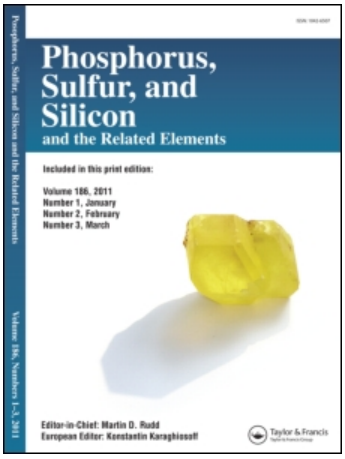


Phosphorus, Sulfur, and Silicon and the Related Elements
Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t713618290

α-Phosphino-Imine Ligand Design

Maria Zabłocka[a]; Alain Igau[b]; Victorio Cadierno[b]; Marek Koprowski[a]; Jean-Pierre Majoral[b]
[a] Polish Academy of Sciences, Poland [b] Laboratoire de Chimie de Coordination du CNRS, France

Online publication date: 27 October 2010

To cite this Article Zabłocka, Maria , Igau, Alain , Cadierno, Victorio , Koprowski, Marek and Majoral, Jean-Pierre(2002) 'α-Phosphino-Imine Ligand Design', Phosphorus, Sulfur, and Silicon and the Related Elements, 177: 8, 1965
To link to this Article: DOI: 10.1080/10426500213421
URL: http://dx.doi.org/10.1080/10426500213421

Phosphorus, Sulfur and Silicon, 2002, Vol. 177:1965

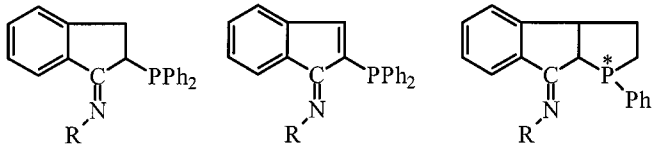
1042-6507/02 $12.00 + .00
DOI: 10.1080/10426500290094639

α-PHOSPHINO-IMINE LIGAND DESIGN

Maria Zabłocka,[a] *Alain Igau,*[b] *Victorio Cadierno,*[b]
Marek Koprowski,[a] *and Jean-Pierre Majoral*[b]
Polish Academy of Sciences, Poland[a] *and Laboratoire de Chimie de Coordination du CNRS, France*[b]

(Received July 29, 2001; accepted December 25, 2001)

Ligands containing imine functions as chelating site are the subject of interese studies in coordination chemistry.[1,2] However there is no general method for the preparation of these type of ligands that incorporate the nitrogen atom of the imine function, an heteroelement, in order to modify the chelating properties of the ligands and to extend the application of these type of ligands. We recently developed a straightforward syntheses of various unprecedented α-phosphino-imine systems I.[3]



I *α-Phosphino-Imine* Systems

SCHEME 1

The corresponding enantiomeric tricyclic ligand was obtained.

Pd, Ru, Ru complexes were prepared and characterized by x-ray. Studies on the catalytic properties of new complexes were also investigated (Stille coupling reactions, diastereoselective Michael additions, hydrogenations).

REFERENCES

[1] G. Helmchen and A. Pfaltz, *Acc. Chem. Res.*, **33,** 336 (2000).
[2] M. Gomez, G. Muller, and M. Rocamora, *Coordination Chemistry Reviews*, 769 (1999).
[3] V. Cadierno, M. Zabłocka, B. Donnadieu, A. Igau, J.-P. Majoral, and A. Skowrońska, *J. Am. Chem. Soc.*, **121**(48), 11086 (1999).

Address correspondence to Maria Zabłocka, Polish Academy of Sciences, Centre of Molecular and Macromolecular Studies, Sienkiewicza, 112, Łódź, 90-363, Poland.