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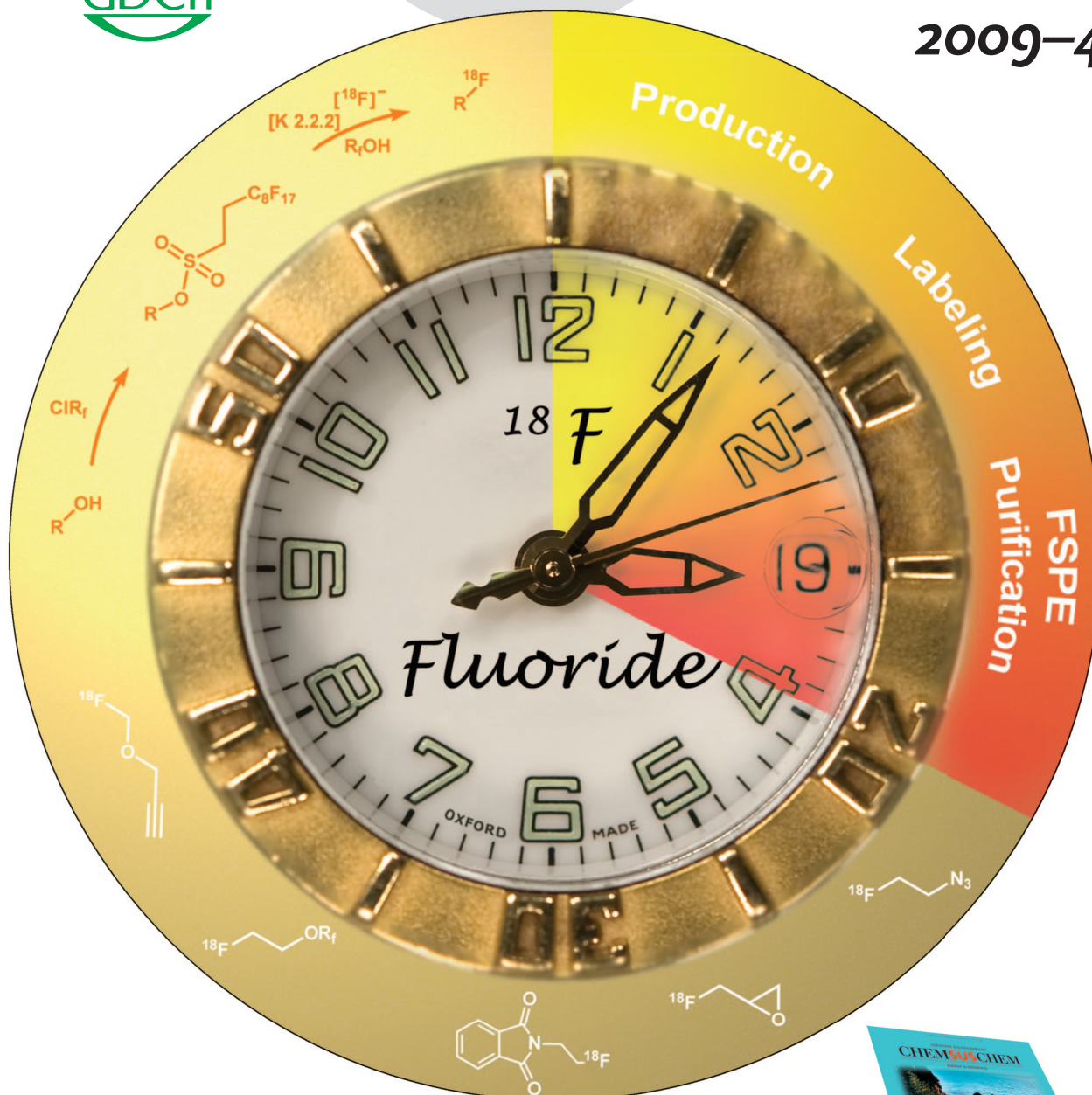
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Nonlinear Effects in Asymmetric Catalysis

H. B. Kagan et al.

Aqueous Olefin Metathesis

K. Grela and D. Bartscher

Fullerene Synthesis

L. T. Scott

Characterizing the Sleepless Genes

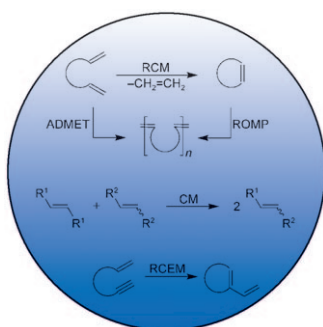
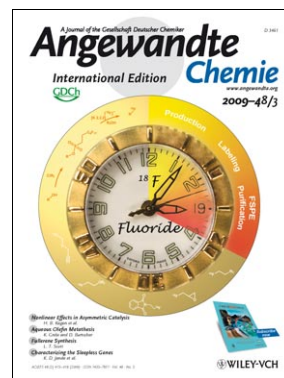
K. D. Janda et al.



Cover Picture

Romain Bejot, Thomas Fowler, Laurence Carroll, Sophie Boldon, Jane E. Moore, Jérôme Declerck, and Véronique Gouverneur*

Time is of the essence in preparing ^{18}F -labeled radiotracers when the half-life of ^{18}F is 109.7 minutes. In their Communication on page 586, V. Gouverneur and co-workers report the radiosynthesis of various prosthetic groups and ^{18}F radiotracers from fluorine-tagged precursors. This approach allows for fast and convenient purification of ^{18}F -radiolabeled material (FSPE = fluorine solid phase extraction). Cover illustration produced by Dr. Karl Harrison (Chemistry Department, University of Oxford).

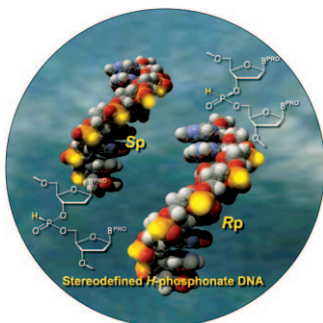
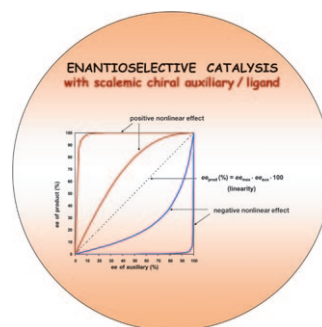


Aqueous Olefin Metathesis

K. Grela and D. Bartscher review developments in aqueous olefin metathesis in their Minireview on p. 442. They focus on methods for synthesis “on water” and the targeted design of polar ruthenium catalysts which are stable and active in aqueous media.

Nonlinear Effects

A nonlinear effect is observed in asymmetric catalysis when the enantiomeric excess of the reaction product is not proportional to that of the chiral auxiliary or ligand. The consequences for the reaction mechanism are described by H. B. Kagan et al. in their Review on page 456.



Chemistry on Solid Support

Wada et al. describe in their Communication on p. 496, the first stereocontrolled synthesis of oligonucleoside *H*-phosphonates. These compounds can be converted into multiple analogues through stereospecific modification at the phosphorous center.