PINCER COMPLECES BASED ON THE 2-INDENEDIIDE MOTIF: FROM IN-PLANE COORDINATION TO COOPERATIVE CALAYSIS

D. Bourissou,* B. Martin-Vaca, J. Monot
Université Paul Sabatier
Laboratoire Hétérochimie Fondamentale et Appliquée (UMR CNRS 5069)
118 route de Narbonne, 31062 Toulouse cedex, FRANCE
dbouriss@chimie.ups-tlse.fr

Thanks to their unique properties, pincer complexes have found applications in many fields, ranging from homogeneous catalysis to material science. Tridentate meridional coordination is clearly playing a major role in all these developments: it provides a rigid and robust environment around the metal, and at the same time it offers the possibility to finely tune its steric and electronic properties by varying the nature and substitution pattern of the involved ligand. The ability of some ligand platforms to directly participate in chemical transformations (so-called non-innocent character) further extends the potential of pincer complexes.

Aiming at developing new pincer structures featuring original bonding situation and peculiar behavior, we have been studying over the last few years tridentate ligands based on the 2-indenediide motif. This presentation will summarize our recent results in this area. The formation, structure and reactivity of pincer complexes of type **A** will be discussed.

