

A Journal of the Gesellschaft Deutscher Chemiker

Angewandte Chemie

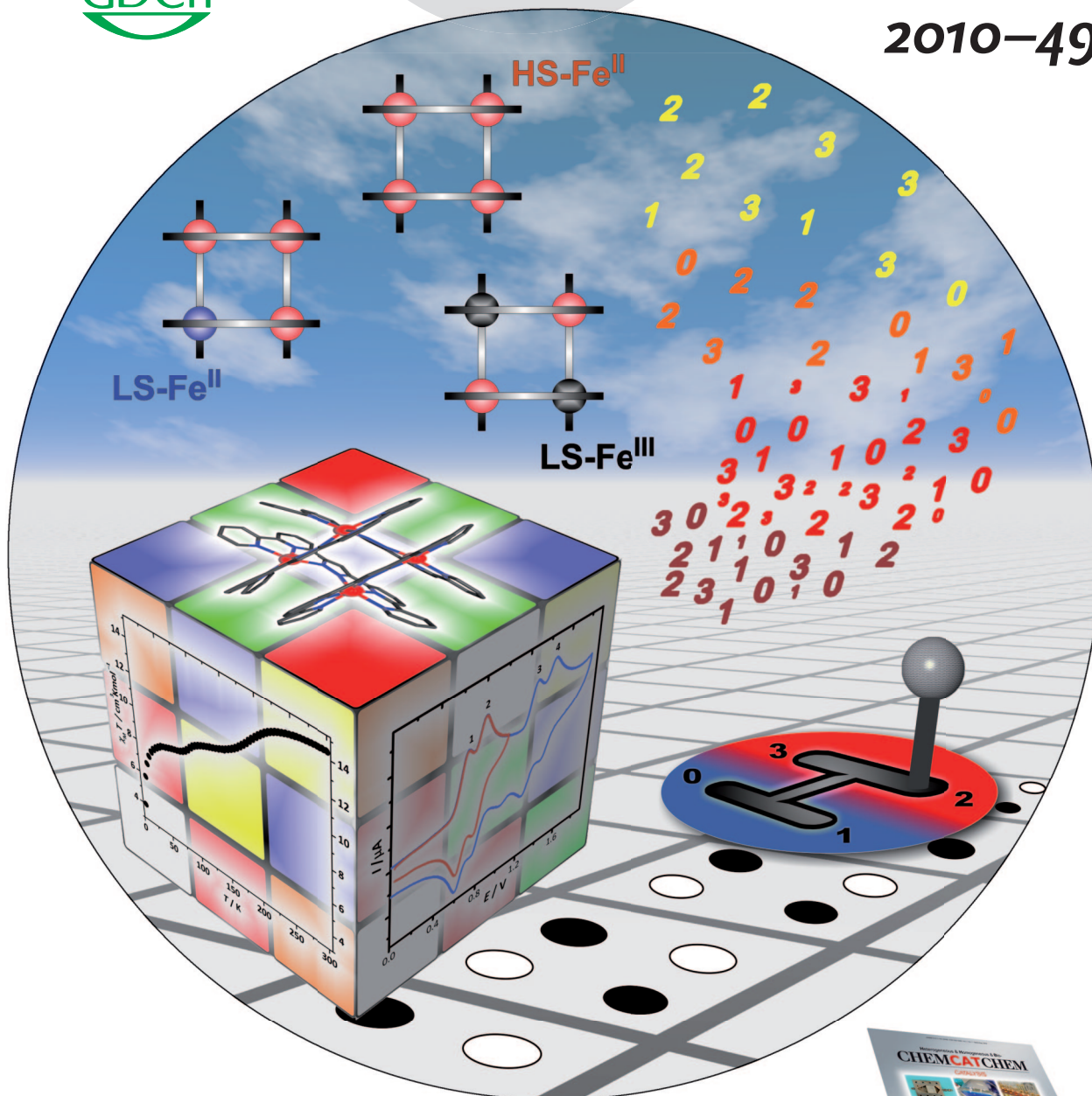
International Edition

D 3461



www.angewandte.org

2010–49/48



Rylene Dyes

T. Weil, J. Hofkens, K. Müllen et al.

Oxetane

M. Rogers-Evans, K. Müller, E.M. Carreira et al.

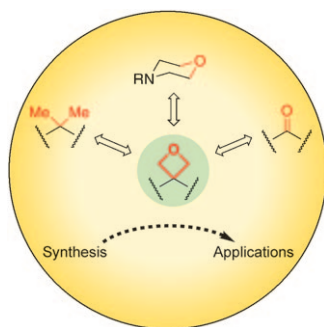
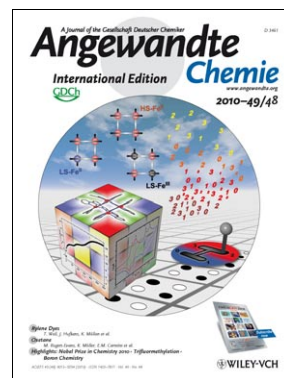
Highlights: Nobel Prize in Chemistry 2010 • Trifluormethylation • Boron Chemistry



Cover Picture

Benjamin Schneider, Serhiy Demeshko, Sebastian Dechert, and Franc Meyer*

A $[2 \times 2]$ Fe_4 grid complex featuring two orthogonal switching modes, namely stepwise spin-crossover and sequential redox processes, is presented by F. Meyer and co-workers in their Communication on page 9274 ff. Of particular interest are the resulting twofold-degenerate configurations $[\text{HS-LS-HS-LS}]$ and $[\text{Fe}^{\text{II}}_2\text{Fe}^{\text{III}}_2]$, where two identical metal centers occupy opposite corners of the Fe_4 square. Such an arrangement qualifies this new grid complex as a potential building block for quantum cellular automata.

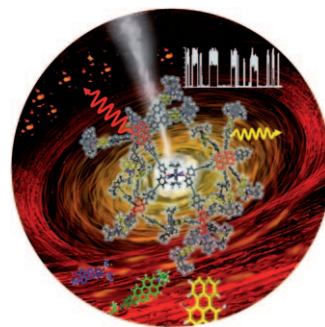


Oxetanes

The introduction of an oxetane unit can significantly improve the properties of a compound, for example, a drug candidate. K. Müller, E. M. Carreira et al. describe in their Minireview on page 9052 ff. transformations involving oxetanes.

Rylene Dyes

T. Weil, J. Hofkens, K. Müllen et al. describe in their Review on page 9068 ff. the latest advances in the area of rylene dyes and rylene nanoemitters, which could find applications as functional dyes in photonics.



Ubiquitins

In their Communication on page 9126 ff., A. Brik et al. describe a general strategy to synthesize all di-ubiquitin chains linked through Lys6, 11, 27, 29, 33, 48, and 63. Here, δ -mercaptolysine mediates isopeptide bond formation through native chemical ligation and subsequent desulfurization.