

Syntheses and Structures of Two Arene-Ruthenium(II) Complexes with Cyclometalating 2-Pyridyl-*m*-tolyl Ligands

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Reactions of $[(\eta^6\text{-C}_6\text{Me}_6)\text{RuCl}_2]_2$ and $[(\eta^6\text{-}p\text{-cymene})\text{RuCl}_2]_2$ with $[\text{Hg}(\text{ptpy})_2]$ (Hptpy = 2-pyridyl-*m*-toluene) in THF afforded $[\{(\eta^6\text{-C}_6\text{Me}_6)\text{Ru}(\text{ptpy})\}_2(\mu\text{-Hg}_2\text{Cl}_6)]$ **1** and $[(\eta^6\text{-}p\text{-cymene})\text{Ru}(\text{ptpy})(\text{HgCl}_3)]$ **2**, respectively. The crystal structures of complexes **1** and **2** have been determined by single-crystal X-ray diffraction. The ruthenium atom in both molecules **1** and **2** adopts a *pseudo* octahedral configuration containing a cyclometalated ptpy ligand. The Ru–C(ptpy) and Ru–N bond lengths in **1** are 2.049(3) and 2.089(2) Å, respectively. The corresponding bond lengths for **2** are 2.025(9) and 2.089(7) Å.

Key words: Arene-Ruthenium, Ruthenacycle, Cyclometalated Ligands, Organometallic Compounds