## 2006 IUPAC Prizes for Young Chemists

**On 4 May 2006, IUPAC announced the winners of the 2006 IUPAC Prizes for Young Chemists, which are awarded for the best Ph.D. theses in the chemical sciences as described in 1000-word essays.**

The winners are:

- **Michelle Nena Chrétien**, University of Ottawa, Ontario, Canada
- **Valentina Domenici**, University of Pisa, Italy
- **Matt Law**, University of California, Berkeley, USA
- **Emilio M. Pérez**, University of Edinburgh, Scotland, United Kingdom
- **Dunwei Wang**, Stanford University, California, USA

The winners will each receive a cash prize of USD 1000 and a free trip to the IUPAC Congress, 5-11 August 2007, in Torino, Italy. Each prizewinner will also be invited to present a poster at the IUPAC Congress describing his/her award winning work and to submit a short critical review on aspects of his/her research, which will be published in *Pure and Applied Chemistry*.

The essays describing the 2006 winners' theses can be found on the IUPAC website:

- Dr. Chrétien, "Photochemical, Photophysical, and Photobiological Studies of Zeolite Guest-Host Complexes"
- Dr. Domenici, "Structure, Orientational Order, and Dynamics of Rod-Like and Banana-Shaped Liquid Crystals by Means of $^2$H NMR: New Developments"
- Dr. Law, "Oxide Nanowires for Sensing, Photonics, and Photovoltaics"
- Dr. Pérez, "Hydrogen-Bonded Synthetic Molecular Machines"
- Dr. Wang, "Synthesis and Properties of Germanium Nanowires"

There were 49 applicants from 19 countries. The Prize Selection Committee was comprised of members of the IUPAC Bureau with a wide range of expertise in chemistry. The committee was chaired by Prof. Leiv K. Sydnes, IUPAC past president.

In view of the quality of many applications, the committee decided also to give two Honorable Mention awards to:

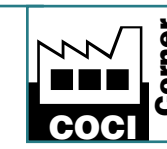
- Elena S. Chernetsova, Lomonosov Moscow State University, Russia
- Fiorenzo Vetrone, Concordia University, Montreal, Quebec, Canada

The Honorable Mention Award winners will receive a cash prize of USD 100 and a copy of the *Compendium of Chemical Terminology*, the IUPAC "Gold Book." The awards to the winners of the 2006 prize and those of 2007 will be made during the Opening Ceremony of the 2007 IUPAC Congress in Torino.

**www.iupac.org/news/prize/2006_winners.html**

Applications for the 2007 Prize are now being solicited, as described on the IUPAC website <www.iupac.org/news/prize.html>.

## COCI Corner




**The chemical industry has been integral to IUPAC since the earliest days of the Union. Leaders of industrial chemical societies helped create IUPAC in 1919, and committees representing industry and applied chemistry have been an important part of the Union ever since. Now, more than ever, advances in industrial chemistry are critical to progress in the chemical sciences.**

The IUPAC **Committee on Chemistry and Industry** (COCI) is the focus within IUPAC for issues of importance to the global chemical industry. COCI is developing new programs and projects on emerging topics. It is also the conduit for communications between IUPAC and National Adhering Organizations (NAOs), Company Associates (CAs), and individual scientists. This issue of *Chemistry International* introduces a new feature called the **"COCI Corner,"** where COCI will present the committee's work on topics of urgency to IUPAC and the chemical industry. In this installment, Mark Cesa (USA), chairman, introduces COCI programs.

COCI "kicked off" the new biennium with a project planning and strategy meeting at the IUPAC Secretariat in April. Continuing the organizational structure developed by past chair David Evans (UK), five programs have been established within which members will generate and carry out new projects, communicate with IUPAC leadership and the chemical industry, and foster liaisons with trade associations,

*The IUPAC Secretariat office and surrounding area provided a good retreat for COCI members; from left, back row: Charles Gwaza (Nigeria), Mark Cesa (USA), David Evans (UK), Bernard West (Canada), Alexander Pokrovsky (Russia); front row: Aldo Alles (Uruguay), Michael Booth (South Africa), Alan Smith (UK), Akira Ishitani (Japan), and Jonas Unger (Sweden).*

chemical societies, and international scientific and development bodies. One particular emphasis will be on capacity building in the developing world. Titular Member (TM) Aldo Alles (Uruguay) coordinates COCI's projects.

The Safety, Health, and Environment Program houses the IUPAC-UNESCO-UNIDO Safety Training Program (STP), the flagship project of COCI <www.iupac.org/standing/coci/safety-program.html>. In October, Prof. Said Mohammed Bayomi of Egypt became the ninth STP Fellow since 2000 when he trained at AstraZeneca facilities in the UK. Eight new trainee candidates are now being vetted by Alles and Secretary/Treasurer Mike Booth (South Africa). Highly successful STP workshops have been held at the last two IUPAC Congresses, where STP Fellows have gathered to share their experiences with improving chemical safety in their home countries. A workshop has been proposed for the IUPAC Congress in Torino next year. STP Fellow Kelvin Khisa (Kenya) is organizing a Conference on Occupational Health and Safety Management in East Africa, scheduled for September 2006 <www.iupac.org/symposia/2006.html#270906>, and STP Fellow and Associate Member Esma Toprak (Turkey) is planning a future workshop on chemical safety for Eastern Europe and the Middle East.

In collaboration with Peter Mahaffy and the Committee on Chemistry Education, TM David Evans leads COCI's efforts in the public appreciation of chemistry. David's article in this issue of *CI* offers a provocative discussion of how the chemical industry can influence this important effort (see p. 12).

Recruitment and retention of Company Associates is the responsibility of TM Akira Ishitani (Japan), along with TMs Jonas Unger (Sweden) and Evans. There are currently 92 IUPAC Company Associates. Khalida Al-Dalama (Associate Member, Kuwait) has set the standard for CA recruitment, single handedly landing two new CAs from the Middle East in 2005 (Nov-Dec 2005 *CI*, p. 19). There are also two new CAs from the UK (Jan-Feb 2006 *CI*, p.20). COCI and the Secretariat plan to work together in this biennium to recruit and retain more CAs.

To fulfill COCI's role to communicate with NAOs and CAs, Unger has proposed a regional meeting for European National Adhering Organizations and Company Associates for early 2007. National Representative and Bureau member Alan Smith (UK) has issued the latest compilation of IUPAC Projects of Interest to Industry. At the April COCI meeting, members visited the laboratories of Company Associate Syngenta at Research Triangle Park (North Carolina, USA), where we learned about current research in biotechnology that has led to great improvements in barley, cotton, soybeans, and other important crops.

*In April, COCI members visited the laboratories of Syngenta, located in Research Triangle Park, North Carolina, USA.*

Under the leadership of TM Colin Humphris (Belgium), the NGO/IGO/Trade Associations Program is working with IUPAC leadership to secure NGO status with key worldwide organizations. TM Alexandre Pokrovsky (Russia) leads collaborations with UNESCO and similar organizations. Humphris and Pokrovsky are uniquely positioned to bring the leaders of chemical industry to the table to participate in the World Chemistry Leadership Meeting and other important IUPAC activities.

Smith also coordinates COCI's program on collaborations with IUPAC divisions and standing committees. New representatives of divisions and standing com-

mittees have been appointed. COCI is exploring new project ideas in Responsible Care (National Representative Bernard West, Canada), nanotechnology, and biomonitoring, and will work with the divisions to strengthen and expand on these ideas.

COCI is building a portfolio of projects at the interface of the chemical sciences and industry. In future issues of *CI* we'll describe our efforts in more detail. Watch this space!

**For more information, contact COCI Chairman Mark Cesa <mark.cesa@innovene.com>.**

**www.iupac.org/standing/coci.html**

## Permanent Access to Scientific Information in Southern Africa

**The final report, executive summary, and presentations from the September 2005 CODATA Workshop on Strategies for Permanent Access to Scientific Information in Southern Africa: Focus on Health and Environmental Information for Sustainable Development are now freely available online at <http://stardata.nrf.ac.za/html/workshopCodataPublications.html>.**

This workshop was one of a series focused on issues related to the preservation of and access to scientific information resources in developing countries. This most recent workshop was co-organized by the U.S. National Committee for CODATA in collaboration with the South African National Committee for CODATA, the National Research Foundation of South Africa, and the CODATA Task Group on Preservation of and Access to Scientific and Technical Data in Developing Countries. The reports and presentations are also available on a CD, which may be obtained through the "Order a CD" e-mail link at the URL provided above.

Questions or comments about this workshop or the reports may be sent to Paul Uhlir <puhlir@nas.edu>, director of the U.S. National Committee for CODATA at the U.S. National Academies, or by phone at +1 202-334-2807.

**www.codata.org/taskgroups/Tgpreservation**

## Memorandum on Cooperation with UNESCO

**On 21 December 2005, IUPAC and the Division of Basic and Engineering Sciences of UNESCO—the United Nations Educational, Scientific, and Cultural Organization—signed a *Memorandum on Cooperation in Pure and Applied Chemistry*. The two organizations, which have a history of close and successful cooperation, will focus their joint activities on capacity building and information sharing in Africa. The Memorandum lists a number of specific areas of cooperation:**

- addressing global and ethical issues that necessitate international expertise and/or action in the field of chemical sciences
- advancing the chemical sciences through the fostering of international and regional cooperation in research projects, in particular through networks of national centers of excellence
- promoting the services of chemical sciences for the development of technologies, engineering, wealth creation, and improvement of the quality of life
- improving training of young scientists, both men and women, particularly those from the least-developed countries
- sharing scientific information and knowledge

This agreement recognizes the need to follow-up on recommendations in *Science Agenda—Framework for Action*, adopted by the World Conference on Science, particularly those relating to fundamental research, basic human needs, and the sharing of scientific information and knowledge, and the recommendations from the WCS follow-up symposium on "Harnessing Science for Society: Further Partnerships" (Venice, 2005).

The Division of Basic and Engineering Sciences is responsible for promoting international partnerships in science that encourage sustainable development, basic and engineering sciences, renewable energy, and disaster mitigation.

**For more information, contact IUPAC Executive Director John Jost <secretariat@iupac.org>.**

**www.unesco.org/science**

**>Basic and Engineering Sciences**