by the near-zero $\Delta S^{\ddagger}$ value found for the phen system. It is only in the case of the most sterically hindered dpbpy complex that a change in sign of $\Delta V^{\ddagger}$ really occurs; i.e. in this case the steric hindrance reaches a critical point where an associative (I_a) ring-closure is not possible anymore, and the reaction is forced to follow a dissociative (I_d) mechanism.

The present study demonstrates that a changeover in ring-closure mechanism from I_a to I_d is possible in the case of the Mo metal center when extreme steric hindrance on the chelating ligand is introduced. A similar changeover in mechanism caused by steric hindrance was observed for ligand substitution reactions of $(S_2)Mo(CO)_4$ (S_2 = 2,5-dithioalkane) complexes.[25] In addition, this has also more generally been observed for ligand substitution of group VIB metal carbonyl complexes in going from the larger W- to the smaller Mo- and Cr-centered complexes.[21,22,26,35] Thus the sizes of the metal center and of the coordinated and entering ligands play a crucial role in determining the location of the transition state along the reaction coordinate which involves bond cleavage with the leaving and bond formation with the entering nucleophile. Once again, the values of $\Delta V^{\ddagger}$ have demonstrated the informative nature of this activation parameter.[36]

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[35] Wieland, S.; van Eldik, R. *Organometallics* **1991**, *10*, 3110.

[36] van Eldik, R.; Merbach, A. E. *Comments Inorg. Chem.* **1992**, *12*, 341.

Additions and Corrections

Nathalie Le Berre-Cosquer, René Kergoat,* and Paul L'Haridon: Reaction of Vinylacetylene with $[Mo(\eta^5\text{-}C_5H_5)(CO)_2]_2$. Reactivity of $[\{Mo(\eta^5\text{-}C_5H_5)(CO)_2\}_2(\mu\text{-}HC\equiv CCH{=}CH_2)]$. Crystal Structures of $[\{Mo(\eta^5\text{-}C_5H_5)(CO)_2\}_2(\mu\text{-}\eta^2,\eta^3\text{-}HC\equiv CCHCH_3)][BF_4]$ and of $[[\{Mo(\eta^5\text{-}C_5H_5)(CO)_2\}_2]_2\text{-}\mu\text{-}(\mu\text{-}HC\equiv CCH_2CH_2)_2]$. **1992**, *11*, 721–728.

The formula of the compound $[\{Mo(\eta^5\text{-}C_5H_5)(CO)_2\}_2(\mu\text{-}HC\equiv CCH{=}CH_2)]$ was written incorrectly in the original title.

William R. Cullen,* Steven J. Rettig, and Tu-cai Zheng: Thermolysis of $Ru_3(CO)_{10}[Fe(\eta\text{-}C_5H_4PPr^i_2)_2]$. Structure of $Ru_3(CO)_8(\mu\text{-}H)_2[(\eta\text{-}PC_5H_4)Fe(\eta\text{-}C_5H_4PPr^i_2)]$ and $Ru_3(CO)_8(\mu\text{-}Cl)(\mu\text{-}OH)[\mu\text{-}Fe(\eta\text{-}C_5H_4PPr^i_2)_2]$. **1992**, *11*, 853–858.

The title of this paper should appear as shown above.