

Transformations of 1,3-di-p-tolyl-5-p-toluidino-ethyl-1,3,5-diazaphosphorinane initiated by electrochemical oxidation at a glassy carbon electrode

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Abstract

Electrochemical oxidation of 1,3-di-p-tolyl-5-p-toluidinomethyl-1,3,5-diazaphosphorinane at a glassy carbon anode yields 5,5'-spirobis(1,3-di-p-tolyl-1,3,5-diazaphosphoniarinane) perchlorate and 1,3-di-p-tolyl-5-p-toluidinomethyl-1,3-diaza-2-carbenia-5-phosphorinane perchlorate. The latter reacts on a PtII template to give a complex of a new diphosphine ligand.

Keywords

α -aminomethylphosphines, electrochemical oxidation, carbocations, template reactions, ^1H , ^{13}C and ^{31}P NMR spectra