## **Editorial**



Dear Readers of CHIMIA,

You have in your hand an issue of CHIMIA dedicated to 'Hot Topics' review articles. The first article by **Andreas Türler** is entitled 'Chemical Experiments with Superheavy Elements'. The superheavy elements (also called transactinides with atomic number  $\geq$  104 (Rf)) are artificially synthesized in fusion reactions in quantities of a few single atoms. Since all isotopes of the transactinide elements are radioactive and decay with rather short half-lives, the study of the chemical properties of these elements is a true challenge. In this review, Türler describes the first experiments with hassium (Hs, atomic number 108), copernicium (Cn, atomic number 112) and element 114 (eka-Pb). The experimental investigation of superheavy elements is especially intriguing, since theoretical calculations predict significant deviations from periodic trends due to the influence of strong relativistic effects.

The second article by *Katharina M. Fromm* and coworkers 'From Alkaline Earth Ion Aggregates *via* Transition Metal Coordination Polymer Networks towards Heterometallic Single Source Precursors for Oxidic Materials' summarizes different approaches developed in her group toward the preparation of oxide materials, starting with homometallic clusters and coordination polymers and highlighting recent results with heterometallic single source precursors. Heterometallic oxides are used as materials in applications ranging from high temperature superconductors to temperature resistant ceramics.

The third article by **Wolf-D. Woggon** and coworkers 'Recent Biomimetic and Organocatalytic Syntheses of  $\alpha$ -Tocopherol' relates their efforts to develop new strategies for the synthesis of  $\alpha$ -tocopherol, the biologically most significant member of the vitamin E family.

The fourth Hot Topics article by *Martin Paul Brändle* and colleagues is entitled 'Chemical Information Media in the Chemistry Lecture Hall: A Comparative Assessment of Two Online Encyclopedias'. In this article, the results of an assessment of the chemistry encyclopedia *Römpp Online* and the German universal encyclopedia *Wikipedia* by first-year university students is described. Criteria with regard to both content and form were applied in the comparison. While both encyclopedias obtained very good evaluations and performed nearly equally with regard to their accuracy, the average overall mark for Wikipedia was better than for Römpp Online. Interestingly, students attach importance to completeness, length and comprehensibility rather than accuracy, and also attribute less value to the availability of sources that validate an encyclopedia article.

Finally, you will also find in this issue an article by **Alois Püntener** and **Serge Moss** 'Ötzi, the Iceman and his Leather Clothes' who investigated with the help of infrared spectroscopy how the leather clothing of the world's most famous iceman could have been tanned.

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

Philippe Renaud (philippe.renaud@chimia.ch)