

Metal Complexes of Biologically Important Ligands, CLXIX [1]. Palladium(II) and Platinum(II) *N,O*-Chelate Complexes (R_3P)(Cl)M(α -aminoacidate) with the Anions of Serine, Threonine, 3,4-Dehydroproline and 4-Hydroxyproline

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Dedicated to the memory of Professor Heinz Peter Fritz

The *N, O*-chelates $M(3,4\text{-dehydro-D,L-prolinate})_2$ ($M = Ni, Cu$) have been obtained from $Ni(OH)_2$ or $Cu(OH)_2$ and the amino acid. The complexes $(R_3P)(Cl)M(\alpha\text{-aminoacidate})$ ($M = Pd, Pt$) have been synthesized from the chloro bridged compounds $(R_3P)(Cl)M(\mu\text{-Cl})_2M(PR_3)Cl$ ($M = Pd, Pt$; $R = Et, n\text{-Bu, Ph}$) and the potassium salts of the α -amino acids D,L-serine, D,L-threonine, 3,4-dehydro-D,L-proline and 4-hydroxy-L-proline. According to the ^{31}P NMR and ^{13}C NMR spectra the complexes with serinate and threoninate are formed as mixtures of *cis/trans* N-M-P isomers, whereas for the palladium complexes with 3,4-dehydroprolinate and 4-hydroxyprolinate a single isomer is observed.

Key words: α -Aminoacidate, Palladium, Platinum, Serine, Threonine, 3,4-Dehydroproline,
4-Hydroxyproline