An Internally Coordinated Metalla[14]-crown-5 System with a Pentagonal-dipyramidal Coordination Geometry of the Central Titanium Atom

Gesa Unger, Gerhard Erker, Gerald Kehr, and Roland Fröhlich*

Organisch-Chemisches Institut der Universität Münster, Corrensstraße 40, D-48149 Münster, Germany

Reprint requests to Prof. Dr. G. Erker.

Z. Naturforsch. **59b,** 917 – 920 (2004); received March 8, 2004

Treatment of the dilithiated dibenzotetraethyleneglycol reagent [(*o*-C_6H_4OLi)-$(OCH_2CH_2)_2O$-(o-C_6H_4OLi)] (**5**) with $TiCl_4 \cdot 2$ THF gave the corresponding metal complex [{(*o*-C_6H_4O-)-$(OCH_2CH_2)_2O$-(*o*-C_6H_4O-)}$TiCl_2$] (**6**). The X-ray crystal structure analysis of **6** revealed that all five oxygen atoms are located in one plane and bonded to titanium in a pentagonal-dipyramidal geometry with the two chloride ligands being oriented trans to each other in the apical positions.

Key words: Titanium Complex, Chelate Ligand, Metalla-Crown Ether, Aryloxy-Ligand