2010-49/50

# **Fibrous** Nanosilica

**Diverted Total Synthesis** 

A. M. Szpilman and E. M. Carreira

**Electron Tomography** 

D. S. Su

Diphosphorus  $P \equiv P$ 

C. A. Russell



### **Cover Picture**

## Vivek Polshettiwar,\* Dongkyu Cha, Xixiang Zhang, and Jean Marie Basset\*

The chemist's first choice ...... for heterogeneous catalysts is often porous silica because of its high surface area. However, these surface areas are mostly due to the pores and are thus not always accessible. V. Polshettiwar, J. M. Basset, and co-workers describe in their Communication on page 9652 ff. how they synthesized fibrous silica nanospheres with a high surface area. Such a fibrous morphology observed in these nanospheres has not been seen before in silica materials.



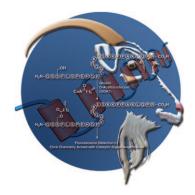


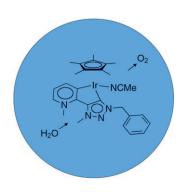
#### **Diverted Total Synthesis**

A. M. Szpilman and E. M. Carreira devote their Review on page 9592 ff. to the concept of diverted total synthesis, which allows the targeted modification of natural products to study their biological activity, and also show what perspectives this concept offers synthetic chemists.

#### Enzyme Assays

K. D. Janda and A. L. Garner describe in their Communication on page 9630 ff. an enzyme assay in which enzyme-linked azide is utilized to arm the assay with catalytic fluorescence signal amplification to enable ultrasensitive detection.





#### Water Oxidation

Highly active catalysts for the generating  $O_2$  are described by S. Bernard, M. Albrecht et al in the Communication on page 9765 ff.: iridium(III) complexes with triazolylidene-chelating ligands, which are easily prepared by click chemistry.