Report of the Project Group of CCE for the San Juan-PR during 46th IUPAC GA in July, 31- August1, 2011

July 2, 2011

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Acknowledgement

 Previous Report: submitted at the CCE Meeting during the 21st ICCE in August 3-8 2010 in Taipei-Taiwan.

1. Membership of the Project Group

Prof. Mustafa Sözbilir (Turkey) – *Project Coordinator* Prof. Mei-Hung Chiu (Taiwan) Prof. Mary Garson (Australia) Prof. Morton Z. Hoffman (USA) Prof. Masahiro Kamata (Japan) Prof. Ram Lamba (Puerto Rico)

2. Review Procedure of Proposals in IUPAC

CCE2011_006

Step 1. Receipt at the Secretariat

- Step 2. Internal evaluation and identification of outside reviewers
- Step 3. Distribution to the outside reviewers and gathering of the reviews
- Step 4. Communication of the reviews to the Division(s) or Standing Committee(s) for final decision or recommendation to the Project Committee
- Step 5. Consideration and action by the Project Committee (when applicable)
- Step 6. Notification of IUPAC's decision to the submitter
- Step 7. Responsibility for project management

Review Procedure of Proposals in the Project Group, CCE

(Step 2 in above)

- Step 1. FM (Dr. Fabienne Mayer) send the proposals to the members of Project Group.
- Step 2. Each member sends his (her) opinion to FM
- Step 3. FM sends the opinion of the members to Project Coordinator (PC).
- Step 4. PC summarizes and sends the collective opinion to Chairman of CCE and FM

3. Project Budget

USD 20,000 per two years

4. Current Projects

4.1 CCE Projects (from the most new)

(1) Project No: 2010-031-2-050 (IYC 2011 Activity)

Title: Chemistry as a Cultural Enterprise **Chair:** Prof. Christiane S. REINERS & Dr. Lida SCHOEN

Members: Boshra M. AWAD, Liberato CARDELLINI, Mei-Hung CHIU, Mary J. GARSON, Morton, Z. HOFFMAN, Rachel MAMLOK-NAAMAN, Liliana MAMMINO, Daniel RABINOVICH & Thomas R TRITTON Start Date: 01 September 2010 Planned End Date: 01 September 2012 Budget in USD: 1.735 Web Page: http://www.iupac.org/web/ins/2010-031-2-050 IYC 2011 Activity Page: http://www.chemistry2011.org/participate/activities/show?id=110

(2) Project No: 2010-025-1-050

Title: Enhancing the capacity to provide quality chemistry education at secondary and tertiary levels in Ethiopia Chair: Prof. Temechegn ENGIDA Members: Yonas CHEBUDE, Mei-Hung CHIU, Peter G. MAHAFFY, Ahmed MUSTEFA Start Date: 01 September 2010 Planned End Date: 31 December 2011 Budget in USD: 5.500 Web Page: http://www.iupac.org/web/ins/2010-025-1-050

 (3) Project No: 2010-011-1-050 (Joined with Div V: Analytical Chemistry) (IYC 2011 Activity) Title: Global Chemistry Experiment for the International Year of Chemistry – Design and Development
 Chair: García-Martínez, Javier; Wright, Anthony (Tony) H.
 Members: Camões, Maria Filomena; Cesa, Mark C.; Hasler, Julia; Humphris, Colin J.; Joyce, Alexa; Kamata, Masahiro; Steenberg, Erica Start Date: 01 January 2010 Planned End Date: 31 December 2011 Budget in USD: 15.000 Web Page: <u>http://www.iupac.org/web/ins/2010-011-1-050</u> IYC 2011 Activity Page: <u>http://www.chemistry2011.org/participate/activities/show?id=92</u> IYC 2011 Activity Page: <u>http://water.chemistry2011.org</u> (will be active from March 22, 2011)

- (4) Project No: 2009-055-1-050 (Update requested)
 Title: Toward Higher Quality of Chemistry Teacher In-service Training in Croatia Chair: Judaš, Nenad; Vladušić, Roko
 Members: Bucat, Robert B.; Chiu, Mei-Hung; Luetić, Marina; Šunjić, Vitomir Start Date: 01-05-2010
 Planned End Date: 30 April 2011
 Budget in USD: 5.000
 Web Page: <u>http://www.iupac.org/web/ins/2009-055-1-050</u>
- (5) Project No: 2009-037-3-050 (IYC 2011 Activity) Title: Developing Toolkits for National Chemistry Weeks during IYC Chair: Prof. Mustafa SOZBILIR Members: Choon Ho DO, Morton HOFFMAN, Ram S. LAMBA, Jan H. APOTHEKER Start Date: 1 August 2010 Planned End Date: 30 June 2011 Budget in USD: 3.300 Web Page: <u>http://www.iupac.org/web/ins/2009-037-3-050</u> IYC 2011 Activity Page: <u>http://www.chemistry2011.org/participate/activities/show?id=61</u>
- (6) Project No: 2008-043-1-050

Title: Visualizing and understanding the science of climate change Chair: Prof. Peter Mahaffy Members: Chiu, Mei-Hung; Engida, Temechegn; Hasler, Julia; Kirchhoff, Mary; Martin, Brian; Osborne, Colin; Tarasova, Natalia P. Start Date: 01-Feb-2009 Planned End Date: 31 August 2011 Budget in USD: 8.400 Web Page: http://www.iupac.org/web/ins/2008-043-1-050

- (7) Project No: Project No: 2008-042-1-050 (Update requested)
 Title: Development of a framework of priorities for IUPAC Committee on Chemistry Education
 Chair: Dr. Tony Ashmore
 Members: Akesson, Eva; Chiu, Mei-Hung; Kirchhoff, Mary; Lamba, Ram S.
 Start Date: 01-May-2009
 Planned End Date: 31 August 2011
 Budget in USD: 7.880
 Web Page: http://www.iupac.org/web/ins/2008-042-2-050
- (8) Project No: 2007-005-2-050
 Title: Research-based evaluation of the Young Ambassadors for Chemistry
 Chair: Dr. Lida Schoen
 Members: Mei-Hung Chiu, Ponnadurai Ramasami, Erica Steenberg, and Natalia Tarasova
 Start Date: 01 January 2008
 Planned End Date: 31 December 2011

Budget in USD: 11.070

Web Page: http://www.iupac.org/web/ins/2007-005-2-050

4.2. Interdivisional Projects (Joint Projects with Other Inter-Division /Standing Committees projects)

- (1) Project No: 2008-017-4-300 (Update requested) (Joined with Div-III: Organic and Biomolecular Chemistry Division)
 Title: Green Chemistry – creation and implementation of international cooperation in teaching and investigations
 Chair: Lunin, Valery V.
 Members: Arico, Fabio; Chang, Jie; Golubina, Elena V.; Han, Buxing; Karakhanov, Edward; Kirchhoff, Mary; Lokteva, Ekaterina S.; Parmar, Virinder S.; Rashidova, Sayera; Tarasova, Natalia P.
 Start Date: 01 July 2009
 Planned End Date: 31 December 2010
 Budget in USD: 10,000
 Web Page: http://www.iupac.org/web/ins/2008-017-4-300
- (2) Project No: 2007-038-3-200 (Joined with Div-II: Inorganic Chemistry Division)
 Title: Development of an isotopic periodic table for the educational community Chair: Holden, Norman E.
 Members: Böhlke, John Karl; Coplen, Tyler B.; Mahaffy, Peter G.; Vocke, Robert D.; Walczyk, Thomas R..; Wieser, Michael; Yoneda, Shigekazu; de Laeter, John R.
 Start Date: 01 April 2008 Planned End Date: 31 December 2010

Budget in USD: 11.000

Web Page: http://www.iupac.org/web/ins/2007-038-3-200

(A feature titled 'Atomic Weights - No Longer Constants on Nature' published in Chemistry International March-April 2011, by Tyler B. Coplen and Norman E. Holden. It could be read at http://old.iupac.org/publications/ci/2011/3302/2_coplen.html). For more information please also visit http://www.ciaaw.org.

(3) Project No: 2007-032-1-100 (Update requested)

(Joined with Div-I: Physical and Biophysical Chemistry Division)

Title: Green Book - Abridged Version Chair: Marquardt, Roberto Members: Brett, Christopher M. A.; Cvitas, Tomislav; Frey, Jeremy G.; Hinde, Robert J.; Holmström, Bertil; Kuroda, Yutaka; Pavese, Franco; Quack, Martin; Smith, Sean; Stohner, Jürgen; Thor, Anders J Start Date: 27 November 2007 Planned End Date: 31 December 2010 Budget in USD: 12.500 Web Page: http://www.iupac.org/web/ins/2007-032-1-100

5. Projects Under Consideration

(1) **Project No:** 2011-003-1-050 **Title:** Benchmarking of learning outcomes Chair: Maja Elmgren

Members: Eva Åkesson, Christiane S. Reiners, Marcy Towns, Siegbert Schmid, Ilka Parchmann Date Submitted: 25 January 2011

6. Completed Projects

(1) **Project No:** 2007-050-2-600

(Joined with Div I: Physical and Biophysical Chemistry & Div VI: Chemistry and the Environment)

Title: Climate and global change: observed impacts on planet earth Chair: Letcher, Trevor Members: Salminen, Justin Start: 01 February 2008 End: 01 June 2009 Budget in USD: Web Page: http://www.iupac.org/web/ins/2007-050-2-600 (Book entitled "<u>Climate Change-Observed Impacts on Planet Earth</u>" was produced as a result of the project published by Elsevier, 2009 [ISBN: 044453301X; ISBN 13: 9780444533012].

(2) Project No: 2007-022-2-020 (Final report pending) (Update requested)
Title: Recommendations for Codes of Conduct
Chair: Graham S. Pearson
Members: Sultan T. Abu-Orabi, Edwin D. Becker, Alastair W. Hay, Jo Husbands, Peter G.
Mahaffy, Robert Mathews, Ting-Kueh Soon, Leiv K. Sydnes, Natalia P. Tarasova, Rietje van Dam-Mieras, and Bernard West
Start: 15 October 2007
End: 31 December 2011
Budget in USD: 5.000
Web Page: http://www.iupac.org/web/ins/2007-022-2-020

(3) Project No: 2006-050-3-100 (Final report pending) (Update requested) (Jointed with Div-I: Physical and Biophysical Chemistry) Title: Wet surface vibrational spectroscopy experiments Chair: James McQuillan Members: Masatoshi Osawa, Derek Peak, Bin Ren, Zhong-Qun Tian, and Thomas Wandlowski Start: 14 March, 2007 End: 31 March, 2001 Budget in USD: 8.200 Web Page: <u>http://www.iupac.org/web/ins/2006-050-3-100</u>

(4) Project No: 2004-045-1-700
(Jointed with Div-VII: Chemistry and Human Health)
Title: Training of school children on pesticides and health - "Toxicology in the classroom"
Chair: Temple, Wayne A.
Members: Awang, Rahmat; Besbelli, Nida; Duffus, John H.; Heinzow, Birger; Makalinao, Irma
Omar, Maizurah; Binti Rexilius, Lutz; Schweinsberg, Fritz
Start: 01 March, 2005
End: 31 December 2008
Budget in USD: 6.007
Web Page: http://www.iupac.org/web/ins/2004-045-1-700

(November 2009 - feature published in Chem. Int. Nov-Dec 2009. Please visit <u>http://www.iupac.org/publications/ci/2009/3106/4_omar.html</u>) In addition an amended version of the Toxiclaro multimedia package is now been developed which can be found at www.prn2.usm.my/toxicology2009.

(5) Project No: 2004-037-1-400

(Jointed with Div-IV: Polymer)

Title: Design of polymer education material for French speaking countries Chair: Gerard Froyer Members: Djafer Benachour, Philippe Dubois, Jean-Pascal Eloundou, Dhanjay Jhurry, Hamid Kaddami, Armand Soldera, and Françoise Winnik Start: 01 April 2005 End: 30 June 2009 Budget in USD: 5.000 Web Page: http://www.iupac.org/web/ins/2004-037-1-400 (June 2011 - project completed - a collection of 400 ppt slides is available via the IUPAC Polymer Education Website portal

(<u>http://www.iupac.org/polyedu/page36/page38/page38.html</u>). The slides illustrate different chapters of Polymer Science and are grouped together into 6 chapters forming an expanded introduction to polymers: Introduction to polymer science, Polymer chemistry, Polymer solid state, Simulation of polymer chains, Rheology and processing, Electrical and optical properties of polymers.

The project continues under French Polymer Group whose website (<u>http://www.gfp.asso.fr</u>) provides additional resources and references. Additional topics will cover physical chemistry, mechanical properties, and biopolymers.)

7. Future Projects

IUPAC operates using a project-driven system. This is done to ensure by selection that only high quality projects bear the IUPAC label, and to encourage participation by the worldwide chemistry community. Therefore you are encouraged to produce more projects and submit.

8. Information about IUPAC & Projects

For information about IUPAC Organisation structure please visit http://www.iupac.org/Organization

For information about IUPAC projects and project submission and review process please visit <u>http://www.iupac.org/Projects</u>

For CCE Projects please visit http://www.iupac.org/indexes/Projects/bodies/050

9. Appendixes (Update about some projects)

10. Acknowledgements

Most of data in this report was obtained from the website of IUPAC. We appreciate very much for Dr. Fabienne Meyers' excellent documentation in the web site. We also thank many internal and external reviewers for their efforts to screening and identifying excellent projects.