

Young Chemists to the 41st IUPAC World Chemistry Congress

The 41st IUPAC Congress will be held 5–11 August 2007 at the Lingotto Conference Centre in Torino, Italy. The theme of the Congress is “Chemistry—Protecting Health, Natural Environment, and Cultural Heritage.” It will include the following sessions: Chemistry Protecting Natural Environment, Chemistry Protecting Health, Chemistry Protecting Cultural Heritage, Materials Chemistry and Nanotechnologies, Theoretical Chemistry and Computer Chemistry, Inorganic Chemistry, Analytical Chemistry, Organic Chemistry, Biological and Biophysical Chemistry, and Advances in Chemical Education.



To encourage young chemists to participate in this unique congress, the organizers have established two different programs, both offering travel assistance. The first program is especially targeted to young scientists from developing and economically disadvantaged countries; the second is open to chemists from any country.

About 50 awards will be given to qualified candidates as a contribution toward their registration fees and

travel costs.

Applications from candidates under age 40 are welcomed. Scientists from academia, government, or industry may submit applications directly to the address below. Award winners will be expected to submit an abstract of a poster or paper to be presented at the Congress. These abstracts will be subject to adjudication as will all other submissions for presentation at the meeting.

There is no specific application form, but applicants are required to provide:

- a letter of application
- a brief curriculum vitae
- a confirmation of their current status and affiliation
- a publication list
- a letter of support from the appropriate department head, dean, or laboratory supervisor

Estimates of the economy airfare to and from the Congress should also be provided.

The deadline for receipt of applications is **31 January 2007**. Applications should be sent to:

Prof. Roberto Gobetto
Dept. of IFM Chemistry
Via P. Giuria 7, 10125 Torino (Italy)
E-mail <iupac-2007.youngchemists@unito.it>

 www.iupac.org/news/archives/2006/41stCongress-yc.html

Observers at the IUPAC General Assembly

In sync with this program, and to also facilitate the participation of young scientists at the concurrent **IUPAC General Assembly**, IUPAC and some NAOs offer additional travel support. The Young Observer programs provide an excellent opportunity for young scientists to establish international collaborations, gain knowledge of global research activities, and participate in IUPAC activities.

For more details about these programs, including application procedures, age limits, criteria for selection, and timelines/deadlines, please inquire with one of the following individuals, depending on your current location:

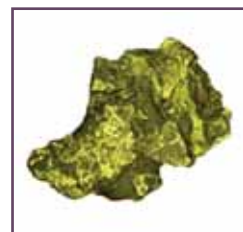
- In the USA, contact Katherine Bowman at the National Research Council <iupac-us@nas.edu> (deadline is 15 January 2007).
- In the UK, contact Stanley Langer at the Royal Society of Chemistry <langers@rsc.org> (deadline is 15 January 2007).

For all other countries represented in IUPAC by a National Adhering Organization, invitations will follow the awards made to Young Chemists by the Congress itself. Those interested should therefore apply first to the Congress program by 31 January 2007.

 www.iupac.org/general/Young-Observer

The XML Gold Book Online

The IUPAC Gold Book—the *Compendium of Chemical Terminology*—is now available in an all-new format, making this key resource computer and Net friendly. The new version takes full advantage of new technologies based on eXtensible Markup Language (XML) and provides efficient ways of browsing, searching, and simply using this reference. The XML *Gold Book* is a milestone in chemical referencing.



Turn to page 28 for a more detailed presentation of the new format and feature, or to simply see for yourself, go to <<http://goldbook.iupac.org>>.

IUPAC Elections for the 2008–2009 Term

Every two years, IUPAC holds an election for its officers and committee members. About 120 individuals are to be elected or reelected either as Titular Members, Associate Members, or National Representatives. Information concerning the voting process and the role of each kind of member is contained in the Union bylaws.

Any qualified individual who is interested in being nominated is invited to contact his/her National Adhering Organization (NAO) and/or the current committee officers. The next election will cover a two- or four-year term that will start in 2008. The following division committees and standing committees will all have vacancies: Physical and Biophysical Chemistry, Inorganic Chemistry, Organic and Biomolecular Chemistry, Polymer, Analytical Chemistry, Chemistry and the Environment, Chemistry and Human Health, Chemical Nomenclature and Structure Representation, CHEMRAWN, Chemistry and Industry, Chemistry Education, Interdivisional Committee on Terminology, Nomenclature and Symbols, and Committee on Printed and Electronic Publications.

As part of the nomination procedure, NAOs are invited to submit curriculum vitae for each nominee to the IUPAC Secretariat no later than 1 December 2006. Elections for each division committee will then take place during the first half of 2007. The 2008–2009 memberships for all committees will be finalized during the next General Assembly in August 2007.

Individuals interested in becoming officers on the IUPAC Bureau should contact his/her NAO. Nominations for officers have a different timeline and can only be made by an NAO. Elections will take place at the Council Meeting during the next General Assembly.

Contact information for all NAOs and division and standing committee officers is available on the IUPAC website, or upon request at the IUPAC Secretariat (e-mail <secretariat@iupac.org>; tel.: +1 919 485 8700; fax +1 919 485 8706).

 www.iupac.org/news/archives/2006/elections.html

Industry and IUPAC Meeting Halfway



A world chemistry leadership meeting has been proposed to bring together senior academic and industrial figures to discuss the changing regulatory environment for chemistry in the world. The meeting, which would take place during the 41st IUPAC World Chemistry Congress in Torino in August 2007, was suggested during discussions at the IUPAC Committee on Chemistry and Industry (COCI), held in Chicago, Illinois, USA, from 20–21 July 2006.

IUPAC has an obvious interest in the development of the chemical sciences and the regulatory environment in which they are deployed by industry. The purpose of the meeting would be to identify IUPAC-sponsored or supported research projects that would benefit both science and industry. IUPAC has previously organized such large projects, including a study on endocrine disrupting chemicals that helped move the science forward significantly and provided new perspectives. This project will aim to share views on health and environment issues facing both science and industry in the context of the Strategic Approach to International Chemicals Management (SAICM),¹ Registration, Authorization, and Evaluation of Chemicals (REACH),² and industry responses through the Global Product Strategy and Responsible Care initiatives. In particular, it may be very useful to develop aligned or joint perspectives on the safety and use (both intentional and unintentional) of chemicals.

Another important area of focus could be bio-monitoring, where IUPAC is concerned that the results from analytical science are correctly presented and interpreted, and that international standards for the use of biomonitoring techniques are established. The establishment of such international frameworks would be very useful in ensuring that biomonitoring can be a bona fide tool for the risk assessment of chemicals in the body.

For more information contact the IUPAC secretariat <secretariat@iupac.org> or COCI officers—visit <www.iupac.org/standing/coci.html>.

¹ www.chem.unep.ch/saicm

² http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm

IUPAC President Attends the International Chemistry Olympiad

In early July, Bryan Henry became the first IUPAC president to participate in the International Chemistry Olympiad (ICHO) held 2–11 July 2006 in Gyeongsan, South Korea. Henry presented IUPAC Gold Books to the gold medalists at the closing ceremonies and delivered a brief talk and general overview of IUPAC at a farewell dinner that evening.

Organizers of the 38th IChO awarded a total of 28 gold, 56 silver, and 81 bronze medals in Gyeongsan, which is south of Seoul. More than 250 students from 68 countries competed in theoretical and practical exams that each lasted five hours.

All four members of China's team won gold medals. Taiwan, the Russian Federation, and the host country each won three gold medals and one silver medal. Poland ranked fifth, earning two golds, one silver, and one bronze. Cheng-Yi Kao of Taiwan won an individual award for performance on the practical test, while Lichao Cai of China received recognition for excellence on the theoretical component. Hande Boyaci from Turkey earned the award for Best Female Student. Students also participated in several cultural tours and activities in South Korea.

Henry's visit, from 5–11 July, was arranged by the IChO-2006 Organizing Committee and Duckwan Lee in particular. Kook Joe Shin, a past president of the Korean Chemical Society, (KCS) served as Henry's host during his entire stay and organized his itinerary.

The first three days of his visit took place in Seoul, where he had the opportunity to meet many members of the Korean chemical community. On 6 July he met with Eun Lee, the current president of the Korean Chemical Society, and Young Bok Chae, president of the Korean Federation of Science and Technology



A medalist is awarded at the closing ceremonies of the 38th International Chemistry Olympiad.

Societies. That evening he attended a dinner with Korean chemists who are associated with IUPAC in various roles. Korea is very active within IUPAC with 43 Fellows, 10 individuals who are either chairs or members of task groups, 20 subcommittee members, 4 national representatives, and 7 titular members. Notable among this group is Jung-il Jin who is a member of the Bureau and president of the Polymer Division.

On 8 July, Henry traveled to Gyeongsan, in the southeastern region of South Korea, where he had a traditional Korean dinner with several member of the IChO Organizing Committee, including Daewoon Lee, the committee chair. Over dinner, Henry learned about the history of the Chemistry Olympiad movement and its impressive growth.

According to Henry, 10 July was the highlight of the trip. It began with a visit to Yeungnam University, in Gyeongsan, which was the venue for IChO. After visiting the Department of Chemistry and meeting with the University President, he was treated to a guided tour of the fascinating university museum with its anthropological focus on the indigenous culture. Next, he met with Jin Soon Cha, the next president of the KCS. He ended the day at the Olympiad. "The closing ceremonies were nothing short of incredible," said Henry.

The International Chemistry Olympiad was detailed in the July-Aug 2005 *CI* <www.iupac.org/publications/ci/2005/2704/1_apotheker.html>. The next Chemistry Olympiad will be held in Russia at Moscow State University in July 2007 under the theme "Chemistry: Art, Science, and Fun." The official website of the 39th IChO is <www.icho39.chem.msu.ru>.



From left: Eun Lee (president of the Korean Chemical Society), Bryan Henry (IUPAC president), and Kook Joe Shin (KCS past president).

For more details about the 2006 event, see <<http://icho2006.kcsnet.or.kr>>.

InChI 1.01

The IUPAC International Chemical Identifier, InChI version 1, was released in August 2006. The whole package, available at www.iupac.org/inchi, includes:

- InChI version 1 software version 1.01 documentation, and Windows and Linux (i386) executable programs
- InChI version 1.01 source code and Application Program Interface (API)
- InChI validation protocol
- What's new in InChI software version 1.01

This release includes the following new features:

- InChI validation protocol to establish whether software that includes the InChI algorithm produces valid InChI
- InChI reversal: InChI to structure conversion (connection table, bond orders, charges, stereochemical parities; the resultant structures have no coordinates; success rate on average is 99.7 percent)
- Several bug fixes that eliminate known InChI failures
- Several minor additional features

For more detail, see the *Whats_New.pdf* included in the package.

We express our gratitude to those who discovered and helped fix various problems with the software and validation protocol.

Q&A—Q: Why is the InChI version in this package 1, not 1.01?—**A:** The version of the chemical identifier (as a string of characters derived from a chemical structure) is the same, only the software and documentation were updated. Therefore, the InChI version is still version 1.



See Tools of the Trade on page 12 for more information on InChI.

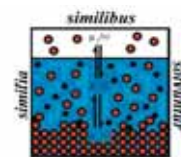
 www.iupac.org/projects/2004/2004-039-1-800.html

Dewen Zeng Receives the 2006 Franzosini Award

At the 5th Annual Meeting of the IUPAC Subcommittee on Solubility and Equilibrium Data, the Franzosini Award was presented to Dewen Zeng in appreciation of his scientific contributions to the Solubility Data Project.

Zeng received his Ph.D. in 2003 at TU Bergakademie Freiberg, Germany. During his Ph.D. project he worked under the supervision of Wolfgang Voigt (Institute of Inorganic Chemistry) on the thermodynamic modelling of salt-water systems. Zeng is a very active scientist who became an expert in thermodynamics and phase diagrams. After one year as a post-doc he returned to China and continued to work on modelling and evaluating solubilities and vapor pressures of salt-water systems.

At the 12th International Symposium on Solubility Phenomena, held in Freiberg, Germany, 24–28 July 2006, Zeng presented research conducted with Hongyan Zhou and Wolfgang Voigt on “Thermodynamic Consistency of Solubility and Vapour Pressure of a Binary Saturated Salt-Water System: II. $\text{CaCl}_2 + \text{H}_2\text{O}$.” See page 31 for a report on the symposium.



Dewen Zeng would like to contribute with his scientific experience to the activities of the solubility data group, particularly in respect to the oceanic salt project. Since Zeng is a native Chinese writer and speaker, he can provide access to Chinese literature on solubility phenomena, which is becoming more and more important to the solubility data group.

Zeng is a professor in the College of Chemistry and Chemical Engineering at Hunan University, Changsha, China.

 For more info about the Franzosini Award, its origin, and previous awardees, see www.iupac.org/divisions/V/502/Franzosini-Award.html.