

# IUPAC in Glasgow, Scotland

## Division Roundups, Part III

### CHEMRAWN: CHEMical Research Applied to World Needs

by Leiv K. Sydnès, CHEMRAWN chair

The CHEMRAWN Committee had a hectic program during the General Assembly (GA) in Glasgow. In addition to its biannual meeting, the committee was heavily involved in a symposium on ethics as part of the 43<sup>rd</sup> IUPAC Congress. The Ethics, Science, and Development symposium came about after the committee chair was challenged by organizations and individuals, as well as the congress program committee, to organize such a meeting. The symposium, part of the CHEMRAWN series of meetings (CHEMRAWN XVIII), was held over two half days and gathered quite a few participants in spite of the fact that a considerable number of other events and sessions took place at the same time (see [www.iupac.org/web/ins/2009-013-1-021](http://www.iupac.org/web/ins/2009-013-1-021) for more details about the symposium).

The most important agenda item at the biannual meeting was undoubtedly the discussion of global and regional problems that can be understood and solved in a sustainable fashion only if scientists with competence in the chemical sciences become engaged. This was particularly important because there were, in essence, no new conference ideas in the CHEMRAWN pipeline when the GA in Torino ended (August 2007). Discussions in Glasgow centered around possible themes that arose from the off-year meeting held in Puerto Rico in July 2008. Each of these ideas was

presented by a committee member who had been given the task of developing the idea further.

The discussions were lively and very constructive, and it was most encouraging to see that several young observers and others who joined in contributed in a creative fashion.

The committee deemed two ideas to be of particular importance and ripe enough to be explored further with the purpose of generating themes for new CHEMRAWN conferences in two to four years. Their working titles are *Biofuels* and *Herbal Medicines*. The former topic is especially significant since the current drive to produce biofuels from biomass, including certain food crops, has resulted in a biofuel-food-environment triangle that some have coined a "trilemma." Soon Ting Kueh from Malaysia volunteered to chair a task group to work on this issue.

The second potential conference theme is closely related to the fact that modern pharmaceuticals are, and will remain, out of reach for a large proportion of the human population for the foreseeable future. This has gradually created an appreciation of the need to use alternative and traditional medicines, largely herbal in nature, against diseases. However, to facilitate such a development, a number of chemical and other problems have to be analyzed, discussed, and resolved. A task group, to be chaired by Mohammed Mosihuzzaman from Bangladesh, was appointed in Glasgow to look into this challenge.

Compared to previous GA CHEMRAWN meetings, there were two new items on the agenda in Glasgow. One was a report about the joint COCI/CHEMRAWN involvement in the Second Session of the International Conference on Chemical Management (ICCM2), held in May 2009 in Geneva, which dealt with the implementation of the Strategic Approach to International Chemicals Management (SAICM). The IUPAC delegation was involved in plenary and group discussions, and, in close cooperation with the Society of Environmental Toxicology and Chemistry, COCI and CHEMRAWN were engaged in two side events, one about effective capacity building in a scientific



*Leiv Sydnès addresses  
the Ethics, Science, and  
Development symposium.*



*Bernard West of Toronto, Canada, discusses "Industrial  
Awareness and Responsible Care."*



perspective and another entitled "Science in Support of SAICM." IUPAC participated in the conference to help ensure a scientific basis for policy development, to nourish capacity building in relation to chemistry and its application, and to identify emerging issues of concern to health and the environment (see feature on page 8).

The second item was a report from Zafra Lerman about the Malta IV Conference, "Frontiers of Chemical Sciences: Research and Education in the Middle East," which is nicknamed as such because the first two meetings were held on the island of Malta in 2003 and 2005. The fourth conference, held in Amman, Jordan, in November 2009, was the first to be run under the CHEMRAWN umbrella (see IUPAC project 2008-044-1-020; [www.iupac.org/web/ins/2008-044-1-020](http://www.iupac.org/web/ins/2008-044-1-020)). The meeting format is unique in the sense that it is probably the only event where scientists from 14 countries in the Middle East meet for days for scientific discussions and where almost all lectures are delivered by Nobel Laureates. As reported by Lerman, joint projects involving scientists from Israel and neighboring countries are now under way. During the meeting in Amman, progress reports were presented in several workshops. (for earlier Malta reports see May-June 2008 *CI*, pp. 31-34 and Mar-Apr 2009 *CI*, pp. 9-11.)

A final point raised during the discussion was whether it would be a good idea to establish closer formal contacts between the CHEMRAWN Committee and the Union's divisions. This idea was supported by everyone in attendance, and it will be proposed that each division appoint a liaison to the CHEMRAWN Committee as soon as possible.

The committee acknowledged the service of several members who stepped down after years of involvement; they were all thanked for their dedicated service. In particular, Stanley Langer from the UK, the committee's secretary for several years, deserves special thanks. Langer is succeeded by Gary van Loon from Canada. The complete membership is available at [www.iupac.org/web/ins/021](http://www.iupac.org/web/ins/021).



**Sospeter Muhongo, director of the ICSU Regional Office for Africa, talks about "Science, Ethics, and Development: Africa's Perspective."**

## Division VIII: Chemical Nomenclature and Structure Representation

by Ture Damhus, division secretary

The main activity at the annual Division VIII Committee meeting is to review publications and current and prospective projects. The nomenclature and structure representation area is quite active, with around 15 ongoing projects (about half of these jointly with Division IV, the polymer division) and 8-10 new ones in preparation.

A prominent and rather widely publicized current project is concerned with coding and disseminating the *IUPAC International Chemical Identifier* (InChI). The division heard from Steve Heller on the latest progress and, in particular, on the formation of the InChI Trust, whose main purpose is to provide continuing funding for further work on the InChI code. The work will continue to be directed by the InChI subcommittee of Division VIII. The InChI developments have been featured on the IUPAC website and here in *CI*, and further articles are underway for *CI* and for *Pure and Applied Chemistry*. A website is also being configured at [www.inchi-trust.org](http://www.inchi-trust.org) (see also [www.inchi.info](http://www.inchi.info)). The shorter InChIKey for online searching requires a look up table to identify the corresponding structure. ChemSpider <http://inchis.chemspider.com> aims to provide such a table.

Another important endeavor is the preparation of a second edition of the popular IUPAC introductory book *Principles of Chemical Nomenclature*. A working group headed by Jeff Leigh has produced a draft that will hopefully, after final editing, reach the publisher during the year 2010.

Other business of the division is to manage its membership and its contacts with and representatives in other IUPAC bodies, such as the other divisions, and the various standing committees. As far as membership and *personalia* are concerned, at this meeting, we recorded with sadness the passing of Alan Sargeson, former chairman of the Commission for Nomenclature of Inorganic Chemistry and Val Metanomski, who had very many IUPAC assignments over a period of many years and was one of the authors of the first edition of the *Principles* book mentioned above.

Like all other IUPAC bodies meeting in Glasgow, Division VIII brainstormed about activities for IYC 2011, and shared our ideas with the Committee for Chemistry Education.