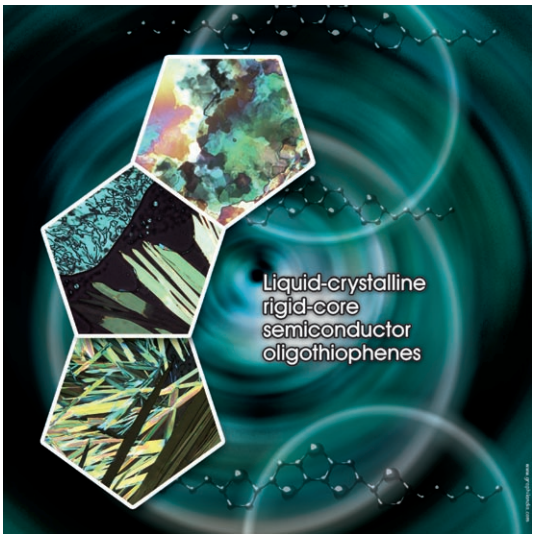
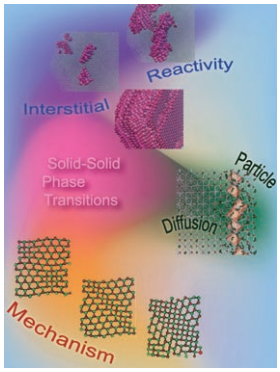
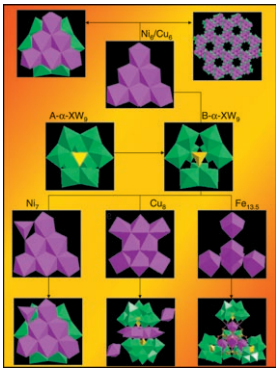
CHEMISTRY
A EUROPEAN JOURNAL

… in oligothiophenes was achieved by M. Melucci and co-workers (see p. 10046 ff.) by applying a new design-strategy based on the insertion of a rigid inner core, such as dithienothiophene, benzothiadiazole, or carbazole, and hexyl chains as ends. Oligomers of different size and shape were synthesized by a highly efficient microwave-assisted protocol. Most of the newly synthesized materials showed ordered smectic mesophases and maintained the smectic order by slow cooling to room temperature. Semiconducting behavior in field-effect transistors from cast and vacuum-evaporated films was demonstrated.

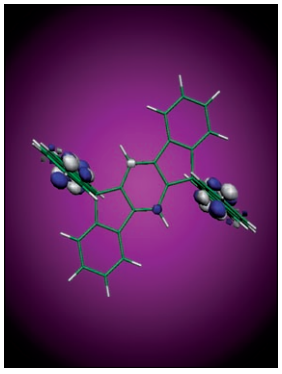




Solid-State Reactions
In the Concept article on page 10022 ff., S. Leoni describes how theoretical simulations can lead to finding new pathways to novel materials, which is an open challenge in modern solid-state chemistry. Such simulations are used to help understand nucleation patterns, formation and propagation of interfaces, intermediate structures, and phase growth.



Polyoxometalates
In the Full Paper on page 10030 ff., G.-Y. Yang et al. describe the hydrothermal synthesis of a variety of transition-metal-substituted polyoxotungstates. The strategy involves the reaction of polyoxometalate precursors with transition-metal clusters. Their magnetic properties were also investigated.



Light-Emitting Devices
In their Full paper on page 10055 ff., C. Poriel, J. Rault-Berthelot, L. Vignau et al. discuss the synthesis and characterization of a series of new luminophores that combine one indenofluorenyl unit and two spiro-linked fluorenyl units (DSF-IFs). The thermal, structural, and photophysical properties of DSF-IFs have been investigated and appear to be promising for organic light-emitting diode (OLEDs) applications.

