

Editorial: Applied Chemistry

Ulrich Schubert

This Special Issue of Monatshefte für Chemie/Chemical Monthly contains a collection of contributions from the area of applied or application-oriented chemistry. The topics range from dental filling composites to supramolecular concepts in polymer chemistry, and from detailed kinetic investigations on heterogeneous catalysis to technical aspects of Diesel exhaust filters. Four of the contributions are based on talks given at one of the “Inorganic Technical Chemistry” symposia organized by DECHEMA every February in Frankfurt, Germany.

Wolfgang Binder gives a comprehensive overview on concepts for the assembly of macromolecules and polymeric nanoparticles into regular structures by means of hydrogen bonding.

Simone Klapdohr and *Norbert Moszner* review the use of inorganic nanoparticles as well as the development of silicate based inorganic-organic hybrid materials for dental filling composites.

The review of *Michael R. Buchmeiser et al.* describes a new organometallic compound of Rh(I) as an efficient homogeneous hydrosilylation catalyst, and its immobilization to poly(styrene-co-divinylbenzene).

The review of *Jörg Libuda et al.* focuses on the connection between structural properties of highly dispersed metals on oxide supports and the kinetics of the catalyzed reaction. Mikrokinetic models are derived by investigating model catalysts with very well defined structures.

Zeolites are important catalytic materials. Moreover, the group of *Gion Calzaferri* has developed a method to use zeolites for light harvesting. Especially for the latter purpose, zeolite crystals of defined size and shape are necessary. This is reported for zeolite L in this issue.

In the final contribution, *Claus Görsmann* reviews the current status of Diesel particulate filter regeneration by soot oxidation with NO₂ or O₂.

Ulrich Schubert
Issue Editor