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## Phosphorus, Sulfur, and Silicon and the Related Elements

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### $\alpha$ -Phosphino-Imine Ligand Design

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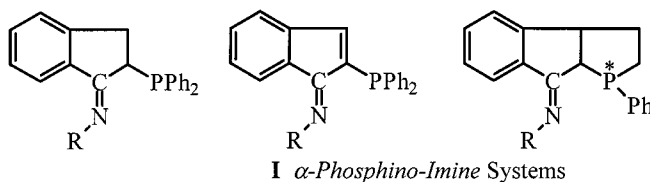
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## $\alpha$ -PHOSPHINO-IMINE LIGAND DESIGN

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Ligands containing imine functions as chelating site are the subject of interest studies in coordination chemistry.<sup>1,2</sup> 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  $\alpha$ -phosphino-imine systems I.<sup>3</sup>



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).

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