peri-Interactions in Naphthalenes, 14 [1]. Pyramidalization versus Planarization at Nitrogen in 8-Dialkylamino-naphth-1-yl Compounds as a Measure of peri Bond Formation

Günter Paulus Schiemenz

Institut für Anorganische Chemie der Universität, D-24098 Kiel, Germany

Reprint requests to Prof. Dr. G. P. Schiemenz. Fax: +49 (0)431 880 1558. E-mail: schiemenz@ac.uni-kiel de

Z. Naturforsch. **61b**, 535 – 554 (2006); received January 23, 2006

The degree of pyramidalization at the N atom of the title compounds permits to distinguish between covalent bond type attraction and other attractive forces. Most so-called coordinative bonds exhibit the features of normal covalent bonds. While such bonds emanating from third or higher period atoms may be rather long, their stretchability is limited, and corresponding interatomic distances are an insufficient criterion for two-electron dative bonds.

Key words: Coordinative (Dative) Bonds, Hypercoordination, Stabilized Silenes, Hydrogen Bonds, van der Waals Radii