
EDITORIAL



Dear Readers of CHIMIA,

You have in your hand an issue of CHIMIA dedicated to 'Hot Topics' review articles. The first article '**Automated Synthesis of Oligosaccharides Provides Access to Chemical Tools and Vaccine Candidates**' is written by **Lenz Kröck** and **Peter H. Seeberger**. Oligonucleotides and peptides are routinely synthesized by automated procedures. On the other hand, the automated synthesis of oligosaccharides is by far more complex due to their branched structures and their stereochemistry. A brief overview of the state-of-the-art of automated synthesis of oligosaccharides is presented and followed by some illustrative examples to highlight applications.

The second article '**Towards Magnetic Molecule and Reagent Separation in Organic Synthesis: Development and Use of Covalently Functionalized Nanomagnets**' by **Samuel C. Halim** and **Wendelin J. Stark** demonstrates how covalently functionalized cobalt nanomagnets can offer an unconventional way to significantly speed up separation of reagents or products in synthesis.

The third article '**A Simple Straightforward Synthesis of Phenylphosphane and the Photoinitiator Bis(mesityl)phenylphosphane Oxide (IRGACURE 819)**' results from the collaboration between research teams at the ETH Zürich and Ciba Inc. led by **Hansjörg Grützmacher** and **Reinhard H. Sommerlade**, respectively. They describe a high-yield synthesis of the photoinitiator IRGACURE 819, a potent photoinitiator for polymerisation, coating, and curing processes. For this achievement, the authors won the 2007 Sandmeyer Prize of the Swiss Chemical Society.

The fourth article '**Lead-Discovery of bis-Aromatic Alkynes, a Novel Class of Herbicides**' by **G. Wayne Craig et al.** describes the process that conducted to the discovery of a novel family of herbicides.

In their article entitled '**Thermal Runaway of Dried Sewage Sludge Granules in Storage Tanks**', **Martine S. Poffet** and **Titus A. Jenny** analyze the causes of self-heating and occasional thermal runaway ending in outbreaks of fire during elimination of the sewage sludge from urban wastewater.

Finally, **Scott E. Denmark**, the recipient of the Prelog Medal 2007, presents his work in a short review article entitled '**Asymmetric Catalysis with Chiral Lewis Bases: A New Frontier in Main Group Chemistry**'. This report provides a brief overview of the conceptual basis and theoretical foundation of catalysis by chiral bases and illustrates a number of reactions primarily in Group 14 that are susceptible to catalysis by Lewis bases.

Finally, you will find in this issue an interview of Prof. **Gerhard Ertl**, winner of the 2007 Nobel Prize in Chemistry. This interview appeared first in the journal of the German Chemical Society (GdCh) *Nachrichten aus der Chemie* and represents the first step of collaboration between the German and Swiss Chemical Society journals.

I wish you a good read of this issue of CHIMIA.

Philippe Renaud
(philippe.renaud@chimia.ch)