

Report to IUPAC, Committee on Chemistry Education (CCE)

Prepared by Mei-Hung Chiu

Chair : Subcommittee on Chemistry Education for Development

July 10, 2009

Members: Beasley, Warren; Bradley, John D.; Bucat, Robert B.; Cheung, Derek S. P.

Kamata, Masahiro; Lamba, Ram S.; Lin, Jing-Wen; Schoen, Lida;

Steenberg, Erica; Tarasova, Natalia P.

The following are the activities CED was involved.

A. Promoting Flying Chemistry Program

1. The third *Flying Chemists Program (FCP)* was held in Philippines with the financial support from CCE, IUPAC and Office of the President Commission on Higher Education, Republic of the Philippines, in April, 2008. A round table including Peter Mahaffy, Mei-Hung Chiu from CCE, and faculty member at the *University of Santo Tomas, Philippines* was organized to discuss the potential issues and resource persons for FCP in October, 2007. That turned out to be a successful arrangement for the upcoming conference in 2008. The keynote speakers were Prof. Peter Atkins (*Oxford University, United Kingdom*), Prof. Peter Mahaffy (*King's University, Canada*), Mei-Hung Chiu (*National Taiwan Normal University, Taiwan*), Prof. Jorge Ibañez (*Universidad Ibero-americana, Mexico*), Prof. Fortunato Sevilla (*University of Santo Tomas, Philippines*).

Two impacts of FCP in Philippines

- (1) As a follow-up activity of the Flying Chemists Program, Lida Schoen and Mei-Hung Chiu will hold Young Ambassadors for Chemistry (YAC) workshop for chemistry teachers and students in Manila, Philippines, on 27-29 October, 2009.
- (2) Prof. Jorge Ibañez, one of the resource persons of FCP, will be back again to hold a micro-scale workshop in Manila, Philippines in October, 2009.
2. Croatia has shown its interest in applying for FCP 2010. Currently, Bob Bucat is the coordinator to build the connections between CED and administrative officers in Croatia.
3. Dr. Temechegn Engida, the President of Federation of African Societies of Chemistry (FASC) expressed his willingness and interest in holding FCP in 2011.

He has contacted the high officials of the Ministry of Foreign Affairs of Ethiopia for support the FCP. The response was quite promising. The new Executive Committee of the Chemical Society of Ethiopia (CSE), FASC is planning to hold it sometime at the 3rd to 4th week of February 2011 in Ethiopia together with the 27th Annual Congress of CSE.

B. Young Ambassadors for Chemistry (YAC) Project

1. Research-based evaluation of the Young Ambassadors for Chemistry project (chaired by Lida Schoen with task members Mei-Hung Chiu and Erica Steenberg) was granted in 2007 and a YAC workshop was conducted before 20th ICCE to 30 chemistry teachers in Mauritius in August, 2008. All the teachers, students, and the public highly appreciated to attend the YAC workshop and event. A highly motivated chemistry teacher was recruited to continue promoting public understanding of chemistry in his country, Mauritius (See report at www.iupac.org/projects/2007/2007-005-2-050_report081103.pdf).
2. Research-based evaluation of YAC was invited to train the teachers and students in Cypress, April, 2009. Details will be reported by Lida Schoen.

C. Network for Inter-Asian Chemistry Educators (NICE)

Continuous effort to carry out Network for Inter-Asian Chemistry Educators (NICE) for linking chemistry educators to promote chemical education in Asia is one of the missions for CED to pursue. The 3rd NICE Symposium will be held in Tokyo, Japan, during July 29-30, 2009 (<http://www.u-gakugei.ac.jp/~nice2009/index.htm>). Chairperson of NICE2009 is Prof. Masahiro Kamata (Japan) and co-chaired with Prof. Masato M. Ito (Japan), Prof. Mei-Hung Chiu (Taiwan), and Prof. Choon H. Do (Korea). Details will be reported by Prof Kamata.

D. Collaboration between CCE, IUPAC and Asian Chemistry Education Network (ACEN), Federation of Asian Chemical Societies (FACS)

1. With the dual positions in chemistry association, Chair of CED of CCE and the Director of Asian Chemistry Education Network (ACEN) of Federation of Asian Chemical Societies (FACS), Mei-Hung Chiu established a scholarship for members of FACS to attend 20th ICCE, 2008. To encourage more members of FACS to be active in CCE's activities, two-year scholarship (\$500 each year) were designed to invite chemical educators (in particular, for young scholars or graduate students) to participate NICE in 2009 and 21st ICCE in 2010. Two

awardees (one from Korea and one from Taiwan) received \$250 each to attend the third NICE.

2. Follow the similar idea of bridging the connection between IUPAC and FACS, the chair of CED is contacting the President of FACS and Institute Kimia Malaysia, Datuk Dr Soon Ting Kueh, to explore the possibilities to hold YAC workshop. The YAC workshop and event has been set on Nov 2-4, 2009 in Ipoh which is a city about 200 km from Kuala Lumpur. Malaysia.

E. Collaboration between CCE, IUPAC and National Association for Research in Science Teaching (NARST) in USA

With the dual positions, Chair of CED of CCE and international coordinator of International Committee of NARST, M. H. Chiu invites NARST on celebrating International Year of Chemistry event by contributing a book to dedicate Madam Curie. This project will be proposed at the NARST BOD in October. The invited editors are two former Presidents of NARST, David Treagust and Penny Gilmer, with chemistry background and international well-known reputation.

F. Initiation of a new project---Collaboration among CCE members

Constructing a learning resource web-based platform for teachers and students (details will be presented at the meeting)