

A Journal of the Gesellschaft Deutscher Chemiker

Angewandte Chemie

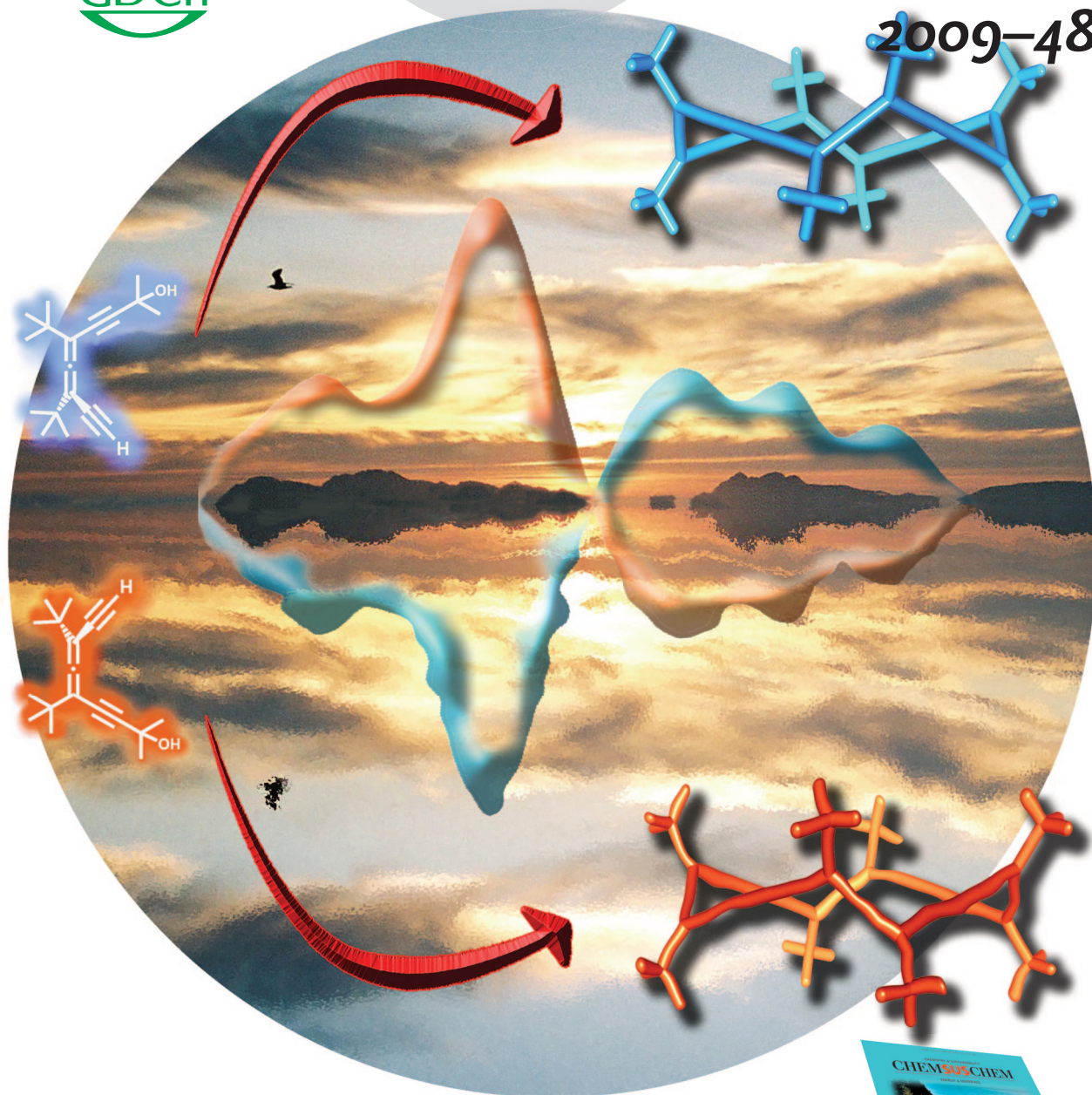
International Edition

D 3461

GDCh

www.angewandte.org

2009-48/30



Nanogels as Pharmaceutical Carriers

A. V. Kabanov and S. V. Vinogradov

Cell-Nanotopography Interactions

R. Langer, J. T. Borenstein, and C. J. Bettinger

Cyclophane Syntheses • Carbon Nanotubes

ACIEFS 48 (30) 5381–5554 (2009) · ISSN 1433–7851 · Vol. 48 · No. 30

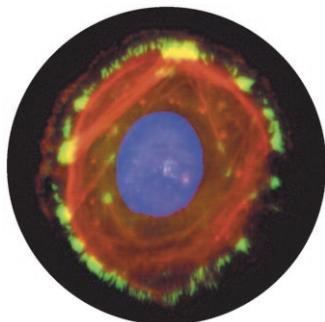


 **WILEY-VCH**

Cover Picture

José Lorenzo Alonso-Gómez, Pablo Rivera-Fuentes,
Nobuyuki Harada, Nina Berova, and François Diederich*

Enantiopure, Shape-Persistent alleno-acetylenic macrocycles are prepared from optically pure 1,3-diethynyllallene building blocks, as F. Diederich et al. report in their Communication on page 5545 ff. These macrocycles with their crown geometry and chiral C_{28} backbone are not only aesthetically pleasing, they also display unusually intense Cotton effects in their circular dichroism spectra, which arise from the unique interplay of the shape-persistent geometry and electronic properties.

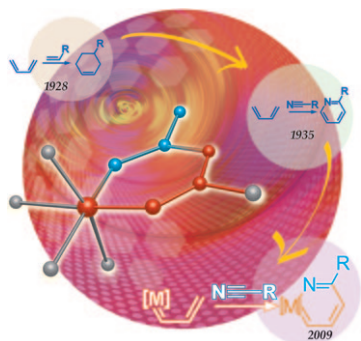
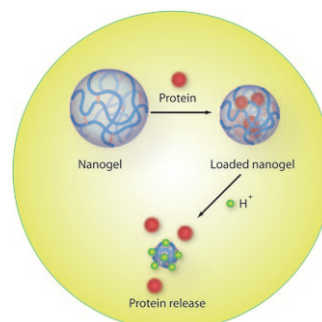


Controlling Cell Function

Substrate nanotopography greatly influences cell behavior. In the Minireview on page 5406 ff., C. J. Bettinger, R. Langer, and J. T. Borenstein describe recent efforts to engineer synthetic substrates to control complex cell function.

Nanogels

A. V. Kabanov and S. V. Vinogradov report in their Review on page 5418 ff. the ability of nanogels to transport and release drugs and biomacromolecules. Their preparation and properties are described.



Metallacycles

In their Communication on page 5430 ff., H. Xia and co-workers describe the unprecedented formal [4+2] cycloaddition reaction between a 1-metalla-1,3-diene and a nitrile, which affords examples of late-transition-metal-containing metallapyridine and metallapyridinium.