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## Efficient Carbonylation of Methanol Catalyzed by Rhodium(I) Cyclooctadiene Complexes with Triphenylphosphinechalcogenide Ligands

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Rhodium(I) complexes of the type,  $[\text{Rh}(\text{COD})\text{CIL}]$  (COD=1,5-cyclooctadiene and L= $\text{Ph}_3\text{PO}$ ,  $\text{Ph}_3\text{PS}$  and  $\text{Ph}_3\text{PSe}$ ) have been synthesized. The complexes show higher efficiency as catalyst for carbonylation of methanol to acetic acid and methyl acetate at 130 °C and 15 bar pressure than the industrially used species  $[\text{Rh}(\text{CO})_2\text{I}_2]$ .