Metallkomplexe mit biologisch wichtigen Liganden, CLXI [1]. Halbsandwich-Komplexe mit *tert*-Leucin, Dipeptiden, Pentaglycin und Glutathion als Liganden

Metal Complexes with Biologically Important Ligands, CLXI [1].
Halfsandwich Complexes with *tert*-Leucine, Dipeptides, Pentaglycine and Glutathione

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Reactions of L-*tert*-Leucine (*tert*-butylglycine), *tert*-leucine methyl ester, GlyValOMe, and Leu-AlaOMe with the chloro-bridged complexes $[Cp^*IrCl_2]_2$, $[(p\text{-cymene})RuCl_2]_2$ or $[(C_6Me_6)RuCl_2]_2$ in the presence of NaOMe give the complexes $[Cp^*Ir(Cl)NH_2CH(R)CO_2]$ (**1**), $[(p\text{-cymene})Ru(Cl)\text{-}NH_2CH(R)CO_2]$ (**2**), $Cp^*Ir(Cl_2)[NH_2CH(R)CO_2Me]$ (**5**), $\{(C_6Me_6)Ru(Cl)[NH_2CH_2CONHCH(R)\text{-}CO_2Me]\}^+Cl^-$ (**6**), $[Cp^*Ir(Cl)NH_2CH_2CONCH(R)CO_2Me]$ (**7**), $[Cp^*Ir(Cl)NH_2CH(CH_2CHMe_2)\text{-}CONCH(R)CO_2Me)]$ (**8**), and $Cp^*Ir(Cl_2)[NH_2CH_2CONHCH(R)CO_2Me)$ (**9**).

With pentaglycine the complexes $[Cp^*Ir(Cl_2)(\text{pentaglycinate}^+Na^+)]$ (**10**) and $[(C_6Me_6)Ru(\text{pentaglycineOMe-}H^+)]$ (**11**) could be isolated. Coordination of one equivalent of the S-protected tripeptide glutathione to $[Cp^*Ir(Cl)]$ and to $[(C_6Me_6)Ru(Cl)]$ was observed. Some *in situ* prepared (p-cymene)Ru complexes with deprotonated dipeptide esters were tested as catalysts and the complex $[(p\text{-cymene})Ru(Cl)(NH_2CH(CHMeEt)NCH\ (CHMe_2)CO_2\textit{tert}\text{-Bu})]$ gave a yield of 73% and moderate entantiomeric excess (36% *ee*) in the transfer hydrogenation of acetophenone to 2-propanol.

Key words: tert-Leucine, Dipeptides, Pentaglycine, Ruthenium, Iridium