

Molecular Flasks

M. Fujita et al.

The Periodic System of Elements W. H. E. Schwarz and S.-G. Wang

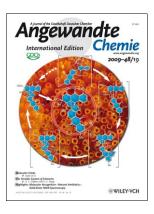
Highlights: Molecular Recognition · Natural Antibiotics · Solid-State NMR Spectroscopy

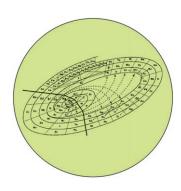


Cover Picture

K. C. Nicolaou,* Yee Hwee Lim, and Jochen Becker

A cascade sequence featuring a Diels–Alder reaction, a lactolization, and an $S_N(Ar)$ -type substitution forms the core of the bisanthraquinone antibiotic BE-43472B in its first total synthesis, which K. C. Nicolaou et al. describe in their Communication on page 3444 ff. The background of the cover picture is a photograph of *Ecteinascidia turbinata* (courtesy of John Easley Photography), the marine source of the streptomyces strain producing this antibiotic.





Periodic System

In their Essay on page 3404 ff., W. H. E. Schwarz and S.-G. Wang discuss the Periodic System of Elements in the context of current research. They show that "facts" and "truth" can be ambiguous, even in hard science.

Molecular Flasks

Self-assembled hosts offer unique reaction conditions for their guest molecules. M. Fujita et al. describe in their Review on page 3418 ff. how such "molecular flasks" alter the reactivity and properties of guest molecules and allow unusual reactions.





Natural Products

In their Communication on page 3440 ff., K. C. Nicolaou and co-workers report the synthesis of the bioactive molecules hopeahainol A and hopeanol. Their approach highlights the importance of cascade reactions in total synthesis.