A Journal of the Gesellschaft Deutscher Chemiker

D 3461

Angewandte Chemie

International Edition

www.angewandte.org

2009–48/18

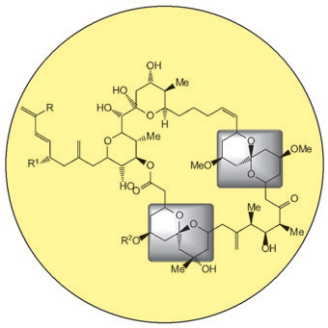
ACIEFS 48 (18) 3193–3370 (2009) · ISSN 1433–7851 · Vol. 48 · No. 18

WILEY-VCH

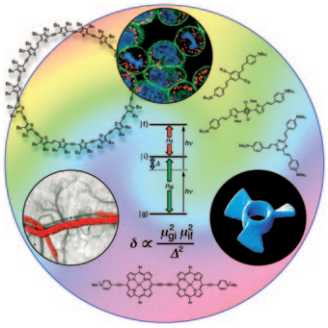
Cover Picture

Pablo Alborés, Luca M. Carrella, William Clegg, Pablo García-Álvarez, Alan R. Kennedy, Jan Klett,* Robert E. Mulvey,* Eva Rentschler, and Luca Russo

Chromation and ferration are the latest additions to the concept of alkali-metal-mediated metalation, as described by J. Klett, R. E. Mulvey, and co-workers in their Communication on page 3317 ff. While the more electropositive sodium is essential for the reaction, it is the less electropositive chromium or iron that actually performs deprotonation of benzene. This novel reactivity can be likened to a game of chess in which the queen (Na) holds the king in check, while the knight (Cr, Fe) scores checkm(etal)ate.



Synthesis of chemical libraries
Natural product inspired chemical libraries are promising sources of new medicinally active ingredients. In their Minireview on page 3224 ff., K. Kumar and H. Waldmann outline how multistep methods established for the total synthesis of natural products can be adapted for chemical libraries.



Two-Photon Dyes
R. G. Denning, H. L. Anderson, and co-workers describe in their Review on page 3244 ff. how the application of two-photon absorption processes can facilitate many areas. What principles should be considered in the development of such chromophores?

microRNA Detection
As little as a one-nucleotide difference among related microRNA sequences can be detected by the highly sensitive method reported by Z. Li et al. in their Communication on page 3268 ff. This method also has potential for in situ detection in specific tissues.