Univ.-Prof. Dr. G. Knör

Tel. +43-732-2468-5100
Fax +43-732-2468-5112
anorganik@jku.at
http://www.jku.at/anorganik/

JOHANNES KEPLER
UNIVERSITÄT LINZ

GÖCH-OBERÖSTERREICH
PROGRAMMVORSCHAU

17.01.2017

Prof. Dr. Karl Kirchner

Institute of Applied Synthetic Chemistry
Vienna University of Technology

"NEW CHEMISTRY WITH BASE METAL PINCER COMPLEXES"

Johannes Kepler Universität Linz
17.15 Uhr, T405 (TNF-Turm)

Univ.-Prof.Dr. Günther Knör
Leiter GÖCH – Oberösterreich

Univ.-Prof. Dr. G. Knör

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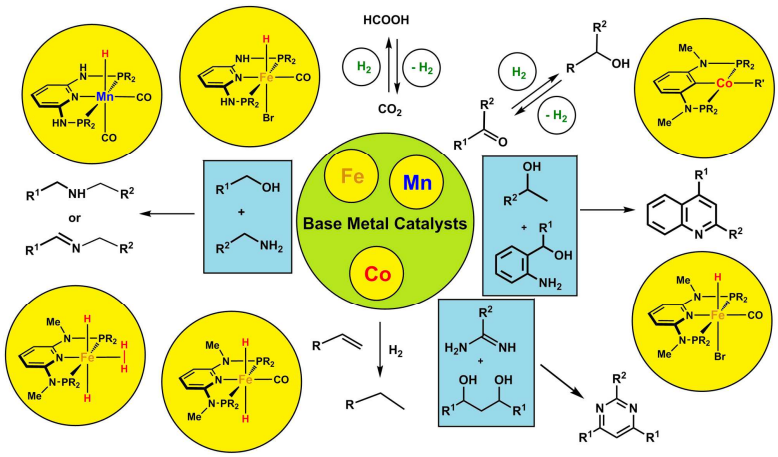
JOHANNES KEPLER UNIVERSITÄT LINZ

NEW CHEMISTRY WITH BASE METAL PINCER COMPLEXES

Karl Kirchner

Institute of Applied Synthetic Chemistry, Vienna University of Technology, Getreidemarkt 9, 1060 Vienna, AUSTRIA, e-mail: *kkirch@mail.tuwien.ac.at*

One of the ways of modifying and controlling the properties of transition metal complexes is the use of so-called “pincer” ligands. This class of tridentate ligands has found numerous applications in various areas of chemistry, including catalysis, due to their combination of stability, activity and variability. We are currently focusing on the chemistry of non-precious metal complexes containing PNP and PCP pincer ligands based on the 2,6-diaminopyridine and 1,3-diaminobenzene scaffolds where the aromatic ring and the phosphine moieties are connected via NH, N-alkyl, or N-aryl linkers.



This has resulted in the preparation of a range of new pincer complexes, in particular iron, manganese and cobalt, which are highly active as catalysts in hydrogenation and dehydrogenation reactions as shown above. This lecture presents an overview of our recent research.