

## NEWS AND ANNOUNCEMENTS

### IMPORTANT ANNOUNCEMENT ABOUT THE FUTURE OF *CHEMISTRY EDUCATION RESEARCH AND PRACTICE*

**From 2005 (with Volume 5) *Chemistry Education Research and Practice*  
will be published by *The Royal Society of Chemistry*  
(merging with *University Chemistry Education*)**

The journals, *University Chemistry Education*, published by the Royal Society of Chemistry, and *Chemistry Education Research and Practice*, published from the University of Ioannina, are merging with effect from 1 January 2005. The new, fully electronic journal will be published by the Royal Society of Chemistry under the title: *Chemistry Education Research and Practice*, and, as both its predecessors, it will continue to be available free of charge on the Internet. The new URL will be: [<http://www.rsc.org/cepr>] There will be four issues per year.

The new journal will be edited by Georgios Tsapalis ([gtseper@cc.uoi.gr](mailto:gtseper@cc.uoi.gr)) and Stephen Breuer ([s.breuer@lancaster.ac.uk](mailto:s.breuer@lancaster.ac.uk)) and will maintain the high standards set by its predecessors. Its editorial policy will be the following.

*Chemistry Education Research and Practice* is the journal for teachers, researchers and other practitioners in chemical education. It is the place to publish papers on:

- research, and reviews of research in chemical education;
- effective practice in the teaching of chemistry;
- in depth analyses of issues of direct relevance to chemical education.

Contributions can take the form of full papers, preliminary communications, perspectives on methodological and other issues of research and/or practice, reviews, letters relating to articles published and other issues, and brief reports on new and original approaches to the teaching of a specific topic or concept.

The new journal welcomes contributions of the type described above. The language of the manuscripts must be English. They should include an abstract of not more than 200 words, a list of keywords, and address of corresponding author, including e-mail address. Manuscripts should be sent, in electronic form only, to both editors, in the first instance. Only one file, carrying the authors' names, and including figures and tables placed appropriately inside the text, plus bibliography, should be submitted.

## THE SCIENCE EDUCATION REVIEW (*SER*)

*The Science Education Review* (*SER*) (ISSN 1446-6120) is targeting at primary and high school teachers, by providing summaries of carefully selected research and other articles from around the world, compiled by the Editor, Dr *Peter H. Eastwell*. It also publishes original, peer-reviewed feature and contributed articles (including formal research papers), plus a lot more. The content is available in a choice of formats: *SER On-Line*, ready-to-use MS Word e-mail attachments (received monthly), and a printed version (received quarterly). Please find details at <http://www.ScienceEducationReview.com>

## EFFECTIVE PRACTICE IN OBJECTIVE ASSESSMENT (A book by Alex H. Johnstone)

This book is aimed particularly at new academics, but would be useful for more experienced teachers who are thinking about using objective methods of assessment to help to ease the load in large classes. It strives to point out that the construction and interpretation of these questions is by no means trivial and requires new skills on the part of the teacher. The author is Professor *Alex H. Johnstone*, whose extensive research work has also included assessment.

*Effective practice in objective assessment* could form the basis for courses on assessment run in universities by Staff Development Units and could act as a text for the course as well as being a handbook for actual practice.

**Contents:** (i) *Talking the same language* (setting out the terminology of assessment); (ii) *Conventional question types* (a description of the range of question types which can be classified as objective); (iii) *Constructing fixed-response questions* (the skills of constructing valid questions); (iv) *Fixed-Response questions with a difference* (new types of objective questions); (v) *Designing a test* (how to construct a balanced test of skills and outcomes to yield meaningful results.); (vi) *Beware of numbers* (the logical handling of soft data).

**Publisher:** *Learning and Teaching Support Network* (LTSN) (Physical Sciences).  
Publication Year: 2003. ISBN: 1-903815-10-X (72 pages)

[LTSN is a government supported network whose publications are available free to UK academics on request. For non UK readers there could be a charge. It is obtainable from:  
Dr **Tina Overton**, Director of LTSN Physical Sciences, Department of Chemistry, University of Hull, Hull HU6 7RX.]

## REPORT ON THE 18<sup>TH</sup> INTERNATIONAL CONFERENCE ON CHEMICAL EDUCATION (18<sup>TH</sup> ICCE)

The 18<sup>th</sup> *International Conference on Chemical Education* (18<sup>th</sup> ICCE) was held at Hilton Hotel, Istanbul, Turkey, from 3 to 8 August 2004. Over 500 participants, from all over the world, attended. Conference events included 9 plenary lectures, 10 key note lectures, 181 oral presentations organised in 30 symposia, 9 workshops, 152 poster presentations, and an exhibition (Fun chemistry). Numerous social events, including a Bosphorous boat tour and an Old City classic tour were part of the Conference too.

**Plenary lectures** were delivered by: **Peter Atkins** (Communicating chemistry: The challenge); **Peter Mahaffy** (Chemistry education: The shape of things to come); **Joe J. Lagowski** (The Chemistry laboratory in digital world); **John D. Bradley** (Chemistry education for development); **Bob Bucat** (Implications of chemistry education research: Pedagogical Content Knowledge); **Mansoor Niaz** (How to facilitate students' conceptual understanding of chemistry? A History and Philosophy of Science perspective); **Jack Holbrook** (Making chemistry teaching relevant); **Mei-Hung Chiu** (A National survey of students' conceptions in chemistry); **Ayhah Ulubelen** (Chemistry education and chemical industry in Turkey).

**Keynote Lectures** were delivered by **Natalia P. Tarasova** (Chemical education for sustainable development); **Warren Beasley** (Teacher and student learning in chemistry: Contrasts and contradictions); **Onno de Jong** (Teaching practice and research in chemical education: Living apart or together?); **Zafra M. Lerman** (Chemistry: An aspiration for theatre and dance); **John Oversby** (The Palava project – A method of assessing modelling capability); **Jung-II Jin** and **Choon H. Do** (Education of macromolecular chemistry to chemistry majors – A close examination of undergraduate textbooks); **Chunli Bai** (Molecular nanotechnology); **Avi Hofstein** (Chemistry teachers' professional development for the implementation of new content and pedagogical standards); **Jorge G. Ibanez** (Redox chemistry and aquatic environment: Examples and microscale experiments).

A Book of Proceedings (Abstracts) was distributed. The 19<sup>th</sup> ICCE will take place in 2006 in Seoul, Korea.

*Georgios Tsaparlis*, Editor, CERP

### REPORT ON THE 7<sup>TH</sup> EUROPEAN CONFERENCE ON RESEARCH IN CHEMICAL EDUCATION (7<sup>TH</sup> ECRICE)

The 7<sup>th</sup> *European Conference on Research in Chemical Education* (7<sup>th</sup> ECRICE) was hosted in Ljubljana, Slovenia. A total of 128 experts, from 22 European and 4 other countries, participated in the conference. The majority of the participants were university lecturers, but about a quarter of them were primary and secondary school teachers and university students. The Slovenian delegation represented about one-fifth of the participants. The conference programme included plenary lectures, keynote lectures, oral and poster presentations of research and projects, and workshops.

Plenary lectures were delivered by: **Miha Tišler** (connections between chirality as a molecular property and the biochemical function of a molecule with this property); **John K. Gilbert** (importance of the creation and use of models in studying and teaching chemistry); **Mahesh K. Lakshman** (synthesis of nucleosides using palladium as a catalyst); **Uri Zoller** (what kind of chemistry lessons promote literacy in the natural sciences at a time of sustainable development); **Erik Thulstrup** (different ways of teaching and studying chemistry); **Diane M. Bunce** (problems and common issues that arise in research on the effects of educational interventions, and objective explanations for the results); **Mordechai Livneh** (the wide range and usefulness of micro-experimentation in chemistry lessons); **Margareta Vrtačnik** (a multimedia presentation: *Chemistry in Art and Art in Chemistry*).

**Keynote Lectures** were delivered by **John Holman** (a new English project for natural sciences lessons: *21st Century Science*); **Yuri Orlik** (a comparison of the American and European models for the education of chemistry teachers); **Vasilis Koulaidis** (analysis of chemistry textbooks); **Lucija Perharič** and **Branko Družina** (compounds that we bring into

our bodies with food and drink and cause disturbances in endocrine function); **Viktor Obendrauf** (micro-experiments and a multimedia presentation of the development of fire-starting technology).

Finally, there were 45 oral presentations and 52 poster displays, and 6 workshops. Three workshops introduced various didactic approaches: studying in groups, autonomous learning and the lesson as a "mini-project". Two workshops introduced the use of electronic instruments and links with computers in chemistry lessons. At one workshop the participants became acquainted with the use of the *Minet* portal in teaching chemistry and content in the area of environmental protection. The Conference included also various social events.

After the conclusion of the conference there was also a meeting of the Education Division of the *Federation of European Chemical Societies* (FECS). In its report the committee rated the Ljubljana conference a success and stressed the high quality of contributions, from the plenary lectures to the poster displays and workshops. They also fixed the location and date for the 8th ECRICE and 4th ECCE: Budapest, Hungary, 2006.

A collection of the conference contributions will be published electronically (on CD) and also partially in book form. The deadline to submit contributions was 30 September 2004.

Dr Dušan Krnel, Organization Committee President, Faculty of Education, *University of Ljubljana*, Slovenia

**EUROPEAN VARIETY IN CHEMISTRY EDUCATION – 2005**  
**Faculty of Chemistry, Jagiellonian University, Kraków, Poland, 5-7 July 2005**

This conference, which is a European counterpart of the UK conference "Variety in Chemistry Education", is devoted to *practical aspects of chemical education at tertiary (university) level*. It provides a forum for the exchange of ideas related to teaching and learning chemistry at degree level, the sharing of good practice and innovation, and the dissemination of outcomes of pedagogic research as it relates to chemistry at university level in Europe.

Proposals for contributions on any of the following topics are particularly welcome:

- Chemistry for non-chemists
- Practical education: the role, effectiveness and organisation of the laboratory and practical placement (internship)
- IT-supported education and assessment
- Innovation in: content, methods, assessment,
- Interdisciplinarity
- Relation and links between education and research
- Academic teachers' development
- European educational programmes and projects: examples of good, transferable practice

In addition, there will be two general sessions:

- Chemistry studies in the context of the Bologna process
- Chemical education research at university level

The conference will comprise plenary lectures (30 min), oral presentations (10 min), poster sessions, and workshops. The language of the conference is English.

For more details on The European Variety in Chemistry Education conference contact:  
Dr Iwona Maciejowska, Faculty of Chemistry JU, 30-060 Kraków, Ingardena 3, tel.  
+48/12/6632066, fax +48/12/6340515, e-mail: [eurovariety@chemia.uj.edu.pl](mailto:eurovariety@chemia.uj.edu.pl)  
or look at the conference website: <http://www.chemia.uj.edu.pl/eurovariety/>

### **5<sup>TH</sup> INTERNATIONAL CONFERENCE ON THE HISTORY OF CHEMISTRY: CHEMISTRY, TECHNOLOGY AND SOCIETY**

From 6-9 September 2005 the Working Party (WP) on History of Chemistry of the *European Association for Chemical and Molecular Sciences* (EuCheMS) - formerly Federation of European Chemical Societies (FECS) - will held its biannual *History of Chemistry Conference* in Lisbon and Estoril, Portugal.

A major aim of the conference is to facilitate communication between historically interested chemists and historians of chemistry from all over Europe. Under the large umbrella of the theme "Chemistry, Technology and Society", the conference will mainly focus on three topics, which all have attracted public and scholarly attention in recent years: (1) the material culture of chemistry; (2) applied chemistry; (3) the popularisation of chemistry. Some special sessions will also be devoted to the development of Portuguese chemistry.

You are kindly invited to contribute to the conference by presenting a paper. Deadline for submitting is 1 February 2005. The Local Committee has selected a beautiful venue for the Conference, which makes it very attractive to come.

For more information, please consult the website of the Conference:  
<http://5ichc-portugal.ulusofona.pt/>

*Prof. Ernst Homburg, Chairman of the EuCheMS Working Party on History of Chemistry,  
Department of History Faculty of Arts and Culture, Universiteit Maastricht, P.O. Box 616  
6200 MD Maastricht, Netherlands; fax 00-31-43-388 4917; email:  
[E.Homburg@history.unimaas.nl](mailto:E.Homburg@history.unimaas.nl)*