# Metallkomplexe mit biologisch wichtigen Liganden, CIV [1]. *ortho*-Palladierte Komplexe von N,N-Dimethyl-C-phenyl-glycinmethylester. Synthese von $\alpha$-Aminosäure-Derivaten durch Insertion von Isocyaniden, CO, Alkenen und Alkinen in die Pd-C-Bindung

Metal Complexes of Biologically Important Ligands, CIV [1]. *ortho*-Palladated Complexes of N,N-Dimethyl-C-phenylglycine-methylester. Synthesis of $\alpha$-Amino Acid Derivatives by Insertion of Isocyanides, CO, Alkenes, and Alkynes into the Pd-C Bond

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Palladium(II) Complexes, *ortho*-Palladation, N,N-Dimethyl-C-phenylglycine, Insertion Reactions

N,N-Dimethyl-C-phenylglycinemethylester reacts with $Pd(OAc)_2$ in acetic acid to give the orthopalladated, acetato bridged complex **1**. Treatment of **1** with sodium halide affords the chloro, bromo, and iodo bridged compounds $[Me_2NC(H)(CO_2Me)C_6H_4PdX]_2$ (**2a - c**) (X = halide). From **2a** and 1,1'-bis(diphenylphosphino)ferrocene the phosphine bridged trinuclear complex **3** is obtained. Substitution of the amine ligand of **2a** by the phosphino group is observed for the reaction of **2a** with $Ph_2PC(Me)C(Me)PPh_2$. Insertion of 2,6-dimethyl-phenylisocyanide, CO, alkyl-vinyl-ketones, and diphenylacetylene into the Pd-C bond of **2a - c** provides the ortho-substituted organic and organometallic derivatives of phenylglycine **6a - c**, **7**, **8a - b** and **9a - c**. The crystal structures of **1**, **4a**, **6a**, **7** and **9a** were determined by X-ray diffraction.

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