

A Journal of the Gesellschaft Deutscher Chemiker

Angewandte Chemie

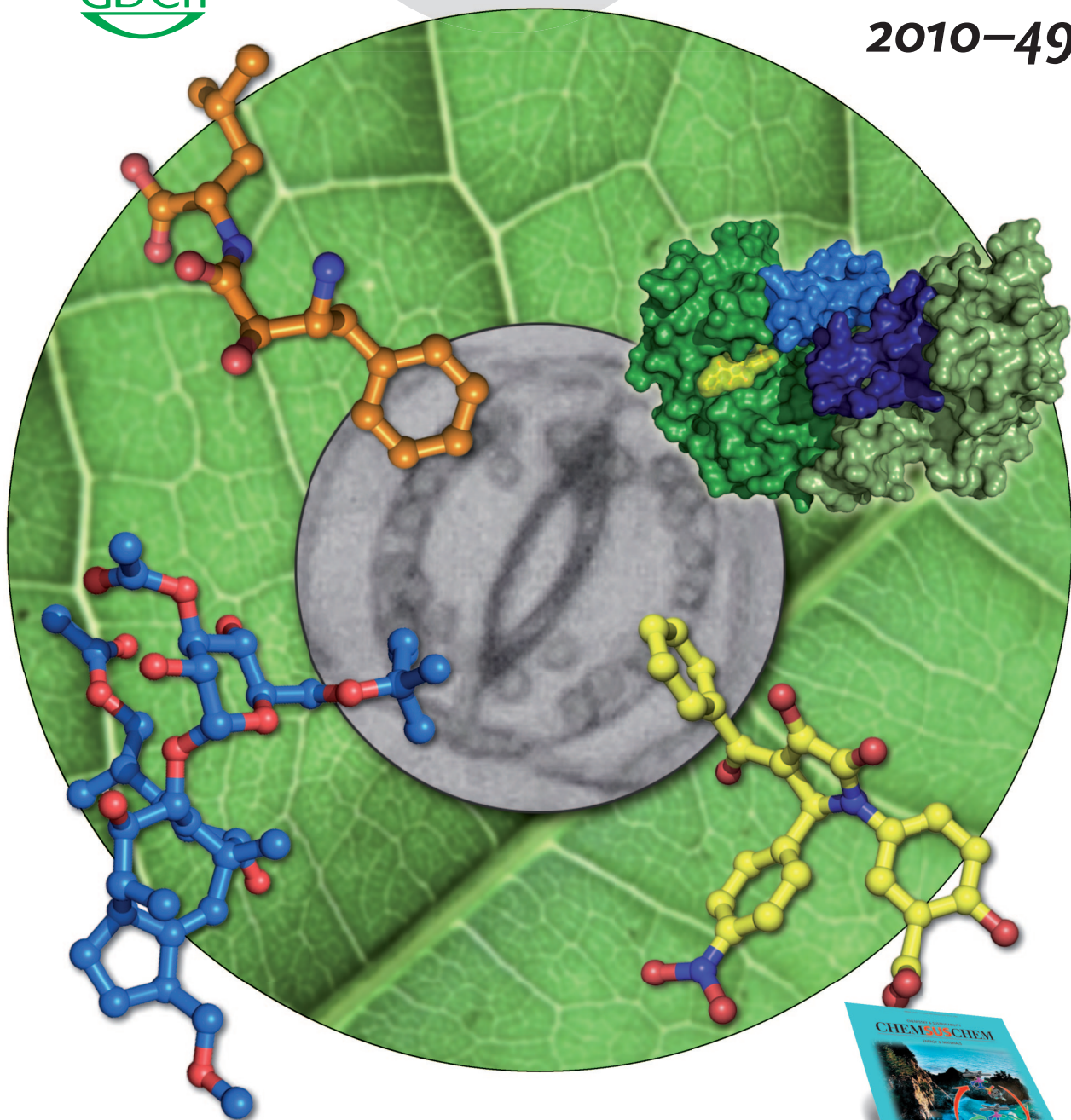
International Edition

D 3461

GDCh

www.angewandte.org

2010–49/24



DNA-Binding Complexes

R. Vilar et al.

Chemistry of Life

M. Fontecave

Acenes

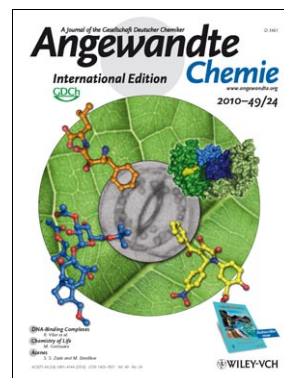
S. S. Zade and M. Bendikov



Cover Picture

Rolf Rose, Silke Erdmann, Stefanie Bovens, Alexander Wolf, Micheline Rose, Sven Hennig, Herbert Waldmann, and Christian Ottmann*

Fusicoccin, a naturally occurring compound, stabilizes a 14-3-3 protein–protein interaction and induces wilting of plants by opening the gas-exchanging stomatal pores (gray). C. Ottmann and co-workers describe in their Communication on page 4129 ff. how easily available small molecules have been identified that mimic the action of fusicoccin. Crystal-structure and functional biophysical analyses reveal the binding modes of these molecules.

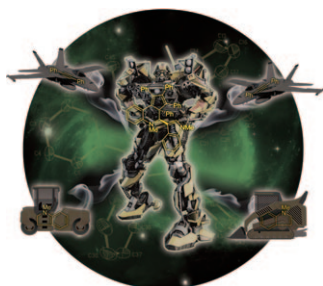


Chemistry of Life

The reductionist approach of chemistry has played an important role in the decline of vitalism and has contributed greatly to our current understanding of life, as M. Fontecave points out in his Essay on page 4016 ff.

Metal Complexes and G-Quadruplex DNA

R. Vilar and co-workers describe in their Review on page 4020 ff. metal complexes that bind to G-quadruplex DNA. The stabilization of such DNA structures correlates with the regulation of gene expression.



Ring-Expansion Reactions

The palladium-catalyzed direct dehydrogenative annulation of indoles and alkynes using O₂ as oxidant is reported by N. Jiao and co-workers in their Communication on page 4036 ff. This chemistry offers a new approach to tetrahydroquinoline derivatives.