

MS13-1-21 Highly Strained and Reactive Donor/Acceptor-Supported Metalla-Silanone
#MS13-1-21

N. Saffon-Merceron ¹, T. Kato ²

¹ICT-UAR2599 - Toulouse (France), ²LHFA - Toulouse (France)

Abstract

A novel stable donor/acceptor-supported Mn(I)-metallasilanone was synthesized and crystallized. The intramolecular silanone-Mn(I) interaction induces a highly strained structure, leading to an exceptionally high reactivity of this compound. Indeed, it readily reacts with several small molecules such as H₂ or ethylene gas in mild conditions.

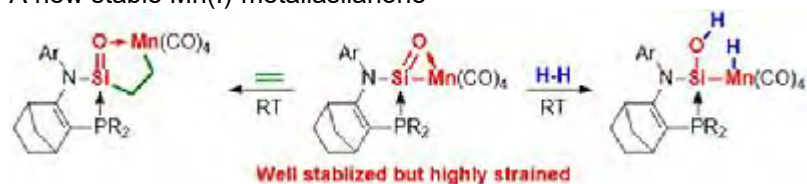
References

Angew. Chem. Int. Ed. 2021, 60, 18489–18493;

J. Chem. Soc. Trans. 1908, 93, 439;

J. Chem. Soc. Trans. 1901, 79, 449;

A new stable Mn(I)-metallasilanone



Molecular structure of Mn(I) metallasilanone

