

**Pure and Applied Chemistry (PAC) is the official journal of IUPAC. It publishes the main invited lectures of symposia sponsored by the Union; the recommendations of its Commissions on nomenclature, symbols and units, and technical reports on standardization, recommended procedures, collaborative studies and data compilations. Summaries of the most recent IUPAC recommendations on nomenclature and symbols, and technical reports appearing in PAC are published in *Chemistry International* in the section Recent Reports. In this section we take a brief look at symposia and lectures published in recent issues of PAC.**

## Lectures from Symposia

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The April 1997 issue of *Pure and Applied Chemistry* (Vol. 69, no. 4) contains the texts of lectures from three symposia: the International Symposium of Sweeteners, held in Jerusalem, Israel, on 14–20 July 1996; the 16th IUPAC Symposium on Photochemistry, held in Helsinki, Finland, on 21–26 July 1996; and the International Conference on Chemical Physics on the Border of the 21st Century, held in Moscow, Russia, on 16–19 April 1996.

### Sweeteners

The International Symposium on Sweeteners was held under the auspices of IUPAC, the Hebrew University of Jerusalem and the Israel Academy of Sciences. The programme included plenary and contributory lectures from many areas of natural and synthetic sweeteners, structure–activity relationships of sweeteners, mechanism of gustation, health aspects of sweeteners, side effects of commercial sweeteners, use of sweeteners in foods, sensory characteristics of sweeteners, neuro-physiological, inborn and acquired aspects of sweetness, sweeteners in weight control and diabetes and legislation of commercial sweeteners.

Prof. HRH Princess Chulabhorn Mahidol was the guest of honour at the Symposium and, at a ceremony prior to the lectures, she was presented with an Honorary Fellowship by the Hebrew University of Jerusalem. Her presentation, entitled 'Natural products for the improvement of the quality of life', covered work on the utility of some Thai plants as a source of food, including toxicological studies of stevioside and chemical investigations of cassava (*Manihot esculenta* Crantz). Her full text, plus that of the nine other plenary lectures to the conference, is presented in *Pure & Applied Chemistry*, **69**(4), 655–727.

### Photochemistry

The plenary and invited lectures to the 16th IUPAC Symposium on Photochemistry [**69**(4), 729–856] as in previous years, covered a wide range of topics, including theoretical chemistry, biological chemistry, chemis-

try in the solid state, energy transfer and fast reaction kinetics. In particular, many examples were presented of the reactions of short-lived intermediates, such as biradicals, which exemplified their synthetic utility.

The conference concluded with the presentation of the Porter Award to Prof. Noboru Mataga of the Institute of Laser Technology, Osaka, Japan. His lecture presented results from picosecond and femtosecond laser spectroscopy studies on photoinduced transfer phenomena in solutions. Such studies have aided the development of exciplex chemistry. Topics covered included the excited dipolar solute–solvent interactions, solvent and driving force effects on the electronic and geometrical structures of inter- and intra-molecular exciplex systems, energy gap dependencies of charge separation in the fluorescence quenching reactions and charge recombination of product loose ion pairs, non-Marcus type energy gap dependence of charge recombination of compact ion pairs formed by excitation of ground state charge transfer complexes, photoinduced electron transfer coupled with proton transfer or proton shift in benzophenone-amine and some hydrogen bonding exciplex systems, and extensions of exciplex studies to photosynthetic reaction centre models.

### Chemical physics

The International Conference on Chemical Physics on the Border of the 21st Century was held under the auspices of the Physical Chemistry Division in conjunction with the Russian Academy of Sciences, Moscow State University. The four plenary lectures are presented [**69**(4), 857–904], including that of the Conference Editor, Alexander E. Shilov of the Emanuel Institute of Biochemical Physics, Russian Academy of Sciences. Prof. Shilov discussed the contribution of N. N. Semenov, the 1956 joint winner of the Nobel Prize for Chemistry, to 20th century chemistry, not only of his discovery of branching chain reactions and the development of the general theory of chain reactions and thermal explosions, but also of his prediction that biology is likely to play a crucial role in future chemistry.

The other three plenary lectures dealt with: the role of

## Measurement technologies in atmospheric chemistry

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A workshop and short course on 'Instrumentation and Measurement Methodologies in Atmospheric Chemistry' was conducted during the two weeks 4–15 November 1996 at the Laboratory of Environmental Analytical Chemistry of the Federal University of Bahia, in Salva-

dor (Bahia), Brazil. The course was organized and coordinated by Prof. Tania Tavares, Head of the Laboratory and a Titular Member of the IUPAC Commission VI.2, Atmospheric Chemistry. Several other members of the Commission also took part by serving as lecturers and/or demonstrators.

The objective of the workshop was to broaden theo-



**Prof. Tania Tavares in Brazil**

retical and practical knowledge in atmospheric measurement techniques among professionals of different scientific backgrounds in Third World countries, especially those that are to some extent connected with WMO Global Atmospheric Watch (GAW) stations. The syllabus included morning lectures and afternoon laboratory practice, as well as a field measurement campaign at the site of the Brazilian GAW station. Subjects taught included the behaviour and reactions of atmospheric constituents, gas phase, particulate and liquid phase sampling and measurement techniques, spectroscopy, chromatography, fundamentals of quality assurance and control, and meteorological concepts required for data interpretation.

This was the first course of its kind, which offered laboratory instruction in addition to lectures. The course was open to anyone who had a good command of English and who was engaged in work related to chemical analysis of components in the air. Twenty-six persons from eight different countries attended: Argentina, Brazil (four different states), Chile, Costa Rica, Indonesia, Kenya, Mexico, Puerto Rico. The lecturers, who were either analytical or atmospheric chemists, aside from two meteorologists, came from Brazil, Croatia, Germany, The Netherlands and the USA.

Sponsors of the workshop, in addition to IUPAC's Chemistry of the Environment Division, included the American Geophysical Union (AGU), the Atmospheric Chemistry and Environment Education Committee of the International Global Atmospheric Chemistry Programme (IGAG), the Inter American Institute for Global Change Research (IAI) and the Global Change System for Analysis, Research and Training (START).

Judging from the comments of the participants, the workshop has been highly successful and fully met all the objectives. Prof. Tavares is to be thanked for a very substantial effort that made this project a success.

**Peter Warneck**  
**Chairman, Commission VI.2, Atmospheric**  
**Chemistry**

## CHEMRAWN in Montevideo

**Prof. Patrick Moyna of the University of Montevideo writes:**

As a result of extensive discussion in the CHEMRAWN Committee and with all the Chemical Societies in Latin America, there is considerable support for a CHEMRAWN-style conference to be held in Montevideo. The conference, proposed for 15–20 March 1998 under the title 'Chemical Studies Applied to Environmental Evaluations', will be aimed at improving the evaluation and understanding of changes to the environment and the implementation of sensible measures to conserve it. Montevideo is at the heart of the recently established Mercosur economic region (which includes Argentina, Brazil, Paraguay and Uruguay, and will shortly be extended to include Bolivia; there is an initial association with Chile and negotiations have begun with Peru, Ecuador, Columbia and Venezuela).

The conference goals are to enable experts in Latin America to analyse the present situation and to exchange experiences and help foster use of best practices and to prepare recommendations for future work, establish monitoring networks and build up the concepts and practice of quality assurance and control. Emphasis will be placed on the need for collaboration between government, environmental agencies, industry and academic institutions.

Support from and collaboration with other relevant IUPAC Divisions and also UNESCO, IOCD and RAQAL are considered essential for the success of the conference.

For further information, please contact: Prof. Patrick Moyna, Facultad de Quimica, University of Montevideo, CP 11800 Montevideo, Uruguay. Tel.: +598 2 94 1884. Fax: +598 2 94 1906.

## COSPAR scientific assembly

The 32nd COSPAR (Committee on Space Research established by the International Council of Scientific Unions) Scientific Assembly is scheduled to be held on 12–19 July 1998 in Nagoya, Japan. The programme is intended to cover around 80 meetings and symposia, on topics including:

- The Earth's surface, meteorology and climate
- The Earth–Moon system, planets and small bodies of the Solar System
- The upper atmospheres of the Earth and planets, including reference atmospheres
- Space plasmas in the Solar System, including planetary magnetospheres
- Research in Astrophysics



- Life sciences as related to space
- Materials sciences in space
- Fundamental physics in space
- Satellite dynamics
- Scientific ballooning
- Space born geophysical data for global change studies
- Science and engineering aspects for Solar System exploration

Abstracts are invited by 9 January 1998, and papers will be published in *Advances in Space Research*.

For more information, please contact: COSPAR Secretariat, 51 bd de Montmorency, 75016 Paris, France. Tel.: +33 1 45 25 06 79. Fax: +33 1 40 50 98 27. E-mail: COSPAR@paris7.jussieu.fr. Information is also available on the WWW at <http://www.mpae.gwdg.de/COSPAR/COSPAR.html>.

## IFCC/Roche establish Human Genomics Conferences

The International Federation of Clinical Chemistry (IFCC), an Associated Organization of IUPAC, and Roche Diagnostics have agreed to establish a series of conferences 'Human Genomics: the Basis of the Medicine of Tomorrow'. They aim to highlight progress in molecular genetics and its potential in diagnosis and therapy. The first conference, entitled 'Recent Progress

in Molecular Biology Technology', is to be held in Singapore on 15–18 March 1998. This will focus on improved DNA diagnostics and define the role of the clinical chemistry laboratory of the future.

The organizers wish to bring together scientists specialized in the field of molecular diagnostics for discussion and preparation of recommendations for better clinical use of these new technologies. They also plan to offer interested clinical chemists a high level course in molecular diagnostics after the Conference.

For further information, please contact: Ursula Steeb, IFCC-Roche Conference Secretary, Roche Diagnostics, Bau 223/315, Postfach, CH-4070 Basel, Switzerland. Tel.: +41 61 6872516. Fax: +41 61 687 25 10. E-mail: Ursula.Steeb@Roche.com



## 'Dictionary of Substances' goes online

The *Dictionary of Substances and their Effects*, produced by the UK's Royal Society of Chemistry (RSC), is now available as an online file (file 307) on Dialog, an online service of Knight-Ridder Information Inc. The online file provides a pay-as-you-go access option, complementing the print and CD-ROM versions already available from the RSC. The dictionary is a specialist reference source of toxicological and environmental data on over 4000 chemicals, updated twice a year.

### Names and Addresses

Full details (names, addresses, telephone/telex/Fax numbers and E-mail) of the officers of IUPAC bodies were published in *The IUPAC Handbook 1996–1997*. The IUPAC Secretariat has been notified of the following changes:

**Dr David L. Berner** (Secretary, Commission on Oils, Fats, and Derivatives), 10 East Pointe, Fairport, New York 14450, USA. Tel. and Fax: +1 (716) 223 9388.

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**Prof. Waldfried Plieth** (Chairman, Commission on Electrochemistry), Inst. für Physikalische Chemie und Elektrochemie, Technische Universität Dresden, Mommsenstraße 13, D-01062 Dresden, FRG.

**Prof. Rolf D. Schmid** (Chairman, Commission on Biotechnology),  
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### IUPAC colleagues deceased

**UK:** Prof. G. Gee (13 December 1996), Commission on Macromolecules (1953–1961, 1965–1969).

**UK:** Prof. M.L. McGlashan (18 July 1997), Interdivisional Committee on Nomenclature and Symbols (1969–1975), Physical Chemistry Division Committee (1969–1973), Commission on Physicochemical Symbols, Terminology and Units (1963–1979), Commission on Thermodynamics (1965–1969).

**USA:** Prof. C.G. Overberger (17 March 1997), Executive Committee/Bureau (1977–1985), CHEMRAWN Committee (1976–1986), President of Macromolecular Division (1977–1979), Macromolecular Division Committee (1967–1977), Commission on Polymer Characterization and Properties (1977–1980), Commission on Macromolecules (1965–1967).