Editorial

“…there must be a vast world out there that we haven’t discovered yet”
Ben Feringa (interview in CHIMIA next month)

Dear Colleagues,

A day of prize-winning chemistry, a day of present and future awardees. I am referring to the last Fall meeting of our Society on September 11th, 2008 at the University of Zürich-Irchel. In this CHIMIA issue you can read what you heard or what you missed.

Jeroen van Bokhoven (ETH Zürich) received the Werner Prize for his work concerning the catalytic activity of nano-sized gold particles. The title of his award-lecture was ‘Absorbing X-rays to Understand Catalysis’, whereas his title in this issue is ‘Catalysis by Gold: Why Size Matters’. Together they tell the fascinating story in a nutshell. Most of us think of Aqua regia in connection with Au, the king of metals. Bygone days! Nano-sized gold particles are catalysts for oxidations and for selective hydrogenations.

The Grammatikakis-Neumann Prize went to Professor Alexander Heckel (Goethe University Frankfurt). The award lecture of Heckel described ‘Light-Activatable Nucleic Acids ‘Caged’ at the Nucleobases’. The results are photobiology at its best. Photolabile groups, e.g. 2-nitrobenzyl group, on nucleobases prevent an oligonucleotide from Watson-Crick interaction, which then can be controlled by irradiation.

The Sandmeyer Award 2008 was presented at the Spring Meeting in Basel, but the results appear in the current issue. The award winning group comes from DSM and Solvias, who in an obviously fruitful cooperation found a modern solution to a classical synthetic problem. One can say, it is a beautiful variation on a theme of Goldberg-Sternbach, working out the synthesis of (+)-biotin, which is an essential growth factor in living cells.

It is already the fifth year that we have awarded the SCS Mettler-Toledo Awards for the best oral presentations from the Fall meeting. Most of the prize winners have a publication in this CHIMIA issue.

Winners of the SCS Mettler-Toledo Awards for Best Oral Presentations:

Ronaldo Mariz UZH
Ionel Popa UNIGE
Sean Garret-Roe UZH
Karin Kiewisch UNIGE
Michael Prudent EPFL
Andreas Zumbuehl UNIGE
Liu Yu UZH
Jean-Marc Planchet F. Hoffmann-La Roche

Every second year at the SCS Fall Meeting the last event is the presentation of the Paracelsus Prize. This time the highest award of the SCS went to Professor Ben Feringa from Groningen in the Netherlands. For many of us Feringa is well known and as I read in one of the supporting letters “a restless scientific giant”. Feringa’s work is highly multidisciplinary. His main interests are enantioselective synthesis and catalysis, supramolecular chemistry and nanotechnology. Feringa and his group were the ‘first’ in an impressive number of scientific breakthroughs: Development of the first molecular rotor, of light-induced molecular switches, of a chemically driven unidirectional molecular motor, of a new class of ligands for enantioselective catalysis, of the first highly enantioselective conjugate addition of organozinc and organomagnesium reagents, of DNA-based asymmetric catalysis and he demonstrated that a molecular motor can perform work by rotation of microscale objects by light-powered nanomotors.

His award lecture was titled ‘From Molecules to Molecular Systems’. In analogy to systems biology he referred to systems chemistry, which begins to overcome the ‘naïve’ reductionism of single molecule studies.

Congratulations to all prize winners who made an interesting day of chemistry to a day of frontiers of molecular sciences.

With my best personal regards

Georg Fräter
President of the Swiss Chemical Society
Congratulations to the Winners of the SCS Mettler-Toledo Awards

Dear Scientist

METTLER-TOLEDO congratulates the winners of the SCS Mettler-Toledo Awards for the best oral presentations at the SCS Fall Meeting.

As a young scientist you belong to the next generation of researchers, many of whom use our instruments. METTLER-TOLEDO is not only a committed sponsor of the Swiss Chemical Society, but also a partner for young researchers in projects from the Swiss National Science Foundation and other scientific programs. The goal behind this partnership between young talent and industry is to build an excellent foundation for ongoing scientific research programs – in academia as well as within industry. Furthermore, we strive to advance our own solutions together with young scientists by bringing our product developers directly to your labs. This way we can provide you with new solutions and services tailored specifically to your requirements.

Our instruments are used in research labs all over the world. We are the market leader in weighing technologies, with balances being the most commonly used instrument in the lab. Scientists like you turn to our analytical instruments, such as titrators and thermal analysis, when they need to detail properties of liquids or other substances. Our RAININ pipettes, widely used at universities and industry, lead the market with their innovative ergonomic design. Additionally we shorten the time to market for life-science start-ups by providing tools that accelerate the synthesis, purification, process research and development of new drugs through fully integrated solutions: from hardware to sophisticated software solutions.

To underline the importance of our partnership we additionally decided to set up a dedicated Academia initiative with different activities, like special balance offerings, seminars and workshops where we invite you to be part of it. This project started in the beginning of this year and we will keep you up to date about all activities.

METTLER-TOLEDO appreciates the possibility to develop young scientists and wishes all of you the best in the future, be it in academia or industry

Mettler-Toledo (Schweiz) GmbH

Thomas Nitschke
General Manager, Market organization Switzerland