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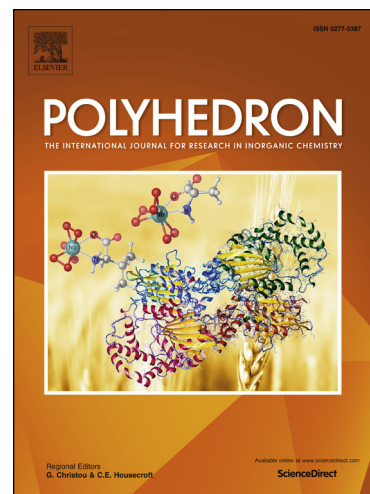
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New pallada- and platinacycle complexes of phosphorus ylide: synthesis, structural characterization, antioxidant capacity and catalytic behavior towards Mizoroki-Heck reactions

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Abstract

The reactions of α -keto stabilized phosphorus ylide $\text{Ph}_2\text{P}(\text{CH}_2)_2\text{PPh}_2\text{C}(\text{H})\text{C}(\text{O})\text{C}_6\text{H}_4\text{-}m\text{-Br}$ (**Y**) with $[\text{MCl}_2(\text{cod})]$ ($\text{M} = \text{Pd}$ or Pt ; $\text{cod} = 1,5\text{-cyclooctadiene}$) 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 $[\text{MCl}_2(\text{Ph}_2\text{P}(\text{CH}_2)_2\text{PPh}_2\text{C}(\text{H})\text{C}(\text{O})\text{C}_6\text{H}_4\text{-}m\text{-Br})]$ ($\text{M} = \text{Pd}$ (**C1**) and Pt (**C2**)). Characterization of the obtained compounds was performed by elemental analysis and IR, ^1H , ^{13}C , and ^{31}P NMR spectroscopic methods. Also, the

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