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Physical and Chemical Properties of Four-Membered Bis(triphenylphosphane)platinum(II) Sulfenato Thiolato Complexes

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PHYSICAL AND CHEMICAL PROPERTIES OF FOUR-MEMBERED BIS(TRIPHENYLPHOSPHANE)PLATINUM(II) SULFENATO THIOLATO COMPLEXES

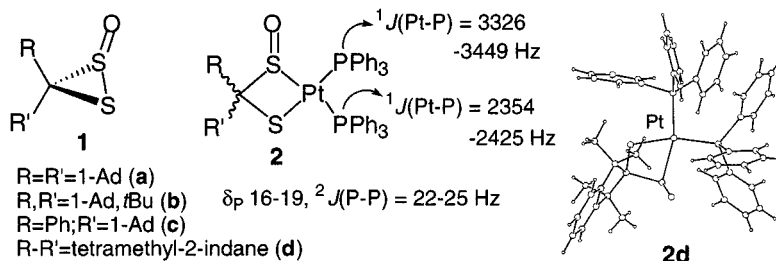
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The reaction of isolable dithiirane 1-oxides with $(\text{Ph}_3\text{P})_2\text{Pt}(\eta^2\text{-C}_2\text{H}_4)$ provided the title complexes in high yields. ^{31}P NMR spectroscopy of the phosphine ligands of the complexes and x-ray crystallographic analysis of a complex were reported.

Keywords: ^{31}P NMR spectroscopy; dithiirane 1-oxide; phosphine ligand; platinum complex; x-ray crystallography

Insertion reactions of Pt(0) complexes into —S—S(O)— linkages is a current topic.¹ We examined the reaction of dithiirane 1-oxides **1** with $(\text{Ph}_3\text{P})_2\text{Pt}(\text{C}_2\text{H}_4)$, which provided **2** in 75–84% yields. ^{31}P NMR data of **2a–d** are summarized below in addition to the x-ray structure of **2d**.



SCHEME 1

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