

Abstract

The reaction of 2 mol equiv. of $[\text{Mo}(\text{NO})\{\text{HB}(\text{dmpz})_3\}\text{X}_2]$ ($\text{HBdmpz}_3 = \text{tris}(3,5\text{-dimethylpyrazolyl})\text{borate}$; $\text{X} = \text{Cl}$ or I) with Schiff base ligands derived by condensation of 2 mol equiv. of *para*- and *meta*-hydroxybenzaldehyde with 1,4- $\text{C}_6\text{H}_4(\text{NH}_2)_2$ and 1,6- $\text{NH}_2(\text{CH}_2)_6\text{NH}_2$ afforded monometallic complexes $[\text{Mo}(\text{NO})\{\text{H}(\text{dmpz}_3)\}\text{X}(\text{OC}_6\text{H}_4\text{CHO})]$. Sodium borohydride reduction of the Schiff bases obtained from the hydroxybenzaldehydes and 1,4- $\text{C}_6\text{H}_4(\text{NH}_2)_2$ followed by reaction with $[\text{Mo}(\text{NO})\{\text{HB}(\text{dmpz})_3\}\text{Cl}_2]$ afforded the bimetallic species $[\{\text{Mo}(\text{NO})\text{HB}(\text{dmpz})_3\}\text{Cl}\{(\text{OC}_6\text{H}_4\text{CH}_2\text{NH})_2\text{C}_6\text{H}_4\}]$. These compounds were characterized spectroscopically and the structure of a closely related compound, $[\text{Mo}(\text{NO})\{\text{HB}(\text{dmpz})_3\}\text{Cl}\{\text{OC}_6\text{H}_3(3\text{-CHO})(4\text{-OH})\}]$, has been determined crystallographically.