

A Journal of the Gesellschaft Deutscher Chemiker

Angewandte Chemie

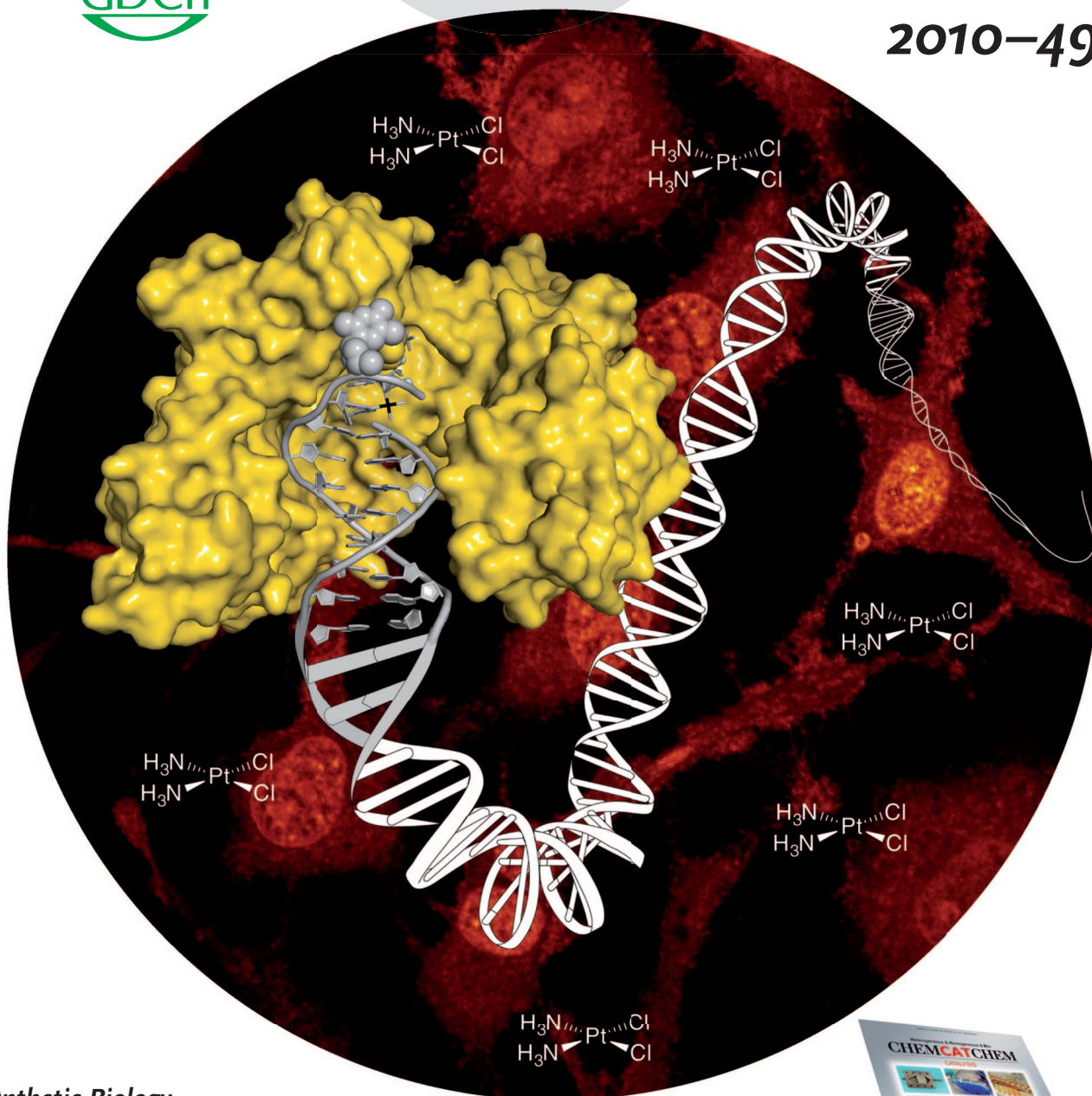
International Edition

D 3461



www.angewandte.org

2010–49/17



Synthetic Biology

H. Robson Marsden and A. Kros

Organosilicon Chemistry

S. E. Denmark and J. H.-C. Liu

Total Synthesis of Palau'amine

H. J. Jesson and K. Gademann

Carbonic Anhydrase

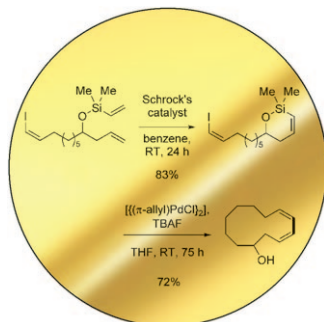
A. Dunkel and T. Hofmann



Cover Picture

Thomas Reißner, Sabine Schneider, Stephanie Schorr, and Thomas Carell*

Cisplatin–DNA lesions block the transcription of DNA and lead to cell death. In their Communication on page 3077 ff., T. Carell and co-workers describe the crystal structure of a cisplatin–(1,3-GTG) intrastrand cross-link in complex with polymerase η . The movement of this enzyme along the DNA duplex is blocked, in particular by the conformation of the central dT unit of the lesion.

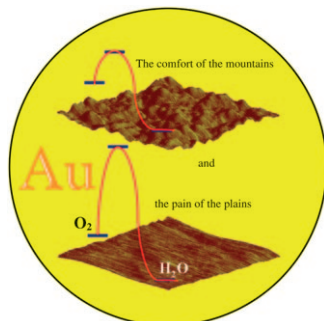


Cross-Coupling

In their Minireview on page 2978 ff., S. E. Denmark and J. H.-C. Liu present examples of natural product syntheses in which cross-coupling reactions with organosilicon reagents play a strategic role.

Synthetic Biology

Self-assembly in biological systems is a very complex process by which biomolecular building blocks are transformed into highly functionalized materials. In their Review on page 2988 ff., A. Kros and H. Robson Marsden describe nature's lessons in synthetic supramolecular chemistry.



Electrochemistry

In their Communication on page 3006 ff., A. M. Nowicka, F. Scholz and co-workers describe the treatment of gold electrodes with hydroxyl radicals, which results in a dramatic decrease in the electron-transfer rates of electrochemical reactions involving radical intermediates.