

Teamwork
- Issue No. 7 - Feb 2004 -

< [Issue No.6](#)

> [Issue No.8](#)

This issue of 'Teamwork' includes:

- [ACD even year meeting](#) (Vienna, 16-17 February)
- ['Welcome' to new members of the ACD](#)
- [Joint ACD-WPQA meeting and symposium](#)
- [New project](#): K. Murray reports on his project: Terminology in mass spectrometry

ACD even year meeting (Vienna, 16-17 February 2004)

This was quite an unusual meeting. Firstly, we were hosted on the premises of the International Atomic Energy Agency (IAEA). Secondly, never before have there been so many invited guests at an ACD meeting - participants in the joint ACD - WPQA mini-Symposium on Emerging Issues in Metrology in Chemistry.

We were especially honoured by the presence of Bryan Henry, IUPAC Vice-President and President Elect, who attended all sessions, and of Werner Burkart, Deputy Director General of the IAEA, who gave an opening address to the Symposium.

As usual, the ACD meeting was an opportunity to review the progress of current projects and to advance the development of new projects. It was also an opportunity to further develop ACD strategy for serving the needs of analytical chemists, worldwide.

The meeting approved the following strategy:

- To regularly seek input from (dialogue with) specialists with expertise beyond that of the ACD membership, to assist us in keeping abreast of 'developing needs'. This process started in Ottawa in 2003 with the workshop on *Genomics and Proteomics* and continued with the mini-Symposium in Vienna. There is a commitment to include an appropriate mini-Symposium in the ACD Agenda for Beijing.
- To identify a limited number of 'Core activities' and 'Emerging issues' and focus the energy of the ACD on these. The latter issues could, and should, vary from one biennium to the next.
- To build a team around each 'Core activity' and 'Emerging issue' to ensure a critical mass, to identify these as shared responsibilities, and to ensure continuity of Core activities from one biennium to the next.

The 'Core activities' and 'Emerging issues' are summarised in the following Plan. A team of 4 to 6 ACD members has been identified to develop each of these seven categories. Each NR, AM and TM has been assigned to one or two teams.

Core Activities:

Communication

Project initiation and management in the areas of:

- Quality Assurance
- Terminology - Orange Book updating
- Critical evaluation of data

Emerging issues in analytical chemistry:

- in Bioanalytical chemistry
- in process chemistry and nano-chemistry
- in developing countries and scientific communities.

Core activities and emerging issues. We cannot cover every field with our limited resources. In order to fulfil the IUPAC mission of providing critically evaluated data and keeping pace with the evolution of analytical chemistry we decided to focus our activities on two areas, described as Core Activities and Emerging issues in analytical chemistry. The former includes maintenance and updating of the [Orange Book](#) and the generation and maintenance of [good projects](#). The latter is consistent with the philosophy that started in Ottawa with the workshop on *Genomics and Proteomics* and continued in Vienna by the symposium on *Emerging issues in Metrology*.

Collective work and activity between the meetings. The Division is formed from a group of individuals. But by working in teams we hope to create added value to the sum of efforts and inputs of the individuals. This is a challenge but we know we can benefit from this approach. The management of our activities by teams between the meetings is a key issue to optimize the productivity of our work.

Better Communication. Dissemination of projects and results is a crucial issue for improving the impact of our work on the chemistry community. *Chemistry International* will continue to be an important medium for us to reach the worldwide chemistry community. Task group leaders are encouraged to use *CI* to publish information on all new projects as well as results of the completed projects. The Division is being proactive in recommendations for IUPAC representatives at IUPAC-sponsored analytical chemistry conferences. Another forum for presentation of our project outputs will be the GA and WCC in Beijing.

Building bridges to other organisations. The joint ACD-WPQA meeting showed that many new dynamics can be brought to our activities by discussing and collaborating on focused issues with other organizations, IUPAP, IAEA, UNIDO, ICSU. The workshop gave the opportunity for closer contacts and discussions at decision-making levels.

ACD and analytical chemistry in developing countries. Capacity building in developing countries is identified as one of IUPAC objectives. The Division wishes to develop its own activities in this direction. The Division is fortunate in having an active NR from India (Jaya Arunachalam) and in having several members with established links with the African continent (Jan-Åke Jönsson, Walter Lund and Roger Smith). Nelson Torto (Botswana), has joined the ACD as a Provisional Member representing the IUPAC Associate Organisation, SEANAC; we will also benefit greatly from his contribution.

Welcome to new Division members

Jan-Åke Jönsson joins the ACD as a Titular member. Jan-Åke is professor and head of the Division of Analytical Chemistry at Lund University, Sweden. He teaches environmental analysis and bioanalysis, quality assurance matters and sample preparation to undergraduate and graduate students. His research interests focus on the development of membrane-based sampling and sample preparation techniques with environmental and biomedical applications. Prof. Jönsson has good contacts with the analytical chemistry community on the African continent, having been involved scientifically and educationally quite

intensively with African universities, especially those in Botswana and Addis Ababa. Jan-Åke is not new to IUPAC. He was the Secretary of the Commission on Separation Methods in Analytical Chemistry (V.3). He is now active in three projects related to terminology in electromigration techniques and separation sciences in general. Welcome back Jan-Åke!

Nelson Torto joins the ACD as a Provisional Member. Nelson is a lecturer in general and analytical chemistry at the University of Botswana with strong links to the University of Lund (Sweden) from which he obtained his Ph.D. His research interests are in the areas of sampling and sample handling for biological and environmental samples. Nelson has been actively involved in promoting analytical chemistry in Botswana and on the African continent in general. He was one of the key persons in the formation of the Southern and Eastern Africa network for Analytical Chemists (SEANAC) which held its inaugural conference in July 2003 in Gaborone (Botswana) (cf. [Teamwork No. 6](#)). He is going to work on the creation of channels for the promotion, education and training of African scientists and standardized curriculum for analytical chemistry.

Mini-Symposium on Emerging Issues in Metrology in Chemistry

Ales Fajgelj and **Paul DeBièvre** report:

In the framework of the Analytical Chemistry Division Committee Meeting, and in line with the initiative started at the Ottawa IUPAC General Assembly last year, the workshop on "*Emerging Issues in Metrology in Chemistry*" was organized. The meeting was opened by W. Burkart (Deputy Director General IAEA) and A. Fajgelj (Chair of IUPAC Interdivisional WPQA). It attracted participation from an additional 17 persons, mostly representing IAEA.

Five lectures were given by invited speakers and IUPAC members. **Robert Wielgosz**, head of the Metrology in Chemistry department at the BIPM, presented a lecture on Key comparisons at BIPM: purpose, examples, MRA and CMCs. This was followed by a presentation on Metrological traceability and measurement uncertainty concepts by **Paul DeBièvre** (IUPAC). After a coffee break **Leslie Pendrill** (secretary of the Commission on Symbols, Units, Nomenclature, Atomic Masses & Fundamental Constants, IUPAP) gave a physicist's view on future needs for Metrological Traceability and **Otto Loesener-Diaz** (industrial development officer at United Nations Industrial Development Organization, UNIDO) presented UNIDO activities in metrology and related issues. The symposium finished with a presentation on Metrological traceability in special fields presented by **Manfred Groening** (head of the Isotope Hydrology Laboratory at the IAEA) and **A. Fajgelj** (IAEA).

The Mini-symposium was a welcome learning event. *Metrology in chemistry* has been identified, together with continuing efforts in the field of quality assurance, as one of the focal areas for the ACD medium term plan. The basic aim of the workshop was to inform ACD Committee members and other participants on the status of the field and current international initiatives. In parallel this workshop provided an excellent opportunity to present and discuss the background and plan for the IUPAC proposal for the ICSU grant programme 2005. Finally, this workshop was a very good opportunity to further strengthen the existing co-operation between IUPAC, IUPAP and IAEA and also to expand it to UNIDO. After the event, a courtesy visit was paid to D. Liang and O. Loesener at UNIDO to discuss involvement of UNIDO in the IUPAC proposal submitted to ICSU on "*Metrological Traceability: a Fair Basis for Trade*".

[Ed: We express our thanks to A. Fajgelj for the fantastic organisation of the Minisymposium.]

New project initiatives

At its meeting in Vienna the ACD voted funds for the new project: [Standard Definitions of Terms Relating to Mass Spectrometry](#). The Task Group chair is Kermit Murray. The project is a direct off-shoot from the ACD workshop on *Genomics and Proteomics* held at the Ottawa GA.

Kermit Murray reports:

Widely accepted standard definitions of terms are necessary for clear communication in the discussion and dissemination of results. This is particularly important for multidisciplinary fields such as mass spectrometry. The introduction of soft ionization methods for the analysis of biological molecules has expanded the scope of mass spectrometry from its early roots in the analysis of inorganic and organic species into the fields of biology and medicine. This expansion in scope and the ten years since the last update of standard terms and definitions make it important to undertake a revision of these terms at this time. Mass spectrometry nomenclature is under the purview of IUPAC's Analytical Chemistry Division and is published in the Compendium of Analytical Nomenclature (i.e. Orange Book). The goal of the project "Standard Definitions of Terms Relating to Mass Spectrometry" is to update these terms and definitions in close conjunction with the mass spectrometry journal editors and national and international mass spectrometry societies.

For more details, see <www.iupac.org/projects/2003/2003-056-2-500.html>

Next funding round

The closing date for the next round of contestable funding for Projects is fast approaching. For consideration, new Project proposals must be submitted and referred to internal and external reviewers before **April 30, 2004**. It is not too late, if you act now!

For more info, see <www.iupac.org/divisions/V/activities.html>

[Ryszard Lobinski](#)
ryszard.lobinski@univ-pau.fr