IUPAC Division III (Organic and Biomolecular)

Draft report for 2008-2009 to Committee on Chemical Education

INTRODUCTION

The Executive Officers of Division III for the 2008-2009 biennium are:

Prof Pietro Tundo (Italy, President)

Prof Gerrit Jan Koomen (The Netherlands, Vice President and President-Elect)

Prof Mary Garson (Australia, Secretary)

Prof Minoru Isobe (Japan, Past President)

The Division operates much of its business, including conference and project activities, through six sub-committees, whose names and current chairs are:

Organic Synthesis (Prof F. MacDonald, USA)

Blomolecular Chemistry (Prof G.M. Blackburn, UK)

Green Chemistry (Prof B. Han, China)

Photochemistry (Prof S. Braslavsky, Germany)

Structural and Mechanistic Chemistry (Prof E. Uggerud, Norway)

Biotechnology (Prof F. Nicotra, Italy)

SUMMARY OF ACTIVITIES OF INTEREST TO CCE

Conferences

- **a. Organic Synthesis**. ICOS-17 (Daejeon, Korea: June 22-27, 2008). This is a large and well-recognised meeting that is traditionally attended by many postgraduate stduents. ICOS-18 will be held in Bergen, Sweden 2-5 August 2010 and ICOS-19 in Melbourne, Australia in July 2012.
- **b. Biomolecular Chemistry**. The CHEMBIOTECH meeting held at the IUPAC Congress in Torino (August 2007) and ISCNP26/ICOB6 in Charlottetown, PEI, Canada (July 13-18 2008) both attracted strong scientific programs. ISNCP27/ICOB7 to be held in Brisbane July 10-14 2011.
- **c. Green Chemistry**. ICGC-2; Moscow, Russia: September 14-20, 2008; a special issue of Pure Appl. Chem. was linked to this meeting. ICGC-3 will be held in Ottawa, Canada 15-19 August 2010.
- **d. Photochemistry.** 22nd IUPAC Symposium on Photochemistry (Gothenburg, Sweden: July 28-1 August 2008; 24th International Conference on Phytochemistry will be held in Toledo July 19-24 2009)
- **e. Structural and Mechanistic Chemistry**. International Symposium on Physical Organic Chemistry ICPOC-19, held at Santiago de Compostela, Spain: July 13-18, 2008.
- **f. Biotechnology**. 13-IBS; Dalian, China: October 12-17, 2008. This meeting held a special session addressing professional training and education in the Asian region. More than 2000 delegates attended, representing >80 countries. A Young Scientist and Students Award was established, to showcase the best of the next generation biotechnology research leaders and their research endeavours. The 14-IBS will take place in Rimini, Italy from 15-19 September 2010.

Projects

Current projects include:

- L. Mammino: "Biomass burning in Sub-Saharan Africa (2007-025-1)"; workshop to be held in 2009 followed by a book.
- A. Pascariu: "Translation in Romanian and Dissemination of a Monograph for Universities and Secondary Schools on "Global Climate Change" (2007-035-1)"; completed. (note that previous IUPAC projects have involved the translation of this book from first italian into english, and then into Arabic)

- M. Mozihuzamann: "Workshop for finalising project proposal documents for setting up of an International Centre for Natural Product Research (2005-034-1-300 and 2007-051)"; in progress.
- M. Isobe: "Strategic planning for a new East Asian Network for Organic Chemistry (2005-039-2-300)"; completed.
- P.Tundo: "Making the on-line journal of green chemistry: green rapid internet communications; feasibility study (2008-016-1)"; running.
- M. Isobe: "Strategic planning for a new East and South East Asian Network for organic Chemistry" (2008-026-1); running.
- C.L. Perrin "Update of IUPAC Glossary of Physical Organic Chemistry." (2008-002-100); approved.
- Sun et al. "Thermodynamic Study on Hydrogen Storage Materials: Metal Organic Frameworks and Metal or Complex Hydrides". (2008-006-3-100); joint project with Div.I and III, approved.

Projects currently under review include:

- V. Lunin: "Green Chemistry: creation and implementation of international cooperation in teaching and investigations" (2008-017-2)
- Axel Griesbeck, "Standard Photochemical Processes." (2008-037-1)
- Stefano Raccanelli et al., "Evaluation of measurement methods and QA/QC for PCDD/F, PCB and PAHs in environmental matrices used in estimation of global pollution" (2008-007-1);
- -Patricia Vasquez et al. "Green Chemistry: sustainable education and environmental development (SEED) in Latin America." (2008-014-1); currently under review within Division III.

From these listings, it can be seen that a number of Divisional projects, particularly those within the area of Green Chemistry, have an educational focus. The Division will administer the CHEMRAWN VII Prize for Atmospheric and Green Chemistry, awarded every two years to a young investigator (<45 yrs) from a developing country, beginning in 2010.

Mary Garson
Representative of Division III to CCE
20 June 2009