

The NaCl Adduct of the Iron-Indium Compound $\text{Fe}_2(\text{CO})_6(\mu\text{-CO})(\mu\text{-InR})_2$ [$\text{R} = \text{C}(\text{SiMe}_3)_3$] – a One-Dimensional Coordination Polymer with Sodium Oxygen Bridges

Werner Uhl, Fritjof Schmock, and Wolfgang Petz

Fachbereich Chemie der Philipps-Universität Marburg,
Hans-Meerwein-Straße, D-35032 Marburg, Germany

Reprint requests to Prof. Dr. W. Uhl; Fax ++49/(0)6421/2825653;
E-mail: uhl@chemie.uni-marburg.de

Z. Naturforsch. **58b**, 385 – 388 (2003); received December 12, 2002

The organoindium subhalide $[\text{R}(\text{Cl})\text{In-In}(\text{Cl})\text{R}]_2$ [$\text{R} = \text{C}(\text{SiMe}_3)_3$] **1** reacts with $\text{Na}_2[\text{Fe}_2(\text{CO})_8]$ to form an iron-indium coordination compound which was isolated as the sodium chloride adduct $[\text{Na}(\text{THF})_4][\text{Fe}_2(\text{CO})_6(\mu\text{-CO})(\mu\text{-InR})_2\text{Cl}]$ **2**. The iron atoms of **2** are bridged by a CO ligand and two InR groups, the indium atoms of which are further connected by the μ_2 -bridging chlorine atom. Four THF molecules and two oxygen atoms of terminal CO ligands of different anions span the coordination sphere of the sodium cations to give a one-dimensional coordination polymer in the solid state.

Key words: Indium, Iron, Coordination Compound