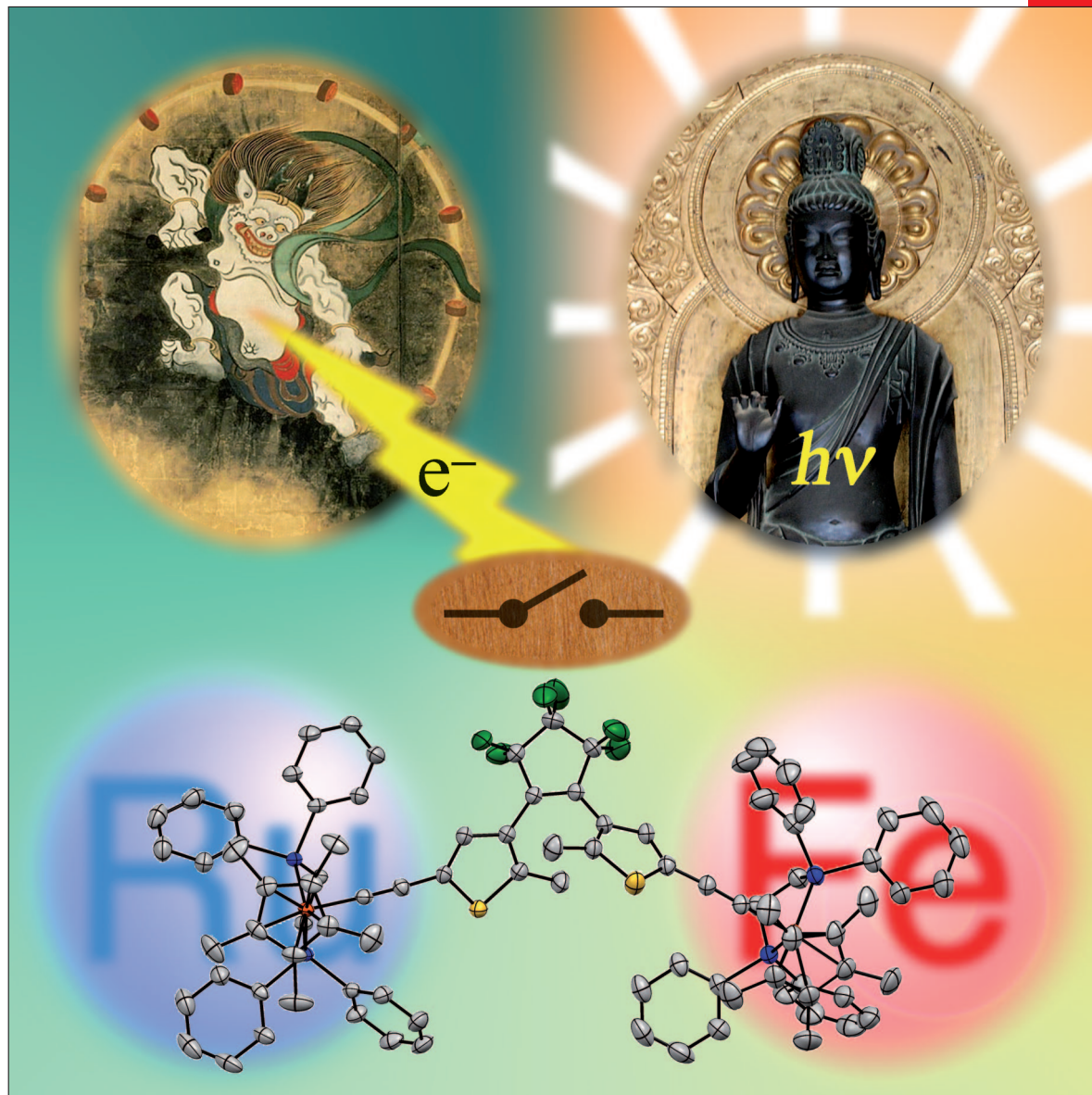


# CHEMISTRY

## A EUROPEAN JOURNAL

16/16

2010



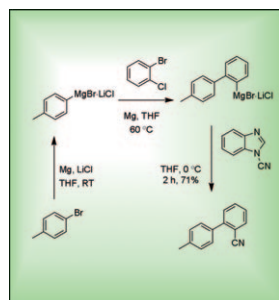
A Journal of

ChemPubSoc  
Europe

Supported by  
**ACES**

 WILEY-VCH

... and switching behavior, as well as the oxidation chemistry, of prepared dinuclear acetylide-type complexes that are bridged by a photochromic dithienylethene unit (DTE) have been investigated in the Full Paper by M. Akita et al. on page 4762 ff. The photochemical, ring-opening/closing cycle of the DTE moiety can switch the communication between the two metal centers in the iron complex, and the ruthenium complex exhibits dual photo- and electrochromism.

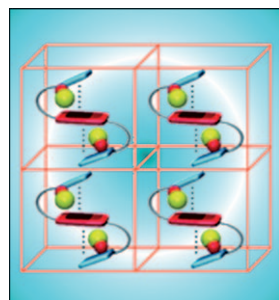
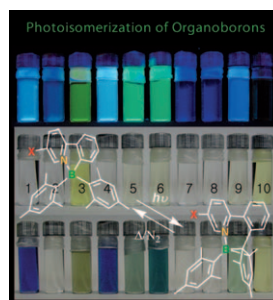


### Synthesis of Benzonitriles

An electrophilic cyanation of aryl and heteroaryl Grignard reagents applying *N*-cyanobenzimidazole has been developed. This methodology, described by M. Beller et al. in the Communication on page 4725 ff., could be further applied towards a novel domino Grignard-coupling/cyanation strategy to obtain 2-cyano-1,1'-biaryls starting from simple aryl bromides.

### Organoboron Chemistry

In their Full Paper on page 4750 ff., S. Wang et al. report on the colors (middle) and fluorescence (top) of ten N,C-chelate organoboron compounds in toluene and their response to irradiation by light at 365 nm (bottom). The color change observed for some of the compounds is caused by the photoisomerization illustrated in the scheme. The nature of the substituent group X, the extent of  $\pi$  conjugation, and the type of N,C-chelate have been found to have a significant impact on the photoisomerization process.



### Vapo-chromic Crystals

The first vapo-chromic organic crystals showing unprecedented molecular-shape-dependent color changes upon exposure to a variety of organic vapors are described in the Full Paper on page 4793 ff. by T. Naota, H. Takaya, and E. Takahashi. Various experimental results and structural investigations indicated that the cavities in, and flexible movement of, the S-shaped templates in these crystals were crucial to their high adsorption capacity and vapo-chromic behavior.



Supported by  
**ACES**

*Chemistry—A European Journal* is jointly owned by the 14 Chemical Societies shown above and published by Wiley-VCH. This group of Societies has banded together as Chemistry Publishing Society (ChemPubSoc) Europe for its combined publishing activities. The journal is also supported by the Asian Chemical Editorial Society (ACES).