## Conference Call

following the Opening Ceremony of the symposium. In 2008 the award was given to two outstanding scientists within the carbohydrate world: Carolyn Bertozzi and Yukishige Ito.

Bertozzi is the leader in applying organic chemistry in living systems, most specifically for the study



Whistler award winner Yukishige Ito, Japan.

of glycosylation. To this end she has designed elegant chemical methods to introduce labelled unnatural compounds into the cellular biosynthetic machinery, thereby allowing for a wide range of studies to monitor changes in glycosylation in tissues and cells. Her cell surface engineering makes an essential contribution to biomedicine with a broad impact at the chemistry to biology interface.

Ito's contributions cover the chemical synthesis of glycoconjugates for biological investigations, including

novel synthetic methods of development. He has made distinguished contributions in many areas; of exceptional note are methods developed for alpha sialoside and beta mannoside linkages and the synthesis of some enormously complex molecules. His fundamental synthetic work on all aspect of large N-glycans makes it possible to focus in a very systematic way on the processing and quality control of glycoproteins in the cell, thereby clarifying key enzymes and chaperones at the molecular level.

Bjørn Erik Christensen, NTNU, Trondheim, Norway, was in charge of the scientific program of the symposium, which covered most aspects of carbohydrate chemistry:

- synthesis
- analysis
- glycobiology, glycomedicine, glycomics
- therapeutics, new materials, and bionanotechnology
- polysaccharides—structure, functions, applications
- industrial applications of carbohydrates

The plenary and oral session presentations ranged from biosynthesis of new bioactive oligosaccharides to structural elucidation of polysaccharides from various sources to their bioactive functions in different cell

systems. Analytical and bioassay methods for structure activity studies were also presented.

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# **Organic Synthesis**

### by Sung Ho Kang

The 17th International Conference on Organic Synthesis (ICOS 17), which was held in Daejeon, Korea, from 22-27 June 2008 at the newly opened Daejeon Convention Center, drew more than 1 000 participants, including 412 scientists from 32 countries. Considering the many thousands of practitioners of organic and organic-related chemical sciences in Korea, it was surprising that in its 30+ year history this conference had never been held on the Peninsula until this year. The citizens and chemical professionals of Korea, and of Daejeon, were grateful to finally host this extremely important professional meeting.

The organizers of ICOS-17 decided to hold the conference in Daejon because they felt its "Science Town" district would stimulate and encourage professionals and help motivate more young students in Korea and Asia to consider to the field of organic synthesis.

ICOS-17 offered expanded coverage of subjects from previous conferences with a different presentation format. The conference topics were grouped as follows:

- 1. Discovery of New Reagents and Reactions
- 2. Challenges and New Trends in Natural Products Synthesis



ICOS-17 organizers with conference co-chairs Eun Lee and Sunggak Kim. (from left) Hee-Seung Lee, Guncheol Kim, Hong-Seok Kim, Sung Ho Kang, Eun Lee, Sunggak Kim, Hyo-Won Lee, Hyun-Joon Ha, Han-Young Kang, Hee-Yoon Lee.

# Conference Call

- Prospects in Bioorganic Chemistry and Chemical Biology
- 4. Visions in Organic Materials Research
- Events in Drug Discovery and Process Development

Dean Toste (Univ. of California, Berkeley, USA) presented his hour-long Thieme-IUPAC prize lecture entitled "Gold(I) Catalysis for Organic Synthesis: Development, Applications and Asymmetric Catalysis (Jul-Aug 2008 *CI*, p. 21)." The 51 other invited speakers (36 from academia, 13 from industry, and 2 from research institutes) delivered superb 40-minute lectures in one morning session and three parallel afternoon sessions. More than 50 percent of the 533 poster presentations were given by foreign participants in two non-parallel sessions.

The opening and closing ceremonies of the conference featured remarks from well-known chemists and non-chemists alike. The opening ceremony featured a welcome address by Eun Lee (conference co-chair) and addresses by Jung-II Jin (president of IUPAC) and Young Kwan Kim (vice mayor of Daejeon Metropolitan City). During an enjoyable banquet that followed an



ICOS-17 staff with organizing committee chairman Prof. Sung Ho Kang. (back row from left) Tae Woo Kim, Le Duy Hieu, Wonchul Lee, Sungkyoung Kang, Hyoung Cheul Kim; (front row from left) Hyo Young Kwon, Sung Ho Kang, Sanghye Shin, Celindro C. Nelma, and Young Suk You.

impressive traditional Korean performance, a few important remarks of gratitude were made by Eun Lee, and of congratulation by David StC. Black (secretary general of IUPAC) and by Tohru Fukuyama (University of Tokyo). The formal conference closing occurred through a farewell address by Sunggak Kim (conference co-chair).

Leiv Sydnes (University of Bergen) has been selected as the chairman of ICOS-18, to be held in Bergen, Norway from 2–5 August 2010.

Sung Ho Kang <shkang@kaist.ac.kr> was chairman of the organizing committee; he is a professor in the Department of Chemistry at the Korea Advance Institute of Science and Technology in Daejeon, Korea.

#### **Bookworm**

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tion for the entire symposium. The symposium sessions covered mycotoxins and human health, analytical techniques for mycotoxins, animal feed and dairy products, dried fruits, spices, botanicals and derived products, nuts, cereals and cereal-based products, coffee, cocoa and derived products, risk assessment, regulations and international trade, advances in toxicology, microcystins and other freshwater toxins, lipophylic shellfish toxins, paralytic shellfish poisoning toxins, amnesic shellfish poisoning toxins, and other marine toxins.

A selection of the plenary lectures have been published in a special issue of *Food Additives and Contaminants* [February 2008: 25(2); doi: 10.1080/0 2652030701788865 for access to the foreword]. This special issue, edited by Hamide Z. Senyuva and Hans P. van Egmond, and is available free online. A selection of the contributed papers on mycotoxins was published in a special issue of *World Mycotoxin Journal* [August 2008: 1(3)]. For titles see http://wageningenacademic. metapress.com/content/120817/. The accepted phycotoxin papers will be published in a forthcoming issue of *Food Additives and Contaminants*.

The 11 plenary lectures published in *Food Additives* and *Contaminants* reviewed progress in managing and reducing mycotoxins in the food chain, including cattle feed and dairy products, small grains and maize, botanicals and dried fruit, the grape-wine chain, peanuts, hazelnuts, and coffee. These reviews were complemented with papers covering the use of clays to reduce human exposure, examining the impact of mycotoxins on human health in developing countries, and providing an update on analytical tools essential for successful monitoring of reduction strategies.

A quick review of the 19 mycotoxin articles in the symposium issue of *World Mycotoxin Journal* shows that they focus on such areas as analysis, reference materials, occurrence, effects of processing, human exposure, toxicology, mechanism of action, modelling, and (biological) control of mycotoxigenic fungi. The scope of the papers is indicative of the multidisciplinary nature of the symposia. For more information about this special symposium issue, contact the publisher at <sales@wageningenacademic.com>.