β-Hydroxydithiozimtsäurederivate als Liganden. Synthese und Charakterisierung neuartiger 1,1-Ethendithiolato- und O,S-Chelatkomplexe

Derivatives of β-Hydroxydithiocinnamic Acids as Ligands. Syntheses and Characterisation of Novel 1,1-Ethenedithiolato and O,S-Chelate Complexes

Karsten Schubert, Helmar Görls und Wolfgang Weigand

Institut für Anorganische und Analytische Chemie, Friedrich-Schiller-Universität Jena, August-Bebel-Straße 2, D-07743 Jena, Germany

Sonderdruckanforderungen an Prof. Dr. W. Weigand. Fax: +49-(0)3641-948102. E-mail: c8wewo@uni-jena.de

Z. Naturforsch. **2007**, *62b,* 475 – 482; eingegangen am 14. November 2006

Professor Helgard G. Raubenheimer zum 65. Geburtstag gewidmet

Starting from 4-bromoacetophenone **1**, the 4-bromo-β-hydroxydithiocinnamic acid **2** and the 4-bromo-β-hydroxydithiocinnamic acid hexyl ester **3** were prepared using carbon disulfide and potassium-*tert*-butylate as a base. Acting as a ligand, the acid gives 1,1-ethenedithiolato complexes with $(Ph_3P)_2Pt(II)$ (**4a**), $(Et_3P)_2Pt(II)$ (**4b**), dppePt(II) (**4c**), $(Ph_3P)_2Pd(II)$ (**4d**), dppePd(II) (**4e**), and dppeNi(II) (**4f**). In contrast to the acid, the deprotonated ester **3** forms a monoanionic bidentate ligand. [O,S] Complexes of Pt(II) (**5a**), Pd(II) (**5b**) and Ni(II) (**5c**) were obtained. All complexes have been fully characterised using ^{1}H NMR, ^{13}C NMR and ^{31}P NMR spectroscopy, mass spectrometry, infrared spectroscopy and elemental analyses. The molecular structures of the complexes **4b** and **5a** – **5c** were determined by X-ray diffraction analyses.

Key words: 1,1-Ethenedithiolates, Dithiocinnamic Acid Esters, Transition Metals, S Ligands