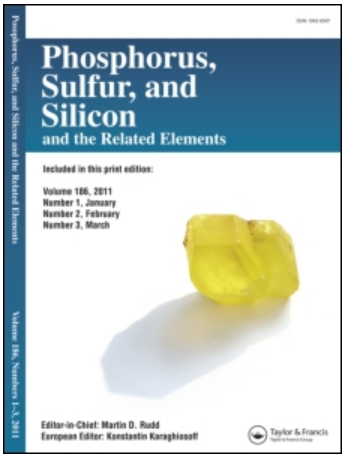

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Coordinating Properties of Dipod and Tripod Phosphorus Ligands with Separated Donor and Acceptor Sites

I. Bartz[a]; J. Grobe[a]; A. Krummen[a]; N. Krummen[a]; R. Martin[a]
[a] Anorg. Chem. Institut, Westfälische Wilhelms-Univer-sität, Münster, FRG

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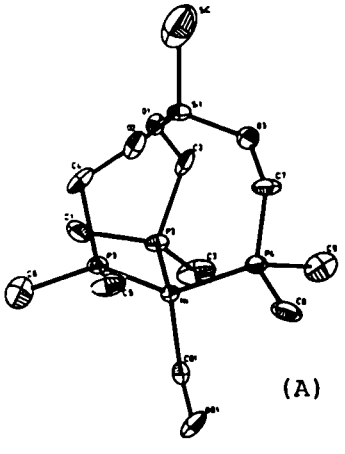
COORDINATING PROPERTIES OF DIPOD AND TRIPOD PHOSPHORUS LIGANDS WITH SEPARATED DONOR AND ACCEPTOR SITES

I.BARTZ, J.GROBE, A.KRUMMEN, N.KRUMMEN, and R.MARTIN
Anorg. Chem. Institut, Westfälische Wilhelms-Universität, Wilhelm Klemm-Straße 8, D-4400 Münster, FRG

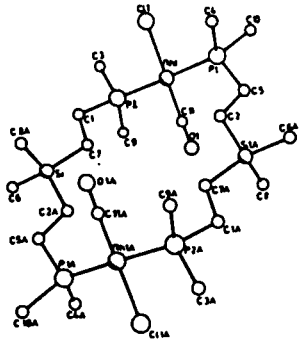
The coordinating properties of dipod and tripod phosphorus ligands L_I = $R_2M'(OCH_2PMe_2)_n(CH_2CH_2PMe_2)_{2-n}$ and L_{II} = $RM'(OCH_2PMe_2)_n(CH_2CH_2PMe_2)_{3-n}$ (M' = Si, Ge) with separated donor and acceptor centres have been investigated using electron rich metal complex fragments, e. g. $M(CO)_m$ (M = Cr, Mo, W), π-C_5H_5Co, RhCl(CO) or Ni(CO), as bonding partners.

The poster will present information about a) the preparation of the ligands L_I and L_{II}, b) the synthesis of complexes of these ligands, c) the effects of coordination on the spectroscopic data [ν(CO), $\Delta\delta$, ΔJ], allowing conclusions about metal/ligand interactions, and d) the molecular structures of selected examples, two of which are shown below: (A) $MeSi(OCH_2PMe_2)_3Ni(CO)$; (B) $[RhCl(CO)(PMe_2CH_2CH_2)_2SiMe_2]_2$.

So far, interaction between the basic centres M and the acceptor sites M' could not be established. Mechanisms for reducing the enhanced electron density on M will be discussed.



(A)



(B)