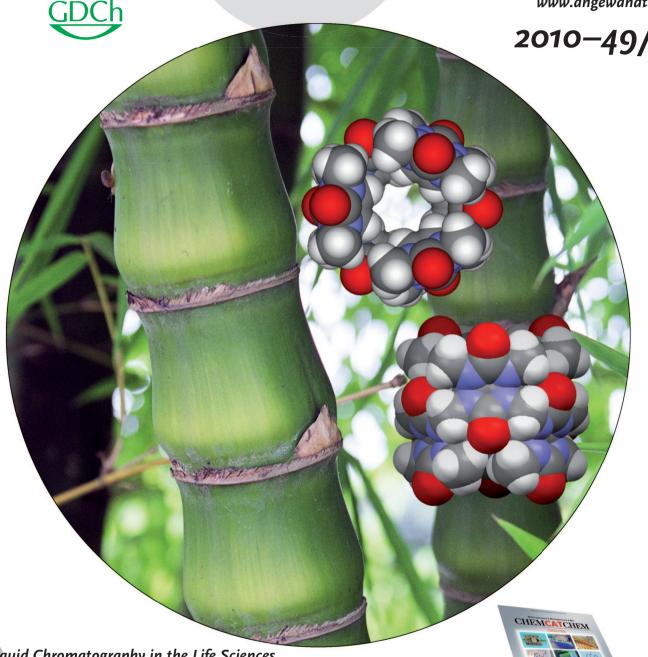
2010-49/13



Liquid Chromatography in the Life Sciences

K. K. Unger et al.

C-C Coupling with Diazoalkanes

J. N. Johnston et al.

**Direct Azole Amination** 

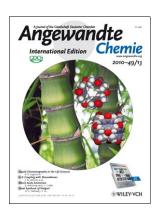
A. Armstrong and J. C. Collins

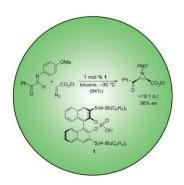
**Total Synthesis of Vinigrol**D. G. Hall and J.-Y. Lu

# **Cover Picture**

## Jan Svec, Marek Necas, and Vladimir Sindelar\*

A novel hexameric macrocycle was directly prepared by acid-catalyzed condensation of 2,4-dimethylglycoluril with formaldehyde, as described by V. Sindelar and coworkers in their Communication on page 2378 ff. The macrocycle binds halide anions inside the cavity through twelve C-H ··X<sup>-</sup> hydrogen bonding with high affinity and selectivity. The trivial name bambus[6]uril deriving from the bambusoidea subfamily was proposed as the macrocycle resemble part of a bamboo plant stem. Photograph courtesy of Milan Lipensky.



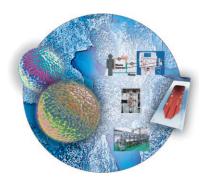


## Coupling Using Diazoalkanes

The range of advances made in recent years using Brønsted acids to activate electrophiles toward carbon–carbon bond formation with diazoalkanes is summarized by Jeffrey N. Johnston et al. in their Minireview on page 2290 ff.

#### Liquid Chromatography

The range of applications for liquid chromatography spans from fmol analysis to the purification of products on a tonne scale. K. K. Unger et al. describe in their Review on page 2300 ff. the development of this technology and highlights its importance today for the life sciences.





## Inherent Chirality

In their Communication on page 2314 ff., M. Sollogoub and co-workers describe the regioselective synthesis of functionalized cyclodextrins that behave as enantiomers. The products can be used as ligands in enantioselective palladium(0)-catalyzed reactions.