



Sekce chemie PŘF UK v Praze
zve všechny zájemce na přednášku z cyklu

Quo Vadis Chemie

Synthesis and Reactivity of Complexes Bearing Protic NHC Ligands

kterou přednese



F. Ekkehardt Hahn

Universität Münster,
Germany

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Recently, it was discovered, that neutral azoles like *N*-methyl-2-chlorobenzimidazole and 2-chlorobenzimidazole react with Ni^0 , Pd^0 or Pt^0 complexes under oxidative addition to give complexes of type **1** with an anionic NHC ligand featuring an unsubstituted ring-nitrogen atom. Protonation of such complexes yields complexes bearing NHC ligands with an NH,NR- or NH,NH-substitution pattern as in **2** and **3**, respectively. Reaction of **1** with dihydrogen leads to heterocyclic cleavage of H_2 and formation of complex **4**. The preparation of NHC complexes by oxidative addition of 2-halogenoazoles to transition metals together with the classical preparation of NHC complexes by deprotonation of azolium salts followed by NHC coordination allows for the selective preparation of heterobimetallic complexes and selected examples including those resulting from biomolecules (*e.g.*, **5** and **6**) will be presented.

