

tories using metrological tools in their routine work, and to end-users who should know and be able to assess the metrological validity of the results obtained by or reported to them

- applicable to all measurement: routine, research, commercial, ad hoc, etc.
- understandable to a wider measurement community, including students, routine analysts, industry, research and scientific workers, as well as to legislators, accreditation bodies, and other regulatory institutions
- general in nature, thus enabling new emerging fields and techniques to be easily incorporated
- interdisciplinary, thus ensuring common understanding, encouraging cross-fertilization (for instance, between chemistry and physics), and at the same time clearly presenting and addressing specifics of various measurement areas

A document, preferably in the form of an inter-organizational harmonized protocol, will constitute the basic outcome of the project. Premises to this project are detailed in the Web pages at the address below and in *CI* (Vol. 25, No. 2 March-April 2003, p 17).

For more information contact the Task Group Chairman Paul De Bievre <paul.de.bievre@skynet.be> or Ales Fajgelj <a.fajgelj@iaea.org>, the chairman of the Interdivisional Working Party on Harmonization of Quality Assurance.

 [www.iupac.org/projects/2001/2001-010-3-500.html](http://www.iupac.org/projects/2001/2001-010-3-500.html)  
[www.iupac.org/projects/2003/2003-004-1-500.html](http://www.iupac.org/projects/2003/2003-004-1-500.html)

### Establishment of a System to Implement the Global Sharing of Chemical Education Reading Material with the Aid of Bi-Directional Machine Translation

While modern technologies are making it possible to easily share information across the world, an adverse consequence of such globalization could be that a single language in this instance English will dominate. Easily available and cost effective translations of information are therefore highly desirable. The objective of this project is to use machine translation

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(MT) software to translate information on chemical education and use the web to disseminate the documents for the benefit of students, teachers, and scientist world wide.

A feasibility study is currently underway that includes the development of MT between English and three different languages: French, Russian, and Japanese. These choices will allow testing the application with languages of increasing difficulty. As the project develops it will address the needs of developing countries.

For more details on this project, contact the Task Group Chairman Yoshito Takeuchi <yoshito@chem.kanagawa-u.ac.jp>.

 [www.iupac.org/projects/2002/2002-021-2-050.html](http://www.iupac.org/projects/2002/2002-021-2-050.html)

### Toxicology Postgraduate Research in Developing Countries

Global changes in industrialization patterns have the potential to exert major impacts on human and environmental health, particularly when problematic chemical-related industries in developed countries are relocated to developing countries for economic reasons. In these less-regulated settings, the ability to identify, monitor, and manage the adverse effects of industrial activities is hampered by a paucity of toxicological expertise.

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One means of addressing this lack of expertise would be to provide scientists and regulators in developing countries with ready access to locally relevant toxicology and risk assessment methodologies. This would enable the local scientific community to build their capacity to address human and ecological health concerns caused by chemical exposures in occupational and environmental settings. The wider community will be the ultimate beneficiary of the consequent adoption of more appropriate processes for sustainable development and industrialization.

This proposal by IUTOX, together with IUPAC and IUPHAR, is to develop a postgraduate research pro-

## The Project Place

gram that deals directly with local toxicological issues in developing countries and countries in transition (e.g., in Africa, Asia, Europe, South America and the Pacific region). The program will be based on an existing Master in Toxicology; it will involve online coursework and postgraduate research projects co-mentored by local scientists and related to local issues.

For more information, contact Dr. A. Kallner <anders.kallner@ks.se>, president of the IUPAC Chemistry and Human Health Division.

### Women in Physics and Physical Science Network in Africa

In IUPAP, the so-called Working Group on Women in Physics is mandated to survey the situation for

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women in physics and suggest ways to improve it. At a conference held by that group in March 2002, a recurring theme was the isolation that many women in physics suffer, and no where did this seem more

severe than in African countries. For that reason, it was decided to establish a network of these women. Because these are so few women in physics in Africa, the network will be broad to encompass physical science and mathematics.

The initiation of such a network will serve the following objectives:

- to generate links between women in different research groups within Africa
- to encourage more girls to study physics and physical science
- to strengthen research efforts and training opportunities of young women physicists
- to promote the recognition of the scientific achievements of senior women physicists within Africa and the international community
- to increase the scientific productivity and efficiency of women physicists

Specific programs will be developed to achieve these objectives. IUPAC supported this ICSU application prepared by IUPAP. In co-supporting this grant

application from IUPAP to ICSU, IUPAC proposed to actively participate by contributing their contact in the chemistry community in Africa. IUPAC has had a long-standing interest in the state of chemistry in particular and the physical sciences in general in Africa, and currently a number of scientists from Africa are associated in various ways with IUPAC, and wish to contribute to the successful implementation of this project.

For more information, contact Dr. Judy Franz <franz@aps.org>, secretary general of IUPAP.



[www.if.ufrgs.br/~barbosa/women.html](http://www.if.ufrgs.br/~barbosa/women.html)

### Foundation of an African Institute for Mathematical Sciences

This important new initiative in capacity building in science education will provide an Africa-based solution to African problems, facilitated by the international scientific community. It is to be realized in South Africa and will have a primary impact there, but its influence and benefit will extend throughout the African continent. The initiative, which has already received the support of the South African National Research Foundation and the endorsement of the Nelson Mandela Foundation, is to establish an African Institute for Mathematical Sciences (AIMS) in Muizenberg, a suburb of Cape Town, where a very well-adapted building has been donated for this purpose. Here, "mathematical sciences" is to be understood as mathematics together with its applications in such diverse fields as mechanics, physics, chemistry, geophysics, astrophysics, engineering, information technology, biology, and medicine.

One goal of the AIMS is to offer a one-year diploma course specially designed for mathematics and science graduates of African Universities, which will be taught by a team of internationally renowned lecturers in close collaboration with South African academic staff. The course will give the students the mathematical and computing research skills needed to address important modern areas of applied mathematics, and will inspire a new generation of African students to undertake scientific research of great practical importance.



[www.aimsforafrica.org](http://www.aimsforafrica.org)