

Polyoxometalates



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Nowadays polyoxometalate (POM) chemistry is a well known and fully established research area, which continues to draw more and more attention. The main reason is the truly breathtaking variety of POM shape, size, and composition combined with many tunable properties such as solubility, redox activity, stability, charge-density. This is why

POMs are versatile

POM research covers the entire spectrum from natural sciences to engineering, from academic to industrial research, from medicinal biology to solid state physics, from mathematics to environmental science, from nanoscience to life science. It is the interaction of researchers from such diverse fields allowing for the exploration of interdisciplinary areas which is known to be most fruitful. As an example, it must be realized that this year's Chemistry Nobel Prize for ribosome research is, in fact, also dedicated to

Nobel Prize 2009 honours POMs!

some small degree to POM chemistry, as in particular polytungstates (e.g. Wells-Dawson ion) have been used very successfully as electron-dense cocrystallization components which facilitated the phasing, solving, and refining of the ribosome X-ray structures.

During the last 20 years or so it has become a tradition in the POM community to host regular international meetings of different size and format taking place at different locations, most of them within Europe. This past summer (July 28–August 1) I had the pleasure to welcome almost 150 POM chemists from all over the world at Jacobs University in Bremen. Jacobs University is a young, private research university and therefore unique in Germany (www.jacobs-university.de). The beautiful park-like campus with its residential colleges allowed all participants of the POM symposium to stay directly at the conference site. Such a setting is ideal for colleagues to get to know each other, to discuss collaborations, to plan joint proposals, exchange of coworkers etc. These days in Europe very large research grants can usually no longer be obtained on a national

level, but rather by collaborative efforts of several groups from different countries. In this sense collaboration is better than competition, and it is usually also more fun.

The Bremen meeting started off with a welcome BBQ, and during the next 4 days a total of 59 lectures were presented and 43 posters shown (www.jacobs-university.de/schools/ses/polyoxometalatesymposium/). The work ranged from the synthesis of discrete polyoxoanions to 1-D, 2-D, and 3-D frameworks (inorganic, organometallic, hybrid organic-inorganic), and investigations of, for instance, their structural, catalytic, magnetic, electrochemical, photochemical properties using experimental as well as theoretical techniques. In short, this meeting reflected the broad scope of contemporary POM chemistry very well.

Scope highlighted at Bremen Meeting

Twenty-nine thought-provoking articles are brought to you in this issue. Every paper has been reviewed by a panel of experts to ensure that you have a selection of papers of the highest quality. The papers reflect the current research activities in POM chemistry around the world. The internationality of the contributors and the broad scope of the conducted research are also supported by the composite cover picture (produced by Rami Al-Oweini). We thank all contributors who supplied individual cover images.

We trust that you will find this issue stimulating, one that helps spark off many great ideas that will continue to enrich the chemical community. At a time when POM chemistry is more dynamic than ever before, *EurJIC* would like to showcase this impressive class of compounds. We would like to take this opportunity to thank all authors and reviewers for helping us to bring excellent work to the chemical world.

Find the best POM chemistry in this issue