## Isostructurality of Analogues Triarylsilanol and –methanol Inclusion Compounds

<u>Petra Bombicz</u><sup>a</sup>, Ingeborg Csöregh<sup>b</sup>, Edwin Weber<sup>c</sup>, <sup>a</sup>Institute of Structural Chemistry, Chemical Research Center, Hungarian Academy of Sciences, Hungary. <sup>b</sup>Department of Structural Chemistry, Arrhenius Laboratory, Stockholm University, Sweden. <sup>c</sup>Institut für Organische Chemie, Technische Universität Freiberg, Germany. Email: bombicz@chemres.hu

Developing strategies for host design require synthesis and structural comparison of enormous variety of crystalline inclusion compounds. The vast quantities of host molecules are organic while others containing inorganic elements, such as silicon, are relatively rare.

Single crystal X-ray structures of 22 inclusion compounds [1] of triphenylsilanol (1), triphenylmethanol (2), trinaphtylsilanol (3) and trinaphtylmethanol (4) hosts, respectively, with various guest molecules are compared. Half of them are newly prepared inclusion compounds. Cell similarity indices ( $\pi$ ), isostructurality indices (I<sub>s</sub>) and molecular isometricity indices for the host molecules (I<sub>m</sub>) are calculated in order to describe the effect of the small guest molecules on the crystal structure. Also the influence of the replacement of the phenyl substituent to naphtyl and the exchange of the carbinol C to Si on the inclusion properties and on the geometry of the host molecules has been studied.

[1] Csöregh I., Weber E., Skobridis K., Bombicz P., Seichter W., Silicon Analogues of Triarylmethanol Hosts. Inclusion Properties and Host-Guest Structures – A Comparative Study., in preparation, and references therein. Keywords: isostructurality, host isometricity, inclusion complexes