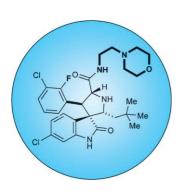
# **Cover Picture**

# Andrew M. Beale, Simon D. M. Jacques, Jaap A. Bergwerff, Paul Barnes, and Bert M. Weckhuysen\*

*Like an 'eye on the inside'* tomographic energy dispersive diffraction imaging is used to obtain 3D information on the phase and element distribution of metal oxides in catalyst extrudate bodies (the pellets in the cover picture). In the Communication on page 8832 ff., B. M. Weckhuysen and co-workers use Co–Mo/Al $_2$ O $_3$  hydrodesulfurization catalysts to showcase the technique and its capacity to discriminate between crystalline and noncrystalline phases. They show that 1D and 2D studies oversimplify the challenge of relating catalyst performance to a preparation method.



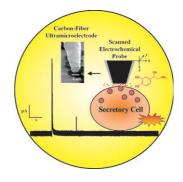


#### Natural Products

In their minireview on page 8748 ff., K. A. Scheid and C. V. Galliford present the 3,3'-pyrrolidinyl-spirooxindole system as a privileged heterocyclic motif for the development of potential medicinal agents or biological probes.

### Single-Cell Investigations

In the Review on page 8760 ff., W. Schuhmann and A. Schulte explain how single cells can be investigated with the aid of precisely positionable voltammetric ultramicroelectrodes. The method can be applied in membrane biology, physiology, neuroscience, pathology, and pharmacology.





## Dinitrogen Activation

When a solution of the hydride complex shown in the picture is exposed to  $N_2$ , as H. Kawaguchi and co-workers describe in their Communication on page 8778 ff., a nitride complex and  $H_2$  form with concomitant cleavage of the dinitrogen bond.