (**Y**) with $[MCl_2(cod)]$ (M = Pd or Pt; cod = 1,5-cyclooctadiene) in equimolar ratio using dichloromethane as a solvent are reported. These reactions led to the formation of new P, C-chelated pallada- and platinacycle complexes $[MCl_2(Ph_2P(CH_2)_2PPh_2C(H)C(O)C_6H_4$-*m*-Br)] (M = Pd (**C1**) and Pt (**C2**)). Characterization of the obtained compounds was performed by elemental analysis and IR, ^{1}H, ^{13}C, and ^{31}P NMR spectroscopic methods. Also, the

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