

Metal Complexes of Biologically Important Ligands, CLVI [1]. Metal Complexes of 4-Iodo-L-phenylalanine. Oxidative Addition of 4-Iodo-L-phenylalanine Ester to Palladium(0)

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Dedicated to Professor Hubert Schmidbaur on the occasion of his 70th birthday

4-Iodo-L-phenylalanine gives with the chloro bridged compounds $[(Et_3P)PtCl_2]_2$, $[(Et_3P)PdCl_2]_2$ and $[Cp^*IrCl_2]_2$ the N,O-chelate complexes $(L)(Cl)M[NH_2-C(H)(CH_2C_6H_4I)CO_2]$ ($M = Pt, Pd, Ir$; $L = PEt_3, Cp^*$) (**1–3**). Oxidative addition of N-protected 4-iodo-L-phenylalanine methylester to $Pd(dba)_2$ in the presence of 2,2'-bipyridyl or of triphenylphosphine affords the p-phenyl metallated amino acids $(bipy)(I)Pd[C_6H_4CH_2C(H)(NHR)CO_2Me]$ (**4,5**) and $(PPh_3)_2(I)Pd[C_6H_4CH_2C(H)(NHR)CO_2Me]$ (**6,7**). Oxidative addition of the coordinated 4-iodo-L-phenylalaninate in $(Et_3P)(Cl)M[NH_2C(H)(CH_2C_6H_4I)CO_2]$ to $Pd(dba)_2$ was also observed.

Key words: 4-Iodophenylalanine, C-Phenyl-Metallated Amino Acids, Palladium, Platinum, Iridium