

A Journal of the Gesellschaft Deutscher Chemiker

D 3461

# Angewandte Chemie

50 YEARS International Edition

GDCh

[www.angewandte.org](http://www.angewandte.org)

2011–50/33



**Flow Chemistry**

K. F. Jensen et al.

**Tosylhydrazones**

J. Barluenga and C. Valdés

**Enzyme Catalysis**

C. Schmidt-Dannert and J. E. Vick

**Oxidative Cross-Coupling**

F. Glorius and X. Bugaut



# Cover Picture

Gang Liu and Daniel Romo\*

A **high ratio of** C–C bond-forming steps and a high degree of stereocontrol characterizes the first total synthesis of (+)-omphadiol. In their Communication on page 7537 ff., D. Romo and G. Lui report a facile conversion of (*R*)-carvone, from the spearmint plant, into omphadiol, from the jack-o'-lantern mushroom, via a versatile bicyclic  $\beta$ -lactone. Several one-pot or sequential processes and the absence of protecting groups contribute to the brevity of the synthesis.

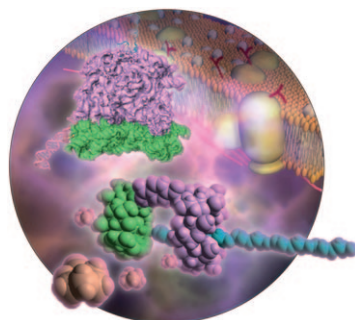
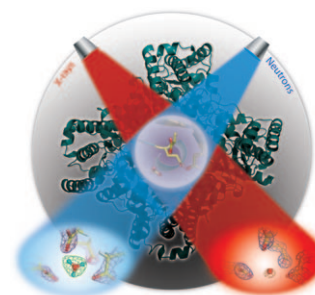


## Flow Chemistry

With the increasing availability of microflow reactors in laboratories, the question increasingly arises, in which cases should such reactors be used instead of classical flasks? The factors that need to be considered are discussed by K. F. Jensen et al. in their Review on page 7502 ff.

## X-ray/Neutron Crystallography

Crystallographic experiments enabled the first direct visualization of a hydronium ion in a biological system. In their Communication on page 7520 ff., A. Kovalevsky, P. Langan et al. provide evidence for interchangeability with a proton at lower pH values.



## Synthetic Polymerases

In their Communication on page 7524 ff., A. Harada and co-workers report a cyclodextrin dimer that is used to produce high-molecular-weight polymers. This system is reminiscent of a DNA polymerase.