



# **International Union of Geological Sciences International Geological Congress**

**Third Ordinary Session of the IUGS-IGC Council**

## **Official Minutes**

**Held in Conjunction with the 34th IGC**

**Brisbane Convention & Exhibition Center**

**August 5, 2012, 09:00 – 17:00 & August 9, 2012, 09:00 – 18:00**



## **International Union of Geological Sciences International Geological Congress**

### **Third Ordinary Session of the IUGS-IGC Council**

#### **1. OPENING AND WELCOME (Opening remarks by Neil Williams and IUGS President: Alberto Riccardi)**

Neil Williams, President of the 34<sup>th</sup> IGC, opened meeting with a welcoming statement at 09:20 a.m.

Alberto Riccardi, the President of the IUGS (2008-2012), extended a welcoming statement and noted that he is pleased to have the Adhering member representation in this meeting.

During this meeting there will be a review of the reports for the past four years. Members should make conclusions and note of what is expected for the future of the IUGS. Throughout the four years sometimes there is not much interaction however many attend this meeting allowing the best opportunity to see where we are and where we are going.

#### **2. APPROVAL OF AGENDA (Chair: Alberto Riccardi)**

No corrections or changes were suggested and the Agenda was approved as circulated.

An Administrative Notice was provided by the Secretary General, Peter Bobrowsky, for all delegates to review the contents of the envelopes that were distributed to the Head Delegates. Peter explained that another envelope will be distributed on Thursday with additional information including the voting ballots.

Motion to approve Agenda

**Passed unanimously**

#### **3. ADMINISTRATIVE MATTERS**

##### **a) Order of Business (A. Riccardi)**

The President reviewed the order of business and explained that the IGC follows the Roberts Rules for Fair and Orderly Meetings & Conventions (RRO), a summary of which was provided to everyone in attendance.

## Motion to approve Order of Business

### **Passed unanimously**

- b) Approval of Minutes (N. Williams)
  - i. 2<sup>nd</sup> Ordinary Session of IUGS-IGC Council—33<sup>rd</sup> Council, August 6 – 10, 2008, Lillestrom

## Motion to approve Minutes

### **Approved as presented**

#### **4. PRESIDENT'S REPORT (A. Riccardi)**

The main goal for President Riccardi during his four year tenure was for the Union to work towards greater efficiency and relevance of activities by reducing existing duplication of functions and efforts. One of his main concern was to improve interaction with IUGS Adhering and Affiliate members as well as with other bodies and organizations working inside and outside of the IUGS addressing activities as efficiently as possible all earth science issues of relevance to society, with special emphasis in standards, geoeducation, geoinformation and environmental management. He worked to develop IUGS activities with limited funds and a fundamental goal was to promote national and international “grassroots” actions within the framework provided by the goals, strategies, and priorities shared by other international organizations, such as UNESCO and the International Council for Science (ICSU).

To effectively carry out the activities described the President relied on the support and collaboration of his **EXECUTIVE COMMITTEE (EC)**. Thus, for the 2008-2012 term he worked with the following EC members: Past President Zhang Hongren (China), Vice Presidents Jacques Charvet (France) and Ochir Gerel (Mongolia), Secretary General Peter Bobrowsky (Canada), Treasurer William Cavazza (Italy), Councilors (2006 – 2010) Mikhail Fedonkin (Russia) and Marta Mantovani (Brazil), Councilors (2008 – 2012) Ezzoura Errami (Morocco) and Colin Simpson (Australia), and Councilors (2010 –2014) Sampat Tandon (India) and Wesley Hill (USA).

All decisions and actions within the EC were accomplished at annual meetings and by electronic media. Decision-making on all issues confronting the IUGS and its external partners was achieved by reaching a consensus after careful evaluation and consideration. Between August 2008, and August 2012, the Executive Committee held six meetings:

- 59<sup>th</sup> EC meeting (13 August 2008, Oslo, Norway),
- 60<sup>th</sup> EC meeting (11 – 15 January 2009, Sydney, Australia),
- 61<sup>st</sup> EC meeting (22 – 25 February 2010, Paris, France),
- 62<sup>nd</sup> EC meeting (22 - 25 February 2011, Paris, France),
- 63<sup>rd</sup> EC meeting (14 - 17 February 2012, San Sebastian, Spain),
- 64<sup>th</sup> EC meeting (4 August 2012, Brisbane, Australia).

Locations of the annual meetings were decided by the Executive Committee, and representatives of different bodies and organizations, i.e., IUGS Committees, Commissions, UNESCO, ICSU, and other groups, were invited to the meetings as observers.

During the 2008-2012 term, the Vice Presidents and Councilors were given specific guidelines for work in the following areas: interaction with Adhering Organizations (J. Charvet) and Affiliate Organizations (Ochir Gerel), C. Simpson was assigned to edit the IUGS Electronic Bulletin (E-Bulletin); E. Errami worked on International Year of Planet Earth (IYPE); M. Fedonkin on the International Geoscience Program (IGCP) activities; and M. Mantovani and S. Tandon worked on Inactive Members. Some EC members were also assigned to special tasks, i.e., Z. Hongren, J. Charvet, and C. Simpson, represented the IUGS in meetings of other organizations and W. Hill worked on special projects such as the IUGS video presented at various events such as the celebrations of the IUGS 50<sup>th</sup> and IGCP 40<sup>th</sup> Anniversaries; and other IUGS exhibitions.

It was President Riccardi's belief that the EC should be an informed participant in all IUGS activities and decisions. The EC was able to achieve this within available resources by taking advantage of electronic communication facilities and reducing IUGS Bureau meetings to only those which were strictly necessary, one or two each year. This was achieved without any loss of efficiency and resulted in substantial savings for the Union and countries/organizations sponsoring the Bureau members. Thus, during the period the Bureau held six (6) meetings, i.e. 20 October 2008, (Maputo, Mozambique), 16 February 2009 (Paris, France), 21 November 2009 (Lisbon, Portugal), 23 June 2010 (Brisbane, Australia), 21-22 January 2011 (Bangalore, India), 25-26 September 2011 (Rome, Italy), usually in coincidence with some other IUGS/IGCC activity.

To improve the IUGS working structure, the President proposed the re-establishment/establishment of two **COMMITTEES**; a Finance Committee and a Strategic Planning Committee. The Finance Committee was re-established at the end of 2009, to improve IUGS financial operations, provide audit services on IUGS finances, and provide a report to the IUGS Council every four years before the election of a new EC. The **Finance Committee** began operations in 2010, and was staffed by former IUGS Treasurers; A. Brambati as Chair, Zdenek Johan, and Pat Leahy, an expert in the management of large geoscientific organizations. As a result of this committee's work, a report on IUGS finances and an audit was submitted to the IUGS Council and distributed to participants at the 34<sup>th</sup> IGC. For the period 2008-2012, the careful and able management of IUGS finances by the Treasurer (W. Cavazza) resulted in positive balances and a significant surplus was added to the existing reserves.

In 2009, President Riccardi was actively involved in establishing and organizing the **Strategic Planning Committee** (SPC). The SPC is charged with making recommendations on the direction of IUGS over the next five years and the integration of its activities in such a way as to sustain current activities while expanding its role in the service of international geosciences. To attain a better interaction of the IUGS constituency the SPC was formed by the two Vice Presidents and the Chairs of the Commissions dealing with Stratigraphy (S. Finney), Geologic Information (K. Asch), Geological Education (G. Lewis), plus a Past President (U. Cordani) and the Chair of the Committee responsible for the Strategic Plan approved in the year 2000 (P. Cook). The Committee was very ably chaired by A. Boriani. As a result a new Strategic Plan was prepared and submitted for approval of the IUGS Council at the 34<sup>th</sup> IGC.

The President considered it a priority to support the activities of the existing IUGS **COMMISSIONS** and **TASK GROUPS**, i.e., the International Commission on Stratigraphy (ICS), Commission Management and Application of Geoscience Information (CGI), Commission on Geoscience Education, Training and Technology Transfer (COGE), Commission on the History of Geological Sciences (INHIGEO), Commission on Environmental Management (GEM), Task

Group on Isotope Geology and Geochemistry (TGIG), Task Group on Global Geochemical Baselines (TGGGB).

In the case of COGE, President Riccardi interacted with COGE's Chairs (G. Lewis, J. Martínez Frías) requesting that they examine their own interests and redefine the goals of the Commission, and develop an active participation in UNESCO's Earth Science Education Initiative on Africa. With regard to GEM, he worked to involve its Chair in IUGS strategic planning. The President maintained a continuous and fruitful interaction with the ICS Chair (S. Finney) in connection with different proposals (e.g. new GSSPs) submitted to the EC for ratification. The President also dealt with the Task Group on Isotopic Geology on various proposals. Based on these activities, he published in *Episodes* (vol. 34, 4) one comment on procedural matters, and an editorial to clarify IUGS position in relation to geological standards and conventions. President Riccardi supported the upgrade of the Task Group on Tectonics and Structural Geology (TecTask) to the Commission in 2009, and the establishment of three new Task Groups: Global Geoscience Workforce (TGGGW) in 2009, GeoHeritage (TGG) in 2011, and Heritage Stone (HSTG) in 2012. A new Initiative on Forensic Geology was also established in 2011 on the basis of a working group of the Commission on the Environment (GEM).

Additionally, and as a part of a drive to improve efficiency in IUGS activities, several **AD HOC REVIEW COMMITTEES** (ARCs) reviewed the activities of most commissions and programs, i.e. CGI in 2009, GEM and the International Lithosphere Program (ILP) in 2010, COGE and INHIGEO in 2011, and the TGGGB in 2012. The results were published in various issues of *Episodes* and included recommendations to improve the activities of those groups.

The President also promoted multilateral cooperation between IUGS members and bodies, i.e., Adhering and Affiliate Members, Commissions and Task Groups and was able to increase productive communications and exchange of information. Their input was requested through several letters; through two editorials published in *Episodes* (vol. 32 No.3; vol. 33, No.3) and through information included in the IUGS E-Bulletin. Positive responses were received from a number of **ADHERING MEMBERS** and Affiliate Organizations, although the number of inactive countries remained at 21% - 29%. Eight other organizations increased their membership category and the number of submitted annual reports increased from 25% to almost 35%. A number of Adhering members did not show important changes, although Kosovo became a new member in 2009 and The Netherlands withdrew from the Union in 2010. Work on inactive countries by Councilor S. Tandon resulted in some becoming active again. President wrote letters to the Governments of Bulgaria and Greece supporting their geological organizations. A larger majority of the **AFFILIATE MEMBERS** were quite active, and six new organizations were accepted as new members: the European Geoparks Network (EGN) and the Italian Federation of Earth Scientists (FIST) in 2009, the European Federation of Geologists (EFG) in 2010, and The Canadian Federation of Earth Sciences (CFES), EuroGeoSurveys (EGS), and the Young Earth Scientists Network (YES) in 2011.

As soon as the new Executive Committee took office in 2008, it was confronted with two issues fundamental to the work and visibility of the IUGS: the Editorial Office of *Episodes* and the Secretariat. **THE RELOCATION OF THE IUGS SECRETARIAT** became necessary when the long-standing support to the Trondheim office was terminated at the close of 2009, by the Norwegian National Committee. The new President of the IUGS immediately became involved in finding a new host country for the IUGS Secretariat. After negotiating with several countries, the decision was to locate the IUGS Secretariat in the United States for the period 2009-2012,

and in Beijing, China, for the period 2012-2020, thanks to the generous support of the U.S. National Committee (Chaired by T. Casadevall) and the China Academy of Geological Sciences.

During his four years as President of the IUGS, he was very fortunate to have the very able and kind help of Anne Linamaa-Dehls (Norway, 2008-2009) and Rich Calnan and Nancy Zeigler (U.S.A., 2010-2012). During 2010-2012, the Secretariat performed with great enthusiasm and efficiency in all types of activities, including preparation of the extensive minutes of the EC meetings and the IUGS Annual Reports for 2010 and 2011.

At the end of 2008, China's editorial responsibility for the journal *Episodes* ended. A series of actions by the IUGS President during 2008 and 2009 enabled a smooth transition of **EPISODES EDITORIAL OFFICE** from China to India due to a new memorandum of understanding MOU between IUGS and the Geological Society of India. As a result, the Editorial Office relocated to Bangalore, India, for the period 2009-2012, thanks to the generous support of the Geological Society of India. During these years, *Episodes* continued its publications on a regular basis and maintained its high standards. This arrangement will continue under a second MOU for the next four years. During these four years the existing agreement with the Geological Society of London resulted in the addition of sixteen and two new titles to the series respectively of Special Publications and Memoirs that now have a total number of 29 IUGS contributions.

Between 2008 and 2012, information on IUGS and the geosciences was disseminated through an E-Bulletin and the IUGS website. The **E-BULLETIN** was published monthly thanks to the work of Councilor Colin Simpson. The number of E-Bulletins issued totaled 44, E-Bulletins No. 33 to 76.

To support the President's initiative to have the **IUGS WEBSITE** become a meeting ground for all of IUGS, modifications were made in 2009. A content management system was added, and graphical improvements were made thanks to the input of the then Chair of the Publications Committee, G. Nowlan. Whenever possible the IUGS website was linked to those websites of National Committees (thanks to the input of Vice President Jacques Charvet) and Affiliated Organizations. The President's initiative included having a host institution and a webmaster under a formal agreement, but a majority of the EC decided to continue with the current informal situation whereby the IUGS Secretary General maintains the website.

The IUGS President organized and co-chaired a meeting of the **INTERNATIONAL GEOLOGICAL CONGRESS COMMITTEE (IGCC)** in Brisbane, Australia, from June 24-25, 2010. As a result of that meeting, the IUGS President invited IUGG to establish a working group to consider coordination of IGC and IUGG Congress and cooperation with Congress activities. The President also participated in the establishment of a new IUGS-IGCC task force to consider the current separate Statutes and Bylaws of the IGC and IUGS. He was also involved in coordinating the revision of the IGC and IUGS Statutes, in preparation for the 34<sup>th</sup> and 35<sup>th</sup> IGC, and in the organization of the bid process for the 36<sup>th</sup> IGC in 2020.

Following the 2008 IUGS Council instructions to the IUGS Executive Committee and IGC Committee, a joint **IUGS-IGCC STATUTES AND BYLAWS COMMITTEE** was formed. As a result of the work undertaken by the Statutes Committee, a new version of the IUGS Statutes was produced and submitted for ratification of the Council at the 34<sup>th</sup> IGC (Brisbane, August 2012). It is evident, however, that substantial changes are still needed to improve the working

structure of our Union, opening the way, perhaps, for more participation of affiliated organizations and some type of permanent management structure.

During the last four years, President Riccardi made a concentrated effort to improve activities and relationships with **ICSU**, UNESCO, and other geoscientific organizations. IUGS participated actively in the 29<sup>th</sup> and 30<sup>th</sup> General Assemblies of **ICSU** (2008, 2011). On both occasions, meetings of geo-related organizations under ICSU's umbrella were directed to coordinate geoscientific activities. Additionally, in these meetings and in many other contacts, specific overtures were made to maintain and reinforce IUGS participation in activities related to ICSU's established priorities on "Environment in Relation to Sustainable Development," "Scientific data and information," and "Capacity Building in Science," focused in developing countries.

As specific actions directed to that end, three members of IUGS EC were designated to act as liaisons between IUGS and ICSU's Regional Offices for Africa (E. Errami), Asia and the Pacific (Ochir G.), and Latin America and the Caribbean (M. Mantovani). Moreover there was an active participation in different matters proposed by ICSU, e.g. nominations to ICSU's Committee on Scientific Planning and Review (CSPR), to "Steering Committee on Earth system research for sustainable development", to "World Data System Scientific Committee", and to ICSU's Executive Board; call to IUGS Adhering and Affiliate members and other IUGS bodies for applications to ICSU's annual Grants Programmes; foresight analysis on key drivers that may influence international science over the next 20 years; survey on activities and experiences in science education; reviews of ICSU's Regional Offices for Asia and the Pacific and for Latin America and the Caribbean; report on Weighted Voting; consultation on Energy"; ICSU's Principle of Universality. IUGS was also accepted as Associate Member of the ICSU World Data System (WDS).

IUGS interaction with other geo-related organizations, GeoUnions and ICSU's grants system, resulted in several successful joint projects. In 2010, as a result of publicizing ICSU's grants among IUGS constituency, IUGS led a project entitled "An international workshop to initiate the circumpolar integration of permafrost microbiological studies" (MicroPerm), on behalf of the International Permafrost Association (IPA). IUGS also participated in a trans-disciplinary project on extreme natural hazards and societal implication together with three other scientific unions (IUGG, IGU, ISPRS) and an IUGS Affiliate Organization (American Geophysical Union).

In relation to **ICSU's GEOUNIONS** and in addition to the meeting at ICSU's General Assemblies in 2008 and 2011, the IUGS participated in two other meetings in Paris (2010) and Istanbul (2012), where the President was represented by Vice President, J. Charvet. IUGS also supported the International Year of Global Understanding (IYGU) initiated by the International Geographical Union (IGU), and participated in two Council Meetings of the International Union of Geographical and Geophysics (IUGG) (2009, 2011) where the President was represented by Councilor, C. Simpson. IUGG was very receptive to promote joint activities, thanks to its very able officers (T. Beer, H. Gupta, and A. Ismail-Zadeh).

With regard to **UNESCO**, an excellent working relationship was maintained during 2008 - 2012 with officers of the Natural Sciences Sector (W. Erdelen, G. Kalonji, R. Missotten, M. Patzak, S. Gaines), as well as with UNESCO's General Director. IUGS actions mainly focused on reinforcing existing joint initiatives, such as the International Geosciences Program (IGCP), the Geological Applications of Remote Sensing (GARS), and the International Year of Planet Earth (IYPE 2007-2009), but also in exploring new possibilities in relation to UNESCO's Mid-Term

Strategy (2008-2013) and on opening new avenues for collaboration on initiatives with a focus on geoeeducation, environment and geological heritage, sustainable development, transference of knowledge, data management, and promotion of global standards. In this context the IUGS President proposed for the IGCP to study the implementation of a more accountable emphasis on capacity building and on transference of scientific knowledge from developed to developing countries, and that IUGS should become actively involved in promoting the Geoparks Initiative. Thus, IUGS became a member of the Bureau of the Global Geoparks Network, where it was very ably represented by Councilor Colin Simpson, who actively participated in all its activities. In this context the IUGS President attended the 3<sup>rd</sup> International Symposium on the Development within Geoparks: Geo-Heritage Protection and Cooperation (August 22-25, Tai'an City, Shandong Province China), where he delivered a speech in the opening session on IUGS and Geoparks. Moreover, a conference on "Geoparks: alternative for local development," organized by the UNESCO Regional Office and the Municipality of Flores (Uruguay), on 13–15 November, 2011, in the city of Trinidad, Flores, Uruguay, was financially supported by IUGS. In connection with UNESCO's Earth Sciences Education Initiative on Africa, IUGS participated actively through the IUGS Commission on Geological Education and some IUGS Affiliated Members, such as the Geological Society of Africa and the Commission for the Geological Map of the World, among others. As a contribution to this initiative, in 2011 IUGS sponsored and funded a Short Course on African Metallogeny in Ouagadougou, Burkina Faso, which was co-organized with some IUGS Affiliate Organizations, i.e., the Society of Geology Applied Mineral Deposits, the Society of Economic Geology, the Geological Society of Africa, and UNESCO. As done for ICSU, the three same members of the EC were designated to act as liaison between IUGS and UNESCO's Regional Science Offices for the Arab States, Africa (E. Errami), Asia and the Pacific (O. Gerel), and Latin America and the Caribbean (M. Mantovani).

Between 2008 and 2010, the IUGS President gave special attention to the **INTERNATIONAL YEAR OF PLANET EARTH (IYPE)** through a series of messages published in several IYPE books. He also participated in a National Event organized by the Argentinean IYPE National Committee (Buenos Aires, 8 October 2009) and in the IYPE Lisbon Event and IYPE Board meeting (Lisbon, 19-21 November 2009), where he delivered speeches at the opening ceremonies. The IUGS continued to support IYPE until its statutory date of termination at the end of 2010. Thereafter, the IUGS President was involved in different actions directed to compile complete information and legal advice to attain the legal termination of the IYPE, which was finally completed at the end of 2011.

The IUGS sought ways to capitalize on the IYPE successes and became a supporter of an **INTERNATIONAL GEOSCIENCE INITIATIVE**, sponsored by several Affiliated Organizations. The IUGS President was a guest speaker at a "Town Hall Meeting" (Iguacu, Brazil, 11<sup>th</sup>, August 2010) on an International Geoscience Initiative," sponsored by the Geological Society of America, the American Geological Institute, the Geological Society of London and the British geological Survey. The speech delivered at that meeting was published in *Episodes* (vol. 33 No. 3).

As a result of an initiative of the IUGS President, IUGS became an ex-officio member of the **ONE GEOLOGY STEERING GROUP**. Accordingly, IUGS supported the interaction of One Geology with the IUGS Commission on the Management and Application of Geosciences Information, and maintained a close relationship with other IUGS bodies on geostandards. This initiative was also linked to a strong interest in IUGS interaction with geological surveys through organizations such as the EuroGeoSurveys and the "Asociación de Servicios de Geología y

Minería Iberoamericanos" (ASGMI). The IUGS President attended meetings organized by OneGeology and the IUGS Commission on the Management & Application of Geoscience Information (CGI) and was also involved in the activities of the OneGeology Steering Group

The IUGS President fully supported another important outcome of the IYPE, **YOUNG EARTH SCIENTISTS (YES)** initiative. This initiative is predicated on the understanding that young people of today's world will be shaping the future of our society in the decades to come. The IUGS President was represented by Vice President, J. Charvet, at the first World Young-Earth-Scientists Congress (YES) held in October 2009. As a result of the Congress, a permanent world-wide network of young professionals, scientists and politicians, was created. Subsequently the IUGS President contacted YES executives with a proposal to formalize a relationship with their organization and, in 2011, YES became an IUGS Affiliate Organization.

Another initiative of the IUGS President was to be recognized as a participating organization in **GEO (GROUP ON EARTH OBSERVATIONS)**. GEO is a voluntary partnership of governments and international organizations that coordinate international efforts to build a Global Observation System of Systems (GEOSS). Some of the priority areas of interest to Earth sciences include: natural and human-induced disasters; the environmental sources of health hazards; energy management; and, freshwater resources. In connection with this participation the IUGS President was involved in a number of GEO activities. The IUGS President was represented by the IUGS Past President, Zhang Hongren, in the Seventh Plenary session of the Group on Earth Observations (GEO-VII), and in the Ministerial Summit, which took place on 3-5 November 2010 at the China National Convention Centre (CNCC), Beijing, China, where a message was read at the closing session. In addition, the IUGS President was represented by Vice-President, Jacques Charvet, at the Eighth Plenary Session of the Group on Earth Observations (GEO-VIII) held in Istanbul on 16-17 November 2011.

The last two years the IUGS saw two important celebrations; the IUGS 50<sup>th</sup> and the IGCP 40<sup>th</sup> Anniversaries. For the **IUGS 50<sup>TH</sup> ANNIVERSARY**, the IUGS President developed the program and directed the organization of the event: a special video on the IUGS was produced for distribution; a celebration was held at UNESCO Headquarters building in Paris, France, featuring guest speakers and the presentation of medals to those who have shaped the IUGS; and, a global essay contest for early career geoscientists, under the age of 35 to express their views on the future of the geological sciences. The best four essays submitted to the contest were honored by publication in *Episodes* (vol. 34, No.2). Participation of Councilor, W. Hill was instrumental to the success of all these activities. An article in *Episodes* (vol. 34, 1) stressing the importance of the IUGS 50<sup>th</sup> Anniversary and the celebration event was published and a message was also published, by invitation of the Editor, in *Geological Carpathica* (vol. 62, 3).

To celebrate the **40<sup>TH</sup> ANNIVERSARY OF THE IUGS - UNESCO INTERNATIONAL GEOSCIENCE PROGRAMME (IGCP)**, a conference was held on 22 February 2012, at UNESCO's Headquarters in Paris, France. In the organization of this event, IUGS was represented by Vice President, J. Charvet. This event brought together numerous experts from all over the world to take stock of the achievements and challenges of the International Program and map the road ahead. As part of the 40 year IGCP celebration of the 40 years, an anniversary book entitled "Tales Set in Stone, 40 Years of the International Geoscience Programme (IGCP)" was published. The book traces the main achievements of this program and its international scientific cooperation.

To improve IUGS recognition of outstanding professional geoscientists, several **AWARDS** were added to the existing James Harrison Outstanding Achievement Award, i.e., the IUGS Scientific Awards of Excellence, the *Episodes* Best Paper Award, and the Steno Award. Most of the new awards along with the Harrison Award will be presented in a special ceremony at the 34th IGC (Brisbane, August 2012).

In addition to the meetings mentioned above, the IUGS President also attended, or supported other international events in different continents and countries:

In June 2012, the IUGS President used the IUGS E-Bulletin and official Website, to release a position paper that was officially submitted to the United Nations Conference on Sustainable Development (UNCSD) or, Earth Summit Rio+20. This paper outlined IUGS's position on geoscientific research and knowledge needed for a safer, more equitable, cleaner, greener and more prosperous world by highlighting seven priority areas: jobs, energy, cities, food, water, oceans, and disasters.

Alberto Riccardi expressed that it had been a great honor and privilege to serve as President of the IUGS. The past four years were very exciting and full of positive activity for him. He was pleased with the progress that IUGS has made and he is hopeful that it sets a strong foundation for the next Executive Committee and for the future of IUGS.

He acknowledged with thanks, the help he received during his term as IUGS President, most of which are mentioned above. The accomplishments of this organization were not the work of any one person, but the many talented scientists and other individuals who were/are part of this team. Without them, he would not have been able to perform his duties as IUGS President. President Riccardi thanked the University of LaPlata and the Ministry of Science of Argentina for financial and logistical support. He did not have enough words to express the moral support, understanding and patience of his wife Marta throughout those complex years in which their lives were focused for the most part on IUGS activities.

Motion to accept the President's Report

**Accepted as presented**

## **5. SECRETARY GENERAL'S REPORT ON THE ADMINISTRATION OF THE UNION (P. Bobrowsky)**

REPORT OF THE IUGS SECRETARY GENERAL REGARDING THE ADMINISTRATION OF THE INTERNATIONAL UNION OF GEOLOGICAL SCIENCES FOR THE PERIOD 2008 (AUGUST) TO 2012 (AUGUST)

### EXECUTIVE SUMMARY

Peter opened by providing an executive summary of the International Union of Geological Sciences which is one of the largest scientific unions under the umbrella of the International Council for Science (ICSU). It currently supports 121 Adhering Organizations (89 of which are Active members) as well as 54 Affiliated Organizations. Two new Adhering Organizations and twelve Affiliated Organizations joined since the last Congress. The IUGS Executive Committee met once per year since the 33rd IGC in 2008 at the partial expense of the Union. Additionally, the Bureau met another 4 times during the past four years at minimal expense to the Union.

Five types of official committees were active during the past term: Nominating Committee, Publications Committee, Finance Committee, Strategic Planning Committee and several Ad hoc Review Committees. Publications and other communication options increased markedly since 2008. Nine IUGS related new books (published by the Geological Society of London), 43 additional electronic E-Bulletins, four Annual Reports, four volumes of Episodes and new Union focused flyers/brochures were published. The SCI Impact factor for Episodes was relatively steady since the 33rd IGC. A new updated version of the website became operational. Five productive Commissions remain and one new Commission was added. Four Task Groups were active and remain operational and one new high profile Initiative was started. Participation within ICSU and relationship with that organization remained stable. The GeoUnion consortium still comprises 8 ICSU Unions and informal cooperation amongst the group members is on the increase. Three activities dominated a positive relationship with UNESCO: IGCP, GARS and IYPE. IUGS funding for IGCP increased to \$70,000 USD per year. The International Year of Planet Earth originally conceived by IUGS closed in 2010 as an extremely successful endeavor with a good legacy for the geosciences.

Other joint initiatives included the ILP with IUGG, and the Task Group on Isotopes and Geochronology with IUPAC. The Union celebrated its 50<sup>th</sup> Anniversary in 2011 with a commemorative event in Paris and the creation of a legacy video. IGCP is celebrating its 40th anniversary in 2012. The IUGS is the main scientific sponsor of the 34th International Geological Congress in Brisbane, Australia in 2012.

## EXECUTIVE COMMITTEE

The Executive Committee meetings were generally “open” for observer participation by individuals in the earth sciences community. Representatives from various National Committees, local “host” government organizations, sister ‘GeoUnions’, IGC Committee members, UNESCO, and many others were invited to and were often present at these meetings. Decisions and discussions regarding budgets and other sensitive Union issues were held in-camera for elected EC members and representatives of the Permanent Secretariat only.

The Executive Committee of IUGS meets annually at the expense of the Union, except for the positions within the Bureau whose employer or sponsoring agency must cover all travel costs. Travel for the President of IUGS was paid for by the IUGS. This practice of selective financial aid has been financially advantageous to the Union since Bureau costs for travel are collectively quite high, but this new change adopted by Council has allowed less developed countries to nominate candidates for the position of President.

The response to the request from Council to improve access to Bureau positions for individuals from Less Developed Countries allowed for the nomination in 2008 of Alberto Riccardi from Argentina. As reported in the 2008 Annual Report from the Secretary General, following an exhaustive in-depth analysis of options by the former Treasurer, the Executive Committee in 2007 targeted \$20,000 USD per year from the annual budget to support Union administration related travel (i.e. only the Annual meeting and Bureau meetings) for the position of IUGS President (eligible candidates must come from a UN designated ‘Less Developed Country’ to use these allocated funds). In effect since 2008, this change in policy has allowed nominations from ‘Less Developed Countries’ to again be submitted for the position of IUGS President in time for elections at the 34th IGC in Brisbane.

For detailed information about the International Union of Geological Sciences including membership, science activities, administration and other topics please visit the website: [www.iugs.org](http://www.iugs.org)

## BUREAU

The day-to-day management of the Union was handled by the IUGS Bureau (President, Treasurer and Secretary General) who are also part of the EC, as defined in the current Statutes and Bylaws. To this end, the members of the Bureau met occasionally outside of the Annual Meeting during their tenure to adjudicate over pressing matters. With the wide and common access to various forms of telecommunication now easily available and with the aim to be more fiscally responsible, the current Bureau minimized the number of extraordinary face to face meetings to four when compared to the previous 2004-2008 Bureau who met 20 additional times in four years. As per the Recommendations in the Strategic Plan and the existing Statutes and Bylaws, each Vice President was requested to participate, at the expense of IUGS, in one Bureau meeting per year. Participation in additional Bureau meetings by the Vice Presidents and others was at their own expense or their employer or sponsoring country, following the same principles that now apply to the Bureau members. Participation in the Bureau meetings was nonetheless open to all EC members and the Permanent Secretariat. Consequently, some of the Bureau meetings during the past four years have included additional EC members, other than the three Bureau members themselves. This additional involvement proved extremely beneficial and important to broaden perspectives and alleviate work loads associated with IUGS Administration.

## PERMANENT (INTERIM) SECRETARIAT

After decades of service the IUGS Permanent Secretariat in Trondheim, Norway was transferred in early 2009 to Reston, Virginia, USA to be managed by Rich Calnan and Nancy Zeigler. This new office has been graciously supported financially by the USA Government through the US Geological Survey. This transfer was always recognized as an Interim Secretariat given the understanding that the USGS offer to host the Secretariat was temporary and is scheduled to terminate at the end of 2012. .

## MEMBERSHIP

Membership within the Union is still represented by two categories: Adhering Bodies and Affiliated Organizations. The former group of members consists of National Bodies such as Geological Surveys, National Academies, Geological Societies and others within sovereign nations, whereas the latter consists of organizations that support broad geoscience objectives at global scales.

At the completion of the 33rd IGC in 2008 there were 119 Adhering Organizations recognized within the Union. The IUGS supports the largest number of member countries of all Unions currently within ICSU (indeed more member countries than ICSU itself). IUGS recognizes Active members as those Adhering Organizations whose dues are paid in full in contrast to Inactive members whose dues have been outstanding for three or more years. As of May 2012 there are 121 Adhering Organizations within the IUGS an increase of two new members since the last Congress. At the time of this report, the number of Active members was down slightly to 89 compared to 93 in 2008.

More importantly, the IUGS acknowledges and appreciates the following: Kosovo and Tajikistan who became new members since 2009. Several other member countries that recognized the importance of our Union and indicated their support by increasing their membership category are also acknowledged. We note the following changes:

- Croatia (from 1 to 2)
- Cyprus (from 1 to 2)
- Czech Republic (from 2 to 3)
- Denmark (from 3 to 4)
- Estonia (from 1 to 2)
- India (from 5 to 7)
- South Korea (from 2 to 3)
- United Kingdom (from 7 to 8)

Unfortunately two countries also withdrew from the Union: Bulgaria (2010) and The Netherlands (2011).

The IUGS is in the enviable position to be associated with a significant number of specialized organizations, societies and groups that serve a large number of earth scientists and/or focus on important niches and subjects within the discipline. Such organizations apply formally to the Union for official recognition as Affiliate Organizations. As with Adhering Organizations, membership within the Union for Affiliated Organizations requires the official ratification by the Council. The current Statutes and Byelaws allow for electronic Council ratification of various issues, hence, several membership ratifications were facilitated during the inter-congress period. As a consequence the total number of Affiliated Organizations now stands at 54 as compared to 42 in 2008; an impressive increase of 12 new bodies.

The Union welcomes the following new IUGS Affiliates since 2008:

- Association of African Women Geoscientists (AAWG)
- Canadian Federation of Earth Sciences (CFES)
- Coordinating Committee for Geoscience Programmes in East and Southeast Asia (CCOP)
- European Federation of Geologists (EFG)
- European Geoparks Network (EGN)
- EuroGeoSurveys (EGS)
- Geological Society of France (GSF)
- Geological Society of India (GSI)
- International Centre for Training and Exchanges in the Geosciences (CIFEG)
- Italian Federation of Earth Scientists (FIST)
- International Medical Geology Association (IMGA)
- Young Earth Scientists Network (YES)

## COMMITTEES

The following official IUGS Committees were active in the past four years:

- Nominating Committee (NC)
- Strategic Planning Committee (SPC)
- Finances Committee (FC)
- Publications Committee (PC), and
- Ad hoc Review Committees (ARC)

The Nominating Committee (NC) reports directly to Council and not the Executive Committee. During this term, the Nominating Committee was Chaired by Zhang Hongren (China). Mid term Felix Toteu (Cameroon) resigned due to a conflict of interest following his appointment to UNESCO and he was replaced by Aberra Mogessie (Austria). The remaining members of the NC included Marita Bradshaw (Australia), Jonas Satkunas (Lithuania), Peadar Mcardle (Ireland), Elena Centeno-Garcia (Mexico), and Ryo Matsumoto (Japan). As mandated by the current Statutes and Byelaws, this committee requested nominations from all eligible bodies and organizations for the positions of IUGS EC members to be appointed in 2012. The Committee evaluated all nominations and tabled recommendations to the Council for their final decision. A copy of the full report from the Nominating Committee is available from the Secretariat.

The Strategic Planning Committee (SPC) was formed in 2009 in response to the recommendations of the last strategic plan. Chaired by Attilio Boriani (Italy), the remaining members consisted of Jacques Charvet (France), Peter Cook (Australia), Umberto Cordani (Brazil), Stan Finney (USA), Ochir Gerel (Mongolia) and Gary Lewis (USA). The aim of this committee was to examine how well the Union has addressed the recommendations of the current strategic plan and to develop a new strategic plan for the union for consideration and discussion by council on the occasion of the 34th IGC.

The Finances Committee (FC) was formed in early 2010 in response to directions from Council. Chaired by Antonio Brambati (Italy) with other members Zdenek Johan (France) and Pat Leahy (USA) this committee has been very active in examining the financial affairs and needs of the Union including making recommendations regarding new sources of income, managing existing funds more effectively and assessing the state of financial need into the future.

The Publications Committee (PC) changed leadership and membership during the course of this term of office. In early 2009 Godfrey Nowlan (Canada) stepped down as PC Chair. He was replaced by Fred Spilhaus (USA). The remaining committee members include: Susana Damborenea (Argentina), Zhenyu Yang (China), Michael Thomson (United Kingdom) and Mudlappa Jayananda (India). The committee did not meet during the past four years and managed to address issues [internal (Episodes) and external (through the Geological Society of London) publications] through email. (For details on the PC and related output see comments under Section on Publications/ Communications). The most important change related to the Publications Committee was the change in Editorship and publication management for Episodes which moved from Beijing, China (after many successful years of production) to Bangalore, India (under the auspices of the Geological Society of India). A new Editor in Chief was appointed (Mudlappa Jayananda from New Delhi).

Several Ad hoc Review Committees (ARCs) were appointed during the past four years to provide timely and critical evaluation of IUGS funded activities. Following the completion of a review, an evaluation report is completed by the Committee Chair, submitted to the IUGS EC for approval and is subsequently published in Episodes.

There were no active ARCs in 2008. In 2009, an Ad hoc review committee reviewed the Commission on Management and Application of Geoscience Information (CGI) and published its results in Episodes (Vol. 33, No. 4). In 2010 two ARC were completed: one on the International Lithosphere Programme (ILP), (actually reported: *Episodes 35(2), 361-362*) and another on the Commission on Geoscience for Environmental Management (GEM), also reported in Episodes (Vol. 34, No. 1). In 2011 there was two Ad Hoc Review Committees active. The first completed a review of the Commission on the History of Geological Sciences

(INHIGEO) and the second on the Commission on Geoscience Education, Training and Technology Transfer (COGE); both to be published in Episodes in 2012. In 2012 there were two ARC completed: the first on the Task Group on Global Geochemical Baselines (TGGGB) and the second on the International Geoscience Programme (IGCP) with reports to be submitted in time for the 34<sup>th</sup> IGC and likely to appear in Episodes in 2013. As a result of all of these reviews, the new IUGS EC will save costs since the next round of evaluations will not be required to begin until 2014.

## PUBLICATIONS/COMMUNICATIONS

A Memorandum of Understanding (MOU) exists between the IUGS and the Geological Society of London (GSL) to publish geoscience books of mutual interest. All IUGS funded activities (including Commissions, IGCP Projects, etc.) are expected to consider the GSL for publication of their work. As of May 2012, 23 volumes were already published under the agreement through GSL with an additional few slated for release in 2012 and onwards. Several other volumes were also targeted at various stages of progress. Contact is now being made with various IGC participants and expressions of interest are expected to be received for volumes resulting from the 34<sup>th</sup> IGC.

The journal Episodes was ably managed and published through India under the editorship of Mudlappa Jayananda and his team of associate editors. An MOU in place between IUGS and the Geological Society of India is in place and expires on the occasion of the 34<sup>th</sup> IGC. In 2008 volume 35 will be released. Noteworthy is the SCI Impact Factor for Episodes which was relatively stable during this period: 1.8 in 2008, 2.13 in 2009, and 2.04 in 2010.

The previous Publications Committee published a new brochure and flyer for the Union (both available for download from the IUGS website [www.iugs.org](http://www.iugs.org)) in 2009 before transition to a new slate of Publication Committee members.

Annual Reports for the IUGS for the past four years were compiled by David Huntley (Canada) and released by the EC following the tradition established at the 32nd IGC in Italy. All reports are available in digital format on the IUGS website. Following the example set by the previous EC for printing a hard copy Annual Report on the occasion of the IGC, the current executive for any given year releases a hard copy Annual Report for the preceding year on the occasion of the pending IGC. Hard copies were released in 2004, 2008 and will again be distributed in 2012 at the 34<sup>th</sup> IGC.

In 2007 the Union website was reformatted and upgraded with new software and has been effectively managed for the past five years by IUGS Secretary General Peter Bobrowsky.

The concept of IUGS E-Bulletins launched in October 2001, an email based service providing relevant news information in a short format to the geoscience community was maintained and enhanced. Since the last Congress an additional 46 E-Bulletins of this popular effort will have been compiled (as of August 2012) by Councilor Colin Simpson.

## COMMISSIONS, TASK GROUPS AND INITIATIVES

Activities and individuals represented by these bodies reflect the scientific arm of the Union. The aim of all such groups is to address key and relevant topics that have a global relevance for the earth sciences, deal with topics not presently addressed by other bodies, involve the

expertise of leading scientists from around the world and do so in a timely manner. The IUGS very much appreciates the hard work, volunteer efforts, collaboration and accomplishments enjoyed by each program, their projects and the individuals contributing to the work on behalf of the earth science community. Unequivocally, these bodies and their supporting officers and members are the “bell weather of success” for all geosciences. Since all of these activities are directly funded by IUGS, regular Ad hoc reviews are undertaken, the results of which determine whether support for the program should be continued.

During the past four years the following IUGS Commissions were recognized:

- Commission on Environmental Management (GEM)
- International Commission on Stratigraphy (ICS)
- Commission on the History of Geological Sciences (INHIGEO)
- Commission on Geoscience Education, Training and Technology Transfer (COGE)
- Commission Management and Application of Geoscience Information (CGI)
- Commission on Tectonics and Structural Geology (TECTASK)

All six Commissions remain active, each maintaining an informative communication strategy (e.g. website, publication, etc.), each of these Commissions is scheduled to elect new officers in Brisbane in 2012 and each group obtains varying levels of financial support directly from IUGS. All six Commissions have completed extraordinary accomplishments during the past term including participation with 100s of Commission members, contributing aggressively to the journal Episodes, contributing good science outputs, addressing key social issues, substantially raising the level of awareness amongst non-geosciences, improving the geoscience capabilities and capacity within ‘Less Developed Countries’ and much more. For specific details on each Commission, please visit the individual Commission websites:

- GEM (<http://www.iugs-gem.org/>)
- ICS (<http://www.stratigraphy.org/>)
- INHIGEO (<http://www.imhigeo.org/>)
- COGE (<http://www.iugscoge.com/>)
- CGI (<http://www.cgi-iugs.org/>)
- TECTASK (<http://www.tectask.org/>)

The Union also supported a number of formal Task Groups, several informal “task groups” and approved one new Initiative. The formal Task Groups represent activities that do not match “Commission” expectations, whereas the Commissions represent activities that have exceeded the capacity of Commissions and require focused attention on their own. Initiatives are viewed as medium term efforts that are in transition to independence such as a new society. During the past four year term the following formal Task Groups and Initiative were in effect:

- Task Group on Isotope Geology and Geochemistry (TGIG)
- Task Group on Global Geochemical Baselines (TGGGB)
- Task Group on GeoHeritage (TGG)
- Task Group on Global Geoheritage Stone (HSTG)
- Task Group on Global Geoscience Workforce (TGGGW)
- Forensic Geology Initiative (FGI)

The Task Group on Isotope Geology and Geochemistry remains a small, active and relevant component of the Union. This joint venture with the International Union of Pure and Applied

Chemistry is co-funded by both Unions to address topics such as updating geochronological decay constants and standardizing the use of SI units, etc.

The Task Group on Global Geochemical Baselines has been a long term contributor to basic geoscience data collection. This small group of participants maintain a global mandate. A new Ad hoc Review will be undertaken before the 34<sup>th</sup> IGC. Notably the activities of this group have been embraced by UNESCO who launched a Tier 2 cooperative venture with China to establish an Institute of Geochemistry in Langfang.

A new Task Group on GeoHeritage was started and ratified by Council in 2011. This group aims to consolidate the many activities related to geological heritage including GeoParks, IUCN reviews, and others.

The Task Group on Global Geoscience Workforce was proposed in 2008 and ratified shortly thereafter. Under the leadership of the American Geosciences Institute this group addresses the importance of evaluating the access to trained professionals in all work force sectors.

The Task Group on Geoheritage Stone was proposed and approved in 2012 and represents a joint effort with the International Association of Engineering Geology and the Environment (IAEG); as a Commission within the latter organization.

One important informal “task group” was created to streamline the current statutes and bylaws of the Union and IGC. As instructed by Council during the 33<sup>rd</sup> IGC in Oslo, this task group completed its task in time to allow for discussion and resolution at the 34<sup>th</sup> IGC. There were two other important informal task groups: the first dealing with Affiliated Organizations and the other with Adhering Members. The latter provided a new standardized reporting template, populated the website with a section devoted to promoting individuals Adhering Bodies and elaborated on an operational model for National Committees.

Lastly, the IUGS was privileged to support and benefit from the high profile work of the Commission on Environmental Management and its many activities. In particular on such working group on Forensic Geology was elevated to IUGS Initiative status in 2011. This new body expands the traditional purview of earth science relevance to society through its work with law enforcement around the world.

## INTERNATIONAL COUNCIL FOR SCIENCE (ICSU)

The IUGS remains a paid member in good standing under the ICSU umbrella, with the EC responding when appropriate to calls for action issued by ICSU during the year. During the past four years, a number of significant issues and events have arisen that have changed how ICSU operates and interacts with its members. The management of ICSU has undergone tumultuous times since 2008 with the retirement of long term Executive Director Thomas Rosswall, the appointment of Deliang Chen (Sweden) in 2009 and his subsequent early resignation in 2011 followed by the appointment in 2012 of Steven Wilson (UK).

In 2007, ICSU changed its official currency of operation from USD to EURO, a move that impacted most if not all Unions regarding their ability to pay annual dues. Also approved was an automatic increase of 5% per year for the dues categories to account for inflation. As noted in the last quadrennial report of IUGS, ICSU commissioned a study to evaluate membership

categories and the outcome of their study indicates that IUGS is currently paying its dues at an appropriate level.

ICSU reinstated a limited Grants Programme in 2008. Applications for this funding may not come from individuals but rather must be submitted via a recognized Union within ICSU. Furthermore, all applications must be co-sponsored by other Unions. In this regard, IUGS has benefited a number of times during the past four years. In 2008 IUGS participated in an ISPRS led ICSU grant dealing with space based mapping and geosciences and health. IUGS was also a partner in an IUGG led 2009 ICSU project on Geohazards. Finally, IUGS was the lead applicant through its partner the International Permafrost Association for an ICSU grant related to permafrost monitoring.

All three Bureau members of the IUGS EC participated actively in the 29<sup>th</sup> General Assembly of ICSU held in Maputo, Mozambique in October 2008 and then again in the 30<sup>th</sup> General Assembly of ICSU held in Rome, Italy in September 2011. The next IUGS EC will represent the Union to in the 31<sup>st</sup> General Assembly scheduled for New Zealand in 2014.

ICSU organized an all-Union meeting in Paris, France (2010) to better focus on issues unique to Unions in contrast to member state issues. Two Executive Committee members participated in this event. The next all-Union ICSU meeting is scheduled for 2013.

Several members of the Executive Committee met with the ICSU President, Madame Catherine Brechignac (France) in Paris, in 2009 and 2010 to discuss issues of mutual interest as they pertain to policy and practice for ICSU-Union relations. These visits have strengthened the ties between IUGS and ICSU over the past years. They also met with President elect Gordon McBean (Canada) in Italy in 2011.

In 1980 ICSU established an IUGS-IUGG initiative entitled the International Lithosphere Programme (ILP/SCL). As noted previously ICSU divested its interests in the programme which is now solely under the umbrella of the two Unions: IUGS and IUGG. The current active Terms of Reference for ILP were approved on 18 October 2006. The following individuals represent IUGS in the ILP: Jacques Charvet (France), Y. Tatsumi (Japan) and A. Green (Switzerland); the latter a shared seat with IUGG. New members need to be identified to replace some of the current representatives. The ILP has become extremely successful in its activities and fund raising, and is therefore less dependent on the two Unions. For more details see: <http://sclilp.gfz-potsdam.de/>

## GEOUNIONS

In early 2004, then IUGS President Ed de Mulder invited senior representatives of three other ICSU Unions (IUGG, IGU and IUSS) who shared certain earth science objectives to an informal meeting in Paris. Thus began the start of the informal "GeoUnions" consortium which now meets annually to review and discuss critical issues within ICSU, or dealing with globally relevant topics such as the International Year of Planet Earth. During the past few years the number of members within the informal GeoUnion consortium has grown to eight, now consisting of: IUGS, IUGG, IGU, INQUA, IAU, ISPRS, IUSS and URSI.

Collectively they represent a "cluster" as defined by ICSU and therefore nominate and elect a single representative to the ICSU Executive Board (which consists of four cluster representatives). The GeoUnions proposed two nominees for their cluster, and Past ISPRS

President Orhan Altan (Turkey) was successfully elected for the 3 year position in October 2011.

During the past term one or more of the Executive Committee members met the GeoUnions in Maputo (October 2008), Paris (April 2010), Rome (October 2011) and Istanbul (April 2012).

When possible, executive members of the Unions try to participate in events organized by their fellow Unions. For instance, the following Unions were represented at the IUGS Annual Executive Meetings: in 2009 (IUGG), in 2010 (IAU, IUGG and URSI), and in 2011 (IUGG). Similarly, IUGS Executive Committee representatives actively participate in the Congress/General Assembly of sister unions (e.g. IUGS at IUGG annual meeting in 2011).

## COOPERATION WITH UNESCO

The IUGS maintains a long history of positive and mutual cooperation with UNESCO. Previously this relationship was managed with the Earth Sciences Division of UNESCO but following the dissolution of that department the responsibility shifted to the newly amalgamated Division of Ecological and Earth Sciences. Cooperative activities with UNESCO during the past four years included:

- International Geoscience Programme (IGCP)
- Geological Applications of Remote Sensing (GARS)
- Global GeoParks Network (GGN)
- International Year of Planet Earth (IYPE)

Initiated jointly in 1972, the International Geoscience Programme (IGCP) formerly called the International Geological Correlation Programme remains a primary focus of attention for both organizations as the key geoscientific activity for the global community. During the past four years much of the collaboration has been primarily through the SubDivision Chief Robert Missotten who recently retired from UNESCO in 2011. A replacement for his position has been pending at UNESCO given recent financial cutbacks imposed on the organization in the fall of 2011. UNESCO and IUGS successfully celebrated the 40th Anniversary of the IGCP in February of 2012 at UNESCO Headquarters in Paris, France where a one day event commemorating four decades of geoscience research was shared by over 100 delegates.

Financial concerns continue to plague this important programme. The annual contribution of \$85,000 USD from the USA to IGCP stopped when the country rejoined the UN. Furthermore, the internal contributions from UNESCO have undergone progressive reductions. In response to these negative events, the IUGS EC has more than tripled the annual contribution of support to IGCP from \$20,000 in 2004 to \$70,000 USD in 2012. Recognizing the importance of grass roots geoscience performed by the many scientists involved in IGCP, the EC stretched the capacity of the Union to ensure continued survival of the programme. Through the joint agreement between IUGS and UNESCO, continues to annually fund no more than about 30 active projects. For more details please refer to: <http://www.unesco.org/new/en/natural-sciences/environment/earth-sciences/international-geoscience-programme/>

The Geological Applications of Remote Sensing (GARS) programme is an integral part of the International Global Observing Strategy (IGOS), providing cooperation amongst some 40 institutes in 28 countries. Obviously focusing on the importance of linking geology to remote sensing, the group provides a link amongst diverse interests within the remote sensing

community. GARS address hazards, groundwater and global environmental change. The group is still being chaired by Stuart Marsh (UK) since 2003 since a replacement candidate was not identified after his 8 year term expired.

The Global GeoParks Network is a platform activity supported by UNESCO. Launched in 2004, there are now 77 National GeoParks in 25 Member States who are part of the network. The platform compliments the World Heritage list and the cooperation (formal MOU) that IUGS has with the IUCN, but centers entirely on geology and the creation of educational parks. The IUGS actively promotes geoh heritage issues including the Global GeoParks Network, but it plays a minor role in the GGN itself. Efforts to become equal partners with UNESCO, modeled after IGCP have not worked, but as a consolation the Union has now been recognized as a member of the Board. Please refer to <http://www.globalgeopark.org/english/>

The International Year of Planet Earth (IYPE) was first conceived by the IUGS and immediately thereafter was recognized as a collaborative initiative by both IUGS and UNESCO who joined the movement in 2002. The flagship event of the century for IUGS and the entire earth science community is unquestionably the inauguration and celebration of the International Year of Planet Earth. This triennium effort (2007-2009) centered on 2008 as proclaimed by the UN General Assembly on December 22, 2005. The Year coincided well with delivery of the 33<sup>rd</sup> International Geological Congress. Championed almost single-handedly by IUGS Past President Ed de Mulder since the year 2000, when first proposed as a concept, IYPE has successfully evolved into a truly global affair. The International Year of Planet Earth officially terminated in 2010.

Finally the IUGS has been supportive of the new UNESCO Earth Sciences Education Initiative on Africa and hopes that this venture will successfully move forward.

## OTHER

The IUGS applied for and became an official recognized as a Participating Organization of GEO (Group on Earth Observations) which is coordinating international efforts to build a Global Observation System of Systems (GEOSS). The Union participated in the Ministerial meeting in Beijing (2010) and the GEO VIII Plenary in Istanbul (November 2011). The Union continued to actively promote and support OneGeology and its partners within the EuroGeoSurveys and GGMW by participating in the business meeting of OneGeology (Japan 2012), annually attending the business meeting of EGS and the biennial meetings of CGMW.

## ACKNOWLEDGEMENTS

It is with considerable regret that I step down from the Union after serving 12 years on the IUGS Executive Committee. It has been my pleasure and honour to serve the earth science community first as Vice President for four years and then as Secretary General for an additional eight years. During my tenure I have worked closely with some three dozen other executive members and unfortunately due to space restrictions I am unable to list all of these individuals nor detail their specific contributions. Nonetheless a few people do stand out for their wisdom, innovation, support and openness. Ed de Mulder and Zhang Hongren enabled me to learn much regarding respectful debate and decision making for which I am grateful for their mentorship. Particular thanks and recognition goes to my colleagues and good friends Attilio Boriani, Antonio Brambati, Jean Paul Cadet, Jacques Charvet, Eldridge Moores and William Cavazza for their friendship, support and appreciation for extracurricular focus required during turbulent

times. The commitment of most Executive Committee members to the Union is unquestionable and their continued devotion to geosciences has facilitated difficult but productive progress to be made during the past many years on behalf of all geologists. Many thanks to Margarete Patzak from UNESCO who made the annual IGCP meeting visits to Paris so exceptional. I am especially grateful to the Government of Canada as I would not have been able to perform my duties in IUGS without the moral, logistical and significant financial support of the Natural Resources Canada, (ESS, Geological Survey of Canada). For this I am most grateful. Extended appreciation to my family (Theresa, Michiko, Charbon and Toba) for their personal sacrifices and understanding during my extended periods of absence and neglect. Finally and most importantly, I acknowledge the scientific community within IUGS who deserve all the recognition and credit for helping define such an incredible Union.

Motion to accept the Secretary General' Report

**Accepted as presented**

## **6. VICE PRESIDENT'S AND COUNCILORS REPORTS (J. Charvet & E. Errami)**

### **VICE-PRESIDENTS' REPORT 2008-2012 (Jacques Charvet)**

At the Second Ordinary Session of the IUGS-IGC Council, in Lillestrøm (Norway), on August 10, 2008, the two following Vice-Presidents were elected for a term of 4 years (2008-2012):

- Gerel Ochir (Mongolia)
- Jacques Charvet (France)

After their appointment to the Executive Committee (EC) the IUGS Vice-Presidents took care of the usual affairs through the attendance to the annual EC meetings and several Bureau meetings, and by e-mail exchange. Only one of the 6 EC meetings was missed by Gerel Ochir for medical reasons. They attended five Bureau meetings, including the one in Lisbon, on November 2009, which was not linked to an EC meeting. Each year, they evaluated annual reports of IUGS Commissions, Task groups, Adhering Members and Affiliated Organizations.

They had both the opportunity of representing the IUGS President and speaking on behalf of IUGS at some international meetings: 117th Geological Society of Japan (GSJ) Annual Meeting, Toyama, 2010 (G.O.); IYPE Board meeting, London, 2009; IGMA 5000 workshop (International Geologic Map of Asia), Beijing, 2009; 1st YES (Young Earth Scientists) International Congress, Beijing, 2009; opening of the 38th session of the IGCP Scientific Board, 2010; ICSU meeting of Member Unions, Paris, 2010; 29th European Geoparks Conference, Lesvos, Greece, 2010; IGMA 5000 workshop (International Geologic Map of Asia), Beijing, 2011; 10<sup>th</sup> European Geoparks Conference, Langesund, Norway, 2011; GEO VIII Plenary meeting, Istanbul, 2011; ICSU GeoUnions meeting, Istanbul, 2012 (J.C.).

The Vice Presidents were specifically involved in some IUGS Commissions and Task Groups. Gerel Ochir acted as a member of the Commission on Geoscience Education, Training and Technology Transfer (COGE); she was the chair person of the Task Group on Affiliated Organizations. Jacques Charvet was a member of the Task Group on Geoheritage, the Task Group on IUGS and IGC Statutes and Bylaws, the Strategic Planning Committee, and was the Chair of the Task Group on Adhering Members.

Besides the previous tasks, the Vice-Presidents were also involved in several actions linked to the promotion of Earth Sciences and IUGS activities and programs.

Gerel Ochir was: member of the IGCP Scientific Board, Earth Resources Group; Head of the IYPE Mongolian National Committee; leader of the IAGOD Mongolian National Group; convener of session at the 1st YES International Congress and involved in YES network activities; member of the AGID Geoethics Working Group at Pribram, Czech Republic, 2011; responsible for science, education and international relations in Mongolian Geological Society.

Jacques Charvet was: IUGS representative in Advisory and Coordination Committees of the European Geoparks Network, attending 6 meetings and 2 evaluation missions; IUGS representative in the Bureau of ILP; chairman of the Ad-hoc Review Committee on ILP (2011); attending the IGCP Board meetings (2009, 2010, 2011, 2012) and Bureau meeting (2012); member of the IYPE French National Committee and leader of projects; Vice-President of the Scientific Committee of the 1st YES International Congress.

Both Gerel Ochir and Jacques Charvet found their term of Vice-President in the IUGS EC a very interesting experience. They extended thanks all of the affiliated and adhering organizations, IUGS Commissions and Task Groups, and all individuals and scientists with whom they collaborated during their term.

#### Motion to accept the Vice Presidents' Report

#### **Accepted as presented**

#### **IUGS COUNCILORS REPORT 2008-2012 (Ezzoura Errami)**

Following the Article 36 of the IUGS Statues "Four Councilors shall be elected, each to serve for a period of four years, but staggered in order to provide continuity: two take office immediately following election by the Council Meeting, two take office two years after the Council Meeting," the following IUGS Councilors were nominated and elected respectively for the period 2006/2010, 2008/2012 and 2010-2014:

Councilor (August 2006 – August 2010) – Mikhail Fedonkin (Russia)  
Councilor (August 2006 – August 2010) – Marta Mantovani (Brazil)  
Councilor (August 2008 – August 2012) – Ezzoura Errami (Morocco)  
Councilor (August 2008 – August 2012) – Colin Simpson (Australia)  
Councilor (August 2010 – August 2014) – Sampat Tandon (India)  
Councilor (August 2010 – August 2014) – Wesley Hill (USA)

Since their appointment to the Executive Committee (EC), the IUGS Councilors participated in the IUGS day-to-day affairs via email and to all IUGS EC annual meetings and the IUGS-IGC Council meetings. Each year, they participated in the evaluation of the annual reports of IUGS Commissions, Task Groups, Adhering Members and Affiliate Organizations. During their respective terms, the IUGS Councilors participated actively in the promotion of IUGS and its projects and joint projects especially IYPE and IGCP.

Councilor Marta MANTOVANI acted as the contact between IUGS and the Regional Committee of ICSU-Latin America and Caribbean and represented IUGS in 1st ICSU Regional Consultation

for Latin America and Caribbean held in 2009 in Mexico. Marta attempted to establish contacts with IUGS inactive members in South America, in order to get them back involved.

Councilor Colin SIMPSON assisted with the organization the 2009 Executive Committee Meeting in Sydney (Australia). Since his election, and as the Editor of the IUGS e-bulletin, Colin produced a total of 41 e-bulletins (e-Bulletins #34 to #75) which were distributed by the Secretariat by email to over 12,000 addresses worldwide. He represented IUGS in the Global Geoparks Network (GGN) Bureau meetings and associated conferences. In close collaboration with Vice President Jacques Charvet (the IUGS representative on the European Geoparks Network, EGN), he prepared the Terms of Reference for the IUGS collaboration with the GGN and EGN. Colin chaired the IUGS-Ad Hoc Review Committee (ARC) of the IUGS Commission on Geoscience for Environmental Management (IUGS-GEM). He participated as Secretary to the IUGS-ARC review of the IUGS Commission on Management and Application of Geoscience Information (IUGS-CGI) and to the IUGS-ARC review of the IUGS International Commission on the History of Geological Sciences (INHIGEO). Colin represented IUGS at the International Union of Geodesy and Geophysics (IUGG) Executive Committee Meetings in Melbourne in 2009, and 2011, at the OneGeology Steering Group Meeting, Tokyo, 2011 and at the Australian Earth Sciences Convention, Canberra, 2010. He is also involved in the Organizing Committee of the 34th International Geological Congress 2012 (Brisbane, Australia).

Councilor Ezzoura ERRAMI served as the liaison between IUGS and ICSU-ROA and between IUGS and UNESCO Nairobi, and the UNESCO Cairo offices and reported regularly to the IUGS Executive Committee about their activities related to Earth Sciences in Africa and in the Arab World. Ezzoura acted as Secretary of the ARC review of the Commission on Geoscience Education, Training and Technology Transfer (COGE) and she nominated as the President African Association of Women in Geosciences (AAWG) two African women to be members of (COGE). She also organized during the First International Conference on African and Arabian Geoparks, held in 2011 in Morocco, a roundtable on Earth Sciences Education in Africa where COGE, UNESCO and the Earth Sciences Matters foundation were represented. Ezzoura evaluated the IYPE activities through their published works via internet. She examined also the methodologies used by various IYPE national committees and made a proposal on how these could be adapted to the IUGS National Committees in order to improve their communication with the IUGS Executive Committee.

Councilor Wesley HILL coordinated the IUGS-YES-IGC Early Career Earth Scientist Essay Contest in celebration of the IUGS 50th Anniversary 2011. Wesley designed the new IUGS display and exhibit materials for IUGS representation at global conferences. She also coordinated the IUGS 50th Anniversary Video project and production. She acted as IUGS liaison to the International Union for the Conservation of Nature (IUCN) concerning UNESCO World Heritage and as IUGS liaison to the Task Group on Geoheritage. Wesley chaired the IUGS ARC Review of the Commission on Geoscience Education, Training and Technology Transfer (COGE). She also coordinated the IUGS booth for IGC Brisbane.

Councilor Sampat TANDON made an assessment of the status of inactive members and initiated action for establishing contacts with colleagues in different countries. He also interacted regularly during the year with the Editor of Episodes for ensuring its timely publication and to increase its circulation within India. On the 21st January 2011 he also participated in discussions with the IUGS Bureau on the various aspects of the publication of Episodes in the office of the Geological Society of India.

In closing the IUGS Councilors would like to thank all organizations partners, scientists, IUGS Commissions, and Task Groups, with whom they interacted during their respective terms.

Motion to accept the Councilor's Report

**Accepted as presented**

**7. TREASURER'S REPORT 2008-2012 (William Cavazza)**

William Cavazza began by discussing the financial challenges that IUGS faced during the period from 2008 – 2012 which included the following:

- Global economic downturn
- IUGS 50<sup>th</sup> Anniversary
- IGCP 40<sup>th</sup> Anniversary
- Episodes relocation to (Geological Society of India)
- Secretariat relocation to (USGS)

William discussed the membership status for Adhering members.

Returns on Investments

\$525,000 Investment into two guaranteed deposit accounts yielded a net of 4.69 percent during 2008 – 2012, which yielded a return of \$98,569 (USD).

The IUGS EC favored investments on science and planned significant reduction in administrative expenses.

Despite the considerable expenses related to the IUGS 50<sup>th</sup> Anniversary in 2011 during the quadriennium 2008-2011 the overall IUGS financial situation has improved by 14.3 % (from \$1,047,654 to \$1,197,789 USD), consolidating the trend set during the previous quadriennium.

Membership

The global financial downturn has taken its toll as the total number of adhering active members has decreased from 94 in 2008 to 85 in 2011. This has been partially counteracted with a more aggressive membership campaign.

Bank and Financial Assets (as of 6/30/2012)	\$1,148,698.85
Bank and Investment Interests (as of 6/30/2012)	\$ 22,452.93
Bank Charges (as of 6/30/2012)	<u>(1,691.48)</u>
Balance	\$ 20,756.57

Movements until June 30, 2012	
Received	\$ 304,920.79
Paid	<u>\$ (332,036.42)</u>
Balance as of (June 30, 2012)	\$ -27,115.63

## Budget and Realizations 2012 (until June 30, 2012)

	Budget	Realization
Membership Fees	\$402,426.00	\$256,661.28
IGCP Programme – UNESCO 2012	\$73,000.00	
UNESCO Balance for 2011	\$21,455.00	\$21,455.00
Miscellaneous Income - GSL	-	\$ 4,351.58
Bank & Investment Interests	-	<u>\$22,452.93</u>
Total Income	\$496,881.00	\$304,930.79

### Motion to accept the Treasurer's Report

#### **Accepted as presented**

#### **8. REPORTS OF COMMITTEES**

##### **a) IUGS Finance Committee (FC) (A. Brambati, Chair), P. Leahy and Z. Johan (Members)**

The committee was formed two years ago and the report is two-part consisting of Mandates of the FC and an audit. The report revealed that assets increased from 2008 to 2010 and decreased in 2011 due to the decrease in paying organizations.

Income from membership fees stood current and remained that way through 2012. The increased membership in 2010 and 2011 is the result of an aggressive strategy of the treasurer toward the inactive or active pending status of adhering members.

#### **Roles and Aims**

According to the Terms of References issued by the IUGS Executive Committee, the primary roles of the Finance Committee are:

1. To identify external financial opportunities for IUGS.
2. Propose to the EC ways to improve IUGS financial operations, including the allocation of funds in relation to the strategic priorities and missions adopted by EC.
3. To audit IUGS finances and present a report to the IUGS Council every four years before the election of a new EC.

An audit was performed for the years 2008, 2009, 2010, and 2011 and conformed to the general principles accepted in Italy.

Conclusions: The expenses for administration decreased and funds were also invested fruitfully in low-risk accounts.

### Motion to accept the Financial Committee Report

#### **Accepted as presented**

## **b) Ad Hoc Review Committees (S.K. Tandon)**

### **Summary Report on the Ad hoc Review Committee (2009 – 2012)**

As specified in the statutes and Byelaws of the Union, the IUGS EC is required to review the commissions and other bodies funded by the Union on an approximate 4-year cycle. These reports provide accountability for the expenditures incurred by the Union and an opportunity for the Union to directly interact with its constituents. During the period under review 2008-2012, the EC took decisions to review the following 6 commissions and bodies of the Union. These are 1) Commission for the Management and Application of Geoscience Information (CGI), 2) Commission on Geoscience for Environmental Management (GEM), 3) International Lithosphere Program (ILP), 4) International Commission on the History of Geological Sciences (INHIGEO), 5) Commission on Geoscience Education, Training and Technology Transfer (COGE), and 6) Task Group on Global Geochemical Baselines (TGGGB). Summary accounts of the Ad-hoc Review Committees are given below:

1. ARC of the Commission for the Management and Application of Geoscience Information (CGI) (Commission Chair: Kristine Asch)  
Date and Venue: 24<sup>th</sup>-25<sup>th</sup> September 2009 at the German Geological Survey (BGR) Building, Hannover, Germany.

ARC Committee Members:

- Peter Bobrowsky – IUGS Secretary General (Chair)
- Colin Simpson – IUGS Councilor (Secretary)
- Jones Satkunas – (Deputy Director, Lithuanian Geological Survey)
- Brian Marker – (Independent Consultant)

Main Recommendation: ARC recommended that the IUGS continue support of the CGI activities until 2012.

2. ARC of the IUGS Commission on Geoscience for Environmental Management (GEM) (Commission Chair: Kevin Telmer)  
Date and Venue: 2<sup>nd</sup> October 2010, Namibian Geological Survey Building, Windhoek, Namibia)

ARC Members:

- Colin Simpson – IUGS Councilor (ARC Chair)
- Peter Bobrowsky – IUGS Secretary General (ARC Secretary)
- Gabi Schneider (Director, Namibian Geological Survey)
- Geoff Grantham (Geologist, South African Council for Geoscience)

The Commission helped launch a new activity on Forensic Geology.

Main Recommendation: Conditional extension of the Commission for one extraordinary additional term of 4 years in 2012 following resolution of issues related to vacancies of officers, corresponding membership recruitment, and commission communications.

3. IUGG-IUGS ARC of the International Lithosphere Program (ILP) (Chair: Sierd Cloetingh)

The review was made in three steps: a physical meeting between IUGS ARC members and the ILP representatives; a review by IUGG based on documents; a IUGS-IUGG synthesis via e-mails.

Date and Venue of the IUGS ARC: January 18, 2011 at UNESCO, Miollis Building, Paris

IUGS ARC Members:

- Jacques Charvet - IUGS Vice-President (ARC Chair)
- William Cavazza - IUGS Treasurer, IUGS Treasurer (ARC Secretary)
- Laurent Jolivet - Professor, University of Orleans, Orleans
- Jaume Verges - Researcher, CSIC, Barcelona

IUGG Members in charge of ILP review:

- Chen Yun-Tai, IUGG Bureau Member, 2007-2011
- Alik Ismail-Zadeh, IUGG Secretary General
- Kalachand Sain, IUGG liaison to ILP

The IUGG review was based on the ILP reports (2007-2010) submitted by ILP to IUGG.

Main Recommendations: 1) Improvement in the Annual Report is needed so that details on the quantitative evaluation of the scientific results of each Task Force are easily accessible, 2) Better integration to be established between the ILP programs and IGCP (particularly Deep Earth) and relevant scientific commissions (Geodesy, Seismology, Volcanology) of the IUGG.

4. Report on ARC on International Commission on the History of Geological Sciences (INHIGEO) (President – Silvia Figueroa)

Date and Venue: 1<sup>st</sup> August 2011; Aichi University (Toyohashi Campus), Toyohashi, Japan.

ARC Members:

- Peter Bobrowsky – IUGS Secretary General (ARC Chair)
- Colin Simpson – IUGS Councilor (ARC Secretary)
- Niichi Nishiwaki – Faculty of Social Research, Nara University
- Hisashi Nirei – The Geo-Pollution Central Agency, Japan

Main Recommendations: Continue support to INHIGEO until next IGC in 2012, and conditional extension for one extraordinary additional term of 4 years until 2016 following resolution of issues related to updating Statutes and Bylaws for improved management, and the creation of effective strategies for both Commission's Communications and Membership recruitment.

5. ARC on IUGS Commission on Geoscience Education, Training and Technology Transfer (COGE) (Chair: Jesus Martinez-Frias)

Date and Venue: 29<sup>th</sup> September 2011, Centro de Astrobiologia, CSIC-INTA, Torrejon de Ardoz, Madrid, Spain.

ARC Members:

- Wesley Hill – IUGS Councilor (ARC Chair)
- Ezzoura Errami – IUGS Councilor (ARC Secretary)
- Amelia Calonge Garcia, Department of Geologia, University de Alcala de Henares
- Elizabeth Silva, Portuguese Commission for UNESCO

Main Recommendations: IUGS should continue to support COGE; and suggested 13 action items for COGE that include the nomination of a Vice-Chair, publication of activities/projects in Episodes, the addition of Commission members with expertise in training and technology transfer, and the provision of a new strategic plan for the next 5 years to the IUGS.

6. Report on ARC of the IUGS Task Group on Global Geochemical Baselines (TGGGB)\* (Co-Chairs Xuequi Wang and David Smith)

Date and Venue: 14<sup>th</sup> – 15<sup>th</sup> May, 2012, Institute of Geophysical and Geochemical Exploration Langfang, China)

ARC Members:

- Sampat Kumar Tandon – IUGS Councilor (ARC Chair)
- Peter Bobrowsky – IUGS Secretary General (ARC Secretary)
- Dong Shuwen – Vice-President (Chinese Academy of Geosciences)
- Xiangdong Li – Professor of Geochemistry (University of Hong Kong)

ARC noted the extraordinary success in their training programs for developing countries.

Main Recommendation: Should be fully supported for another term until the next IGC in 2016; should resolve issues regarding the dated website.

\*TGGGB operates under the umbrella of the International Union of Geological Sciences and the International Association of Geochemistry.

#### Motion to accept the ARC Committee Report

#### **Accepted as presented**

#### **c) Publications Committee - (Mudlappa Jayananda)**

The IUGS Publications Committee is responsible for reviewing publications and following policy in regards to publication.

Main Activities:

- IUGS E-Bulletin – currently the E-Bulletin is compiled by Colin Simpson and distributed by the Secretariat to over 12,000 e-mail recipients.
- Geological Society of London book publications

- *Episodes* – this journal publication is distributed in 140 countries on various scientific issues. A special issue consisting of 250 pages on the natural resources of Australia and Oceania which is being distributed at the 34<sup>th</sup> IGC Congress.

#### **d) Strategic Planning Committee (SPC) - (Attilio Boriani)**

The last Strategic Plan was approved in 2000. The SPC took a new approach to strategic planning and most discussion was done via email communication and in one formal meeting of the group which was held in 2011. The complete SPC report was made available to Council delegates and is published on the IUGS website. Lio Boriani noted that he would summarize the range of broad priorities and suggestions in the report later in the agenda.

#### Motion to accept the Strategic Plan Committee Report

#### **Accepted as presented**

#### **9. IUGS Secretariat Report (Rich Calnan)**

Rich reported that the IUGS Secretariat is in the state of transition as the Secretariat duties will be turned over to Li Zhijian at the China Academy of Geological Sciences as of December 1, 2012. The IUGS owes a debt of gratitude to Arne Bjorlyke and Anne Dehls of the Geological Survey of Norway who hosted the IUGS Secretariat for over 17 years and coordinated the effort of transferring all records to the USGS in 2009. Special thanks are also extended to Tom Casadevall and Suzette Kimball of the USGS who agreed to temporarily host the IUGS Secretariat for the three-year period from December 2009 to December 2012.

During that three year period the IUGS Secretariat was responsible for planning, coordinating and participating in the following activities:

- The 61<sup>st</sup>, 62<sup>nd</sup>, 63<sup>rd</sup>, 64<sup>th</sup> and 65<sup>th</sup> EC Meetings.
- The 50<sup>th</sup> Anniversary Celebration of the IUGS.
- The 40<sup>th</sup> Anniversary Celebration of IGCP
- The 34<sup>th</sup> IGC Council and related Meetings
- Coordinated a 30 year collection of IUGS papers housed in Eggenburg, Austria.
- Played a key roll in producing an award winning video to mark the first 50 years of IUGS history and developed a new logo to be used for the 50<sup>th</sup> anniversary.

The above was all accomplished in addition to the normal activities of preparing and filing correspondence for the IUGS leadership, maintaining a very dynamic database of over 12,000 names, distributing and tallying ballots, E-Bulletins, and reports from various Committees, Commissions and Task Groups, and producing meeting documents, voluminous meeting minutes and contributing to annual reports.

In a 32 month period the above was a challenging list of tasks accomplished. Along the way great support was provided by some colleagues. The IUGS Secretariat worked in close collaboration with the IGCP Secretariat at UNESCO, and the support was most appreciated. The support of both the USNC and the US Geological Survey was also crucial. The IUGS

President, Alberto Riccardi, was always available with sage advice and the IUGS Treasurer, William Cavazza, provided all of the necessary financial support.

Motion to accept the IUGS Secretariat Report

**Accepted as presented**

**10. REPORTS OF COMMISSIONS, INITIATIVES, AND TASK GROUPS**

**- COMMISSIONS**

**a) Geoscience in Environmental Management (GEM) (Brian Marker)**

The objective of the GEM is to encourage the integration of geosciences knowledge into policy and society while striving to build bridges both between the developed and developing worlds. Its main goals are:

1. To encourage greater application of the geosciences in the sustainable use of land, minerals, energy and water resources which fits in with the IUGS policies;
2. To generate geosciences information for policy development and to communicate that information broadly;
3. To grow multidisciplinary initiatives to create new knowledge and tools to solve environmental problems;
4. To strengthen the interests of the geosciences community in environmental management and sustainable development;
5. To make the essential contributions of geosciences to environmental development and environmental management known to planners and decision-makers; and
6. To engage the key stakeholders involved in specific environmental management and sustainable development issues.

The structure and organization consists of seven Commission working groups. Those groups interact with international organizations and projects. The working groups work on two levels: a commission level and a working group level which involve a variety of environmentally related topics.

The IUGS support of \$10K per year is crucial for the working group's contributions to society.

Motion to accept the GEM Report

**Accepted as presented**

**b) History of Geological Sciences (INHIGEO) (Silvia Figueiroa)**

The primary objective of this commission is to study the history of geological disciplines in an international context. The Terms of Reference (TOR) and By-Laws have been extensively revised by the INHIGEO Board and the IUGS EC.

Membership has increased over the years with 198 members in 2008 to 246 members in 2011 with representation from several countries. INHIGEO members have attended and participated in several conferences over the years such as the IGC. The Commission has produced a wide variety of publications and its members share wide and varied international interaction.

Motion to accept the INHIGEO Report

**Accepted as presented**

**c) International Commission on Stratigraphy (ICS) (Stan Finney)**

The International Commission on Stratigraphy (ICS) is the oldest and largest scientific body of the IUGS which began in 1972 and continued to the present time. Its objective is to establish global standards in stratigraphy and promote and coordinate long-term international cooperation.

The ICS provides a single set of standards on a global chronostratigraphic chart. Global Boundary Stratotype Sections and Points (GSSP's) precisely define the chronostratigraphic units. The commission was able to move the boundary for stratigraphic approach to a global level.

The commission introduced and distributed the International Stratigraphic Chart to all registered participants at the 34<sup>th</sup> IGC. A new Subcommittee on Ediacaran and Cryogenian was established to replace the Subcommittee on Neoproterozoic Stratigraphy. ICS collaborates with national stratigraphic committees from Russia, Italy, France, Austria, United Kingdom, United States, China, Canada, and Spain. The ICS members collaborate and cooperate with INQUA, CCGM/CGMW, OneGeology, IUGS Commission on the Management and Application of Geologic Information (CGI), UNESCO (Geoparks Program) and ProGeo (Geosites and Geoparks initiatives).

Motion to accept the ICS Report

**Accepted as presented**

**d) Commission on Geoscience Education, Training and Technology Transfer (COGE) (J. Martinez-Frias)**

The objectives of the Commission on Geoscience Education, Training and Technology Transfer is to identify gaps in education, training and technology transfer both conceptually and geographically. The COGE members implement the objectives through partnership, networking, and capacity building using an interdisciplinary approach.

The commission has adopted the suggestions of the AR Committee and addressed almost every action item.

In the areas of Geoscience education and Geoethics COGE has worked closely with AGID on Geoethics where the IUGS logo is highlighted. The commission has formed a partnership with the International Advisory for Geoscience Diversity (IAGD).

COGE have been active in the 34<sup>th</sup> IGC Congress and maintain an active website.

Motion to accept the COGE Report

**Accepted as presented**

**e) Management and Application of Geoscience Information (CGI) (Kristine Asch)**

The main objective of the CGI is to enable the global exchange of knowledge of geosciences and information systems. The Commission assists in international dissemination of geoscience information and consists of 243 members representing 65 countries. The members collaborate through working groups which are subdivided into Tasks tied to very strong regional groups and special interest groups. Collaborative cooperation is accomplished through websites, workshops, posters, publications,...etc. The group recently worked with an observer from the YES Group.

CGI's achievements included the development of Geoscience ML and Earth Resources ML for global spatial data interoperability. Outreach efforts include the participation of Latin America and the Africa Network (GIRAF).

Motion to accept the CGI Report

**Accepted as presented**

**f) Tectonics and Structural Geology (TecTask) (Herman Lebit)**

The TecTask Commission provides a modern platform for communication and knowledge sharing. The Commission pursues the mission to stimulate the international professional community of Earth Scientists by exposing new technologies for knowledge sharing, launching initiatives relevant to our science and the public. Their intent is to reach the public through the following areas:

- GeoHeritage protection
- Outcropedia – database mechanism to download photos and other information
- Glacier Watch – provides access to the latest information
- Training and knowledge sharing
- Workshops and Conferences
- Innovation

Motion to approve the TecTask Report

**Approved as presented**

**- Initiatives**

**a) Forensic Geology Initiative (FGI) – L. Donnelly**

Forensic Geology which is also known as geoforensics and forensic geology, is the application of geology to criminal investigation. The GSL Forensic Geology Group was formed in 2006 and in 2012 became an Initiative within the IUGS. The group members work with law enforcement such as the police and the FBI on criminal issues.

The press and the media are particularly interested in forensic geology. FGI members work globally with other international organizations and they are currently working on a "Guide to Forensic Geology."

The FGI will hold a Forensic Geology Program at the 34<sup>th</sup> IGC working in cooperation with the Australian Police.

The group depends on the monetary contribution from the IUGS.

The FGI is looking to expand and diversify moving forward. The group has initiated a number of publications and work on outreach and education issues. FGI has brought together a vast group of people from various areas worldwide. The Australian and New Zealand police forces use the expertise of a forensic geologist on their respective staffs. Expansion in terminology within the court system is essential moving forward in this growing field of expertise.

#### Motion to accept the Forensic Geology Initiative Report

##### **Accepted as presented**

##### **- TASK GROUPS**

##### **a) Isotopes and Geochronology (TGIG) (Sampat K. Tandon)**

This first-ever inter-union Task Group between the IUGS and the International Union of Pure and Applied Chemistry (IUPAC), Task group on Isotopes n Geosciences (TGIG), was proposed to resolve the discrepancies between recommended values of radioactive half-lives or decay constraints that had been generated independently by the two independent unions.

Sampat reported on the following subject areas in detail:

- Work on decay constants
- TGIG Meetings
- Future Plans for the Task Group

#### Motion to accept the TGIG Report

##### **Accepted as presented**

##### **b) Global Geochemical Baselines (TGGB) (David Smith)**

The mission of the IUGS/IAGC Task Group on Global Geochemical Baselines is to establish a global geochemical database, and its representation in map form to document the concentration and distribution of chemical elements and species in the Earth's near-surface environment. The Task Group activities include:

- Developing partnerships with other countries conducting broad-scale geochemical mapping studies;
- Provide training through workshops and short courses
- Develop criteria for certification of those projects that are acceptable for inclusion in a global database;
- Serve as a repository for data collected
- Prepare complete metadata for various certified projects; and ultimately
- Prepare a global geochemical database and atlas.

David discussed a number of the four-year accomplishments to include soil sampling reviews, seminars, geochemical atlas approvals and an IUGS ARC Review of the TGGB which was held in Langfang, China in May of 2012.

#### Motion to accept the TGGB Report

##### **Accepted as presented**

##### **c) GeoHeritage (GTG) (Wesley Hill for Patrick DeWever)**

The GeoHeritageTask Group (GTG) works to facilitate the development of national and international awareness and understanding of the underlying concepts. The task group works to help understand and recognize the various types of geosites (education, recreation, protection..., etc.) around the world and to promote in developing countries the will to develop their own geoheritage.

The group promotes their work through discussions, meetings, tele-conferences and face-to-face meeting from time to time. GTG has developed a database for regulations on geoheritage protection laws.

GTG actively participates with other international groups and is actively involved with the ProGEO group on protection and sharing. GTG has just recently established a new website for the GTG.

#### Motion to accept the Task Group on GeoHeritage Report

##### **Accepted as presented**

##### **d) Heritage Stone Task Group (HSTG) (Barry Cooper)**

This group has been developing over the past four years and its main objective is to facilitate formal designation of natural stones that achieved widespread recognition in human culture.

HSTG's first involvement in dimension stone was hard rock used for building. The group is seeking approval for the establishment HSTG as a joint IUGS/IAEG Task Group.

HSTG has developed a draft version of the Terms of Reference, four circulars, a website, network of correspondents of 129 geologists in 29 countries, and a paper that has been published in *Episodes*.

The work of this group complements the UNESCO World Heritage. HSTG members are looking to expand the current group of correspondents within the international, national, and regional arenas. The group will establish a regular series of meetings which will provide long-term benefits and increased awareness of natural stone.

The HTSG looks forward to IUGS Council endorsement of their report, TOR and Board of Management.

#### Motion to accept the HSTG Report

##### **Accepted as presented**

##### **e) Task Group on Global Geoscience Workforce (TGGGW) (Christopher Keane)**

The TGGGW enables the Union to take a leadership role in raising the quality of our understanding of the geosciences workforce on a global level. As demonstrated during related workshops at the 33<sup>rd</sup> IGC in Oslo, the issue of workforce is of universal concern however, the ability to address it is elusive for most nations.

The TGGGW is focused on three distinct issues:

1. Establish definitions of comparability of data and information regarding the jobs, education, fields, and international mobility of geoscientists.
2. Determine a global baseline knowledge of the quantity and diversity of the geoscience workforce.
3. Identify capacity-building strategies for a durable global competency in Earth sciences.

The AGI along with help from the YES Network developed a Directory of Geosciences Departments in the USA.

At the 34<sup>th</sup> IGC – Workshop 19 will explore the issue of external controls on geosciences education and employment – a vector for measuring demand.

#### Motion to accept the TGGW Report

##### **Accepted as presented**

### **11. STATUS OF IUGS MEMBERSHIP AND RATIFICATION OF NEW MEMBERS**

#### **a) Adhering Organizations (Jacques Charvet)**

Of the 120 Adhering Organizations 84 are active members and 36 inactive members. The newest member is Kosovo (category 1 member). Unfortunately, The Netherlands membership was lost. Cameroon and Egypt (both category 1 members) were reinstated from Active-pending to Active and Ghana (category 1) was reinstated into Active Status.

A model of operating for National Committees was provided in the Adhering member packets at the start of the Council Meeting. Jacques pointed out that a national committee should consist of at least three people supporting geosciences in several areas.

#### Motion to accept the Adhering Organizations Report

##### **Accepted as presented**

##### **b) Affiliated Organizations (Ochir Gerel)**

Ochir Gerel reviewed the recommendations of the IUGS guidelines for the Affiliate members and discussed improving integration between the IUGS and Affiliate Organizations so that there is a better understanding of Affiliated Organizations and their activities. Ochir stressed that it is most important for Affiliate members to regularly interact with the IUGS. Several of the websites for Affiliate members were reviewed for content, regular updates, and whether or not the IUGS had been recognized either by the IUGS logo or by links from the affiliate organization to IUGS, as well as, links to the National Committees. Recommendations were provided to the IUGS at the annual IUGS EC Meetings.

#### Motion to accept the Adhering Organizations Report

##### **Accepted as presented**

##### **12. INTERNATIONAL COUNCIL FOR SCIENCE (ICSU) (David Black)**

The main objective for ICSU is the strengthening of international science for the benefit of society. David presented a brief history of ICSU which was founded in 1931 and initially consisted of 41 National members and 8 International Union members. In 1963 ICSU gained the freedom to conduct science and its related activities anywhere in the world.

##### **ICSU Mission**

- Identify and address key issues for science & society
- Foster collaboration
- Promote participation of all scientists

##### **Research Initiatives**

- Future earth: research for global sustainability
- Urban Health and Wellbeing
- Disaster Risk
- Ecosystems and Society
- Sustainable Energy - regional activities

- Science for Policy
- Universality of Science

The strategic challenges – the main focus is sustainable development.

ICSU strives to build collaboration amongst the scientific unions – send suggestions to [secretarygeneral@icsu.org](mailto:secretarygeneral@icsu.org) or <[d.black@unsw.edu.au](mailto:d.black@unsw.edu.au)>

The website for ICSU: [www.icsu.org](http://www.icsu.org)

Motion to accept the ICSU Report

**Accepted as presented**

### **13. COOPERATIVE ACTIVITIES**

#### **- UNESCO (Patrick McKeever)**

Patrick McKeever handles Science Initiatives at UNESCO and serves as Chief of Earth Science at UNESCO. He is aware of longstanding relation between the IUGS and UNESCO.

The four topics that are the lynch pin for Earth Science at UNESCO are: IGCP, GARS, GGN, and Earth Science Education Initiative on Africa.

Alberto Riccardi thanked Robert Missotten, outgoing Chief of Earth Science at UNESCO and welcomed Patrick McKeever, the new Chief.

#### **a.) International Geosciences Programme (IGCP) – (Peter Bobrowsky)**

Peter explained that the ICGP is an IUGS and UNESCO joint collaborative effort and the funding is co-shared. There are as many as 30 projects active at any one time. Organizations are provided basically seed funding to get going and then seek funding elsewhere.

In February of 2012, IGCP celebrated their 40<sup>th</sup> Anniversary.

Motion to accept the IGCP Report

**Accepted as presented**

#### **b) Geological Application on Remote Sensing (GARS) – (Stuart Marsh)**

Through the cooperative efforts of IUGS/UNESCO this program objective is to assess the value of earth observation and remote sensing. This is a small program that receives \$5K to \$10K from IUGS and is usually matched by UNESCO. The program brings together the ground-based geological community and the geological remote sensing applications.

The program's Geohazards Theme Report is available online at [www.geohazcop.org](http://www.geohazcop.org)

Motion to accept the GARS Report

**Accepted as presented**

**c) Global Geoparks Network (GGN) (Colin Simpson and Wesley Hill)**

Colin reported on this exceptional group and stated that IUGS is a member of the GGN Bureau and a strong supporter of the Global Geoparks Network. The IUGS provides GGN with Geoscientists to support the Geopark Programs. The GGN works in close collaboration with UNESCO and the IUGS Executive Committee Members so that everyone is involved and aware of the latest information with this group. Although Colin will move on as a member of the EC Wesley Hill will continue on for the next two years in support of the GGN.

Motion to accept the GGN Report

**Accepted as presented**

**d) Earth Science Education Initiative on Africa (ESAF) (Wesley Hill)**

The Earth Science Education opportunities in Africa are great. Issues include the following areas:

- Climate change
- Natural Hazards, and
- Drinking water

Providers of training support in earth science education at primary and secondary schools are:

- Geological Society of Africa
- Geoscience of Africa in Egypt, and
- Geoscience in Mozambique.

The website for ESAF is now available and the online availability of earth science education departments has been submitted for approval.

Motion to accept the ESAF Report

**Accepted as presented**

- IUGG

#### **a. International Lithosphere Programme (ILP) (Roland Oberhaensli)**

The ILP has two mothers IUGS and IUGG. The main objectives of this program are the nature dynamics, origin, and evolution of the lithosphere. A task force was initiated and activated to look at geosciences in relation to global change to bridge the gap from micro-seismicity to large earthquakes.

The unconventional include: tight gas, shale gas, and coal bed methane all of which fall in the unconventional category.

Contemporary dynamics and deep processes include:

- Continental collisional orogeny from Atomic Scales to Mountain Building
- Deep into the Subduction Channel
- Continental Lithosphere – Circum Arctic Lithosphere Evolution

A Volcanic Task Force was established – Volcanoes and society: environment health and public outreach. A new Task Force on Geomechanical modeling of geodynamic processes in the lithosphere.

Coordinating Committees include: ICDP, TOPO-EUROPE, TOPO Central Asia, DynaClim, & MEDYNA .

The ILP receives annual contributions from IUGS, IUGG and several supporting countries.

Space monitoring groups include: CHAMP – GRACE and GOCE.

#### Motion to accept the ILP Report

#### **Accepted as presented**

#### **14. IUGS AWARDS (Ezzoura Errami)**

Since its creation in 1961, the International Union of Geological Sciences (IUGS) has been promoting and encouraging Earth Sciences while actively supporting and facilitating international and interdisciplinary research and cooperation. Taking into consideration these objectives, the IUGS EC proposed through time several awards to strengthen the promotion of Earth Sciences worldwide. The IUGS Awards Ceremony will be held at the 34<sup>th</sup> IGC in Brisbane on August 6, 2012. The recipients are as follows:

2012 Hutchison Fund Awards will be presented to:

- Tандis S Bidgoli, Arizona, USA,
- Shaena Montanari, American Museum of Natural History, New York, USA
- Tiffany Rivera, Idaho, USA, Danielle Thomson, Carleton University, Ottawa

- Canada, Shuhong Wang, South Chia Sea Institute of Oceanography, Guangzhou, China
- Sandow M. Yidana, University of Ghana, Legon-Accra, Ghana

**James Harrison Outstanding Achievement Award**

- Edward Derbyshire – Presented by Peter Bobrowsky

**IUGS 50<sup>th</sup> Anniversary – Young Scientist Essay Contest Award**

- Gemma Jeannette Venhuizen – Presented by Wesley Hill

**IUGS 2011 Episodes Best Paper Award (first ever presented)**

- Wojciech Chelmicki, Powel Jokiel, Zdzislaw Michalczyk, Z., and Piotr Moniewski

Presented by Mudlappa Jayananda

**IUGS Science Excellence Award 2012 in Environmental Geology (first ever presented)**

- Ibrahim bin Komoo - Presented by Brian Marker

**IUGS Science Excellence Award 2012 in Geological Education (first ever presented)**

- John L. Laxton – Presented by Kristine Asch

**IUGS Science Excellence Awards 2012: Vladimir. V. Tikhomirov History of Geology Award (first ever presented)**

- Hugh S. Torrens – Presented by Silvia Figueroa

**IUGS Science Excellence Awards 2012: Digby McLaren Stratigraphy Award**

- Stig M Bergstrom – Presented by Stanley C. Finney

**IUGS Science Excellence Award 2012 in Structural Geology (first ever presented)**

- John G. Ramsay – Presented by Bruce Hobbs

Motion to accept the IUGS Awards Report

**Accepted as presented**

**15. IUGS Strategic Plan – (Attilo Boriani)**

A full version of the IUGS Strategic Plan – **Science and Organizational Strategies for the IUGS** – is available on the IUGS website and was provided to Council.

Lio Boriani presented a comparison of the Strategic Plan approved in 2000 with the new 2012 proposal. He noted that strategic planning is a process of defining strategies and directions as a basis for making decisions on allocating resources. The IUGS' vision

(geological sciences are appreciated for their contributions) and mission (IUGS is servicing the Earth Science community of the world) remain appropriate.

Given the time, it was decided to defer the discussion and vote to Thursday.

**a.) Vision**

The vision of IUGS is a world in which the geological science receives the right of appreciation for scientific work.

**b.) Mission: IUGS is servicing the Earth Science community of the world.**

A full version of the IUGS Strategic Plan is available on the IUGS website.

Lio Boriani presented a comparison of the Strategic Plan approved in 2000 to with the new 2012 proposal. It is proposed and unanimously decided to defer to Thursday for vote.

The Meeting adjourned at 05:37 p.m.

**Day 2 – Thursday, 9 August 2012, 08:43 a.m.**

Council Chairs:       A. Riccardi (IUGS Items 15, 16, 19-21)  
                              N. Williams (IGC Items 17-18, 22-23)

**15. IUGS Strategic Plan (continuation)**

The meeting opened with a comment from Arne Bjorlekke of Norway. Arne suggested approval of the profile of the Strategic Plan in principle and if a formal plan is desired he proposed to advise the new committee to have a new strategic plan developed. Ed Nickless – supported Arne’s comments.

President Riccardi noted that the new Plan as the one approved in 2000 is not a binding document but a plan that defines directions, includes recommendations, and does not deal with details of implementation. These should be addressed by the Executive Committee following the approval of the recommendations by Council. Therefore, he proposed that with no objections to the Strategic Plan the Council should vote to approve the plan at this time.

Motion to approve the Strategic Plan as circulated.

**Ballot on Strategic Plan Vote to Accept**

Total Votes: 34       Yes: 30       No: 3       Abstain: 1

**Result: Strategic Plan approved as presented**

**16. REVISED IUGS STATUTES AND BYELAWS (Patrick Leahy)**

Pat Leahy provided a short presentation to the Council. This is the 6<sup>th</sup> IGC he has attended. He attended his first in the USA and then Beijing and all Congresses forward and has seen the

development of IGC and IUGS during that period. It is an honor to serve on this committee because it is an important issue. He thanked the EC for the opportunity to serve on a committee whose members he has an enormous respect.

The IUGS has both Statutes and Bye-Laws – Bye Laws are required for a Corporation and a legal entity. IGC has Statutes only and no Bye-Laws. Some of the issues that should be addressed:

- Proxy votes – not mentioned in the current Statutes and Byelaws. This is an important issue included in the new proposal.
- Article 24e – The Council could include non-voting Observers from countries or regions that are not members of the IUGS, one per country/region.
- Article 43 – It should be clarified that the Nominating Committee consists of six members in addition to the Past President as the 7<sup>th</sup> member.
- As proposed by the Italian Committee the Council is the IUGS-IGC Council, to convey the fact that the Council is one body.
- Members vote and not being a member of the Adhering Organization allows a delegate to vote only on IGC matters.

A proposal was set forth to vote first the approval (in principle) of the IUGS Statutes as presented by Patrick Leahy. If the Statutes are approved in principle a discussion and vote could follow on specific articles as raised. A specific article to be considered is 24(e) on non-voting observers. Some concern is also expressed with regard to article 47 on financial control and accountability, where the word “external” should be introduced in relation to audit. Concern with Byelaw 22 – merits to evaluate candidates for the Nominating Committee – resulted in a motion for the British Delegation to provide the wording on the article.

A motion was accepted nominating the scrutinees/vote counters as Robert Missotten (formerly from UNESCO), A. Gikot (Head of the Japanese Delegation), and H. Kivazalto (Head of the Russian Federation Delegation).

Following the casting of the votes, there was a break for the counting of the votes.

### **New IUGS Statutes and Bye-Laws**

Total Votes: 31      Yes: 29      No: 1      Abstain: 0      Invalid: 1

According to the current Statutes and Bylaws the result is well above the 2/3 of the statutory quorum.

President Riccardi noted that in principle the Statutes have been approved and now Article 24e should be considered. As this is a decision related to IGC – the article could be discussed with the IGC Statutes. A point of order was made to consider the article under the IUGS Statutes. Should be accepted by the IUGS and motion was made to defer the vote to later in the morning – approved to vote at a later time.

## **IUGS Statutes Article 23d (Old Statutes) or 24e (New Statutes)**

23(d) Whenever a meeting of the Council during an IGC has IGC issues tabled on the Agenda, the appropriate authority in countries which are not members of the IUGS shall be invited to send one delegate per adhering organization. However, notwithstanding the voting arrangements agreed generally for participation of the Council, such delegations shall be entitled to vote on matters under the IGC on the agenda.

24(e) Observers from countries or regions which are not members of IUGS shall include one non-voting person per country as designated by the appropriate authority (recognized by the Executive Committee).

Total votes: 35      Article 23d (Old Statutes): 10      Article 24e (New Statutes): 24  
Abstain: 0      Invalid: 1

**Result: Article 24e (New Statutes) approved**

### **REVISED IGC STATUTES (Patrick Leahy)**

As was done for the IUGS Statutes it is proposed to approve in principle of the new IGC Statutes and to focus later on any concern on specific articles.

### **New IGC Statutes**

Total votes: 54      Yes: 53      No: 0      Abstain: 0      Invalid: 1

The following concerns were exposed:

- Article 13 – needs to be changed in the IGC Statutes if 24e of the IUGS Statutes is changed as they are linked.
- Article 5 – current wording states that income from the Congress is for the IGCC, but it is supposed to go to IUGS scientific matters. There is a motion to indicate that this income 'in part' is to go towards IGCC. Anyone opposed to using 'in part'. Majority approved – go to vote along with other articles.
- Article 25 – the possibility that the Congress could last 6 to 10 days or 5 to 8 days.
- Article 16 – the Italian Delegation noted that it is proposed a new composition of the IGCC and that remains open the question who will decide – according to the article wording – who will represent the last but one IGC Session, i.e., the President or the Secretary General. – Finally, it is proposed a formal vote to decide to remove “or” and insert “and” or to leave the article as proposed.

### **IGC Statutes Article 25: “6 to 10 days” vs. “5 to 8 days”**

Total votes: 134      “6 to 10 days”: 29      “5 to 8 days”: 100      Abstain: 5

**Result: Article 25 (new Statutes) modified to “5 to 8 days”, i.e.,**

“The scientific program and business meetings of the Session normally last for 5 to 8 days during which the Council shall meet.”

### **IGC Statutes Article 16 (new Statutes vs. Article 5.6 (old Statutes))**

Article 16. The IGC Committee consists of the President, the Secretary General, and the Treasurer of the IUGS, and the President and the Secretary General of the ongoing IGC Organizing Committee ;the President and Secretary General of the immediate past IGC Session; and the President or Secretary General of the last but one IGC Session.

5.6. The IGC Committee consists of: (a) the President and the Secretary General of the ongoing Organizing Committee; (b) the President of the immediate past Session; (c) the President the Secretary General and the Treasurer of IUGS; and (d) the Secretaries General of the three immediate past Sessions. As observers may be invited the President and the Secretary General of the Preparatory Committee of an eventual next but one IGC may be invited along with up to three congress organizing experts.

Total votes: 144      Article 16 (new Statutes): 112      Article 5.6 (old Statutes): 20

Abstain: 8      Invalid: 4

**Result: Articles 16 (new Statutes) approved.**

### **IGC Statutes Article 16 – Change wording: “or” vs. “and”**

Article 16. “...and the President or Secretary General of the last but one IGC Session” vs. “and the President and Secretary General of the last but one IGC Session.”

Total votes: 129      “or”: 67      “and”: 57      Abstain: 4      Invalid: 1

**Result: Article 16 (new Statutes) remain as proposed in the new version of the Statutes, i.e. “ ... and the President or Secretary General of the last but one IGC Session.”**

## **17. INTERNATIONAL GEOLOGICAL CONGRESS (IGC)**

### **a. Report from the Chairman of 34<sup>th</sup> IGC Committee (N. Williams)**

The current IGC Congress has 5922 delegates attending. At the time of the bid in Florence in 2004 – the Australian dollar was much weaker against the USD and subsequently the severe financial difficulties in many countries raised concerns that the level of attendance at the 34<sup>th</sup> IGC could be much lower than recent IGC’s. So we are very pleased with the attendance.

We are very fortunate to have such a great venue, with its location and convenience. The weather has been as good as what was expected.

We are very pleased to have been able to have raised support to bring so many delegates from Africa.

## **b. Report of the President of the 35<sup>th</sup> IGC (R. Viljoen)**

The 35<sup>th</sup> IGC Session is to be held in Cape Town, South Africa. Congratulations were extended to Ian Lambert and Neil Williams for the marvelous Congress they planned.

The bid for the 35<sup>th</sup> IGC was made and accepted in 2008 as a Pan-African event. Cape Town is a tourist hub in the country.

The Congress will be held from August 27, to September 4, 2016. Richard Viljoen is Chairman of the IGC and Danie Bernardo is the Secretary General. The tentative agenda has been set including field trips. The branding for the Conference is available as well as some brochures and a marketing campaign has begun. Any surplus funds and profits will be placed in a trust to be used by underprivileged participants attending future Congresses. The IGC Committee is cooperating with African Geological Survey and other scientific organizations. Great support has been provided from the Department of Mineral Resources of South Africa.

Currently the 35th IGC has several sponsorships and will continue to seek more. It has secured bridging finance, which is important for the period until sponsorship and other income increases.

Question raised by Alan Jones, Ireland – what facilities will be available for posters sessions? Will you have enough room and adequate time for display at the poster session? Answer: Yes, we have the facility and will take note of the format.

## **c. GeoHost (Ian Lambert)**

The programme to support the attendance of young and financially disadvantaged geoscientists at the 34<sup>th</sup> IGC differed from previous IGC's in that it offered full funding for about 160 people. A large proportion of the funds were provided through the Australian Agency for International Development (AusAID), which sponsored training workshops on Sustainable Mining in Africa; and Capacity Building in Risk Modeling for Natural Hazards in the Asia-Pacific region. Also, the Global Carbon Capture and Storage Institute provided funds for a GeoHost training workshop on Geosequestration, AusAID also fully supported attendance by 13 key people involved with the 34<sup>th</sup> IGC Theme: Geoscience Benefitting Low Income Countries.

In addition, over 150 delegates were provided partial support to attend the 34<sup>th</sup> IGC. The total funding committed for GeoHost support was in excess of \$1.5M, which we believe is the highest of any IGC to date.

## **d. Selection of Host for the 36<sup>th</sup> IGC**

### **i. Strengths and weaknesses of each bid (N. Williams)**

Neil Williams noted that IGCC assists countries to produce a good bid through specifying key criteria and offering general advice. Three initial bids were submitted and all had strengths and weaknesses. Feedback was provided and one country withdrew. The two

for consideration are Canada and India. Each country has 20 minutes to present – the order is India and followed by Canada, and then questions. As both bids have been judged by the IGCC to meet the key criteria, IGCC does not make a recommendation.

He invited the Indian team to make their presentation and started the 20 minute clock.

## ii. Presentation of Bids

India gave their bid presentation within the time allocated.

Canada gave their bid presentation within the 20 minutes allocated.

Comments /Questions: None were taken

## iii. Vote

At this time the votes were submitted and these were scrutinized and counted by the same three people who had done this tack for the previous agenda item.

## Selection of the 36<sup>th</sup> IGC

Total Votes 180                  India 129                  Canada 51

**Result: India will host the 36<sup>th</sup> IGC.**

## 18. ELECTION OF IUGS OFFICERS AND APPOINTMENTS

### a. Nominating Committee Report (Zhang Hongren)

Zhang reported the following submissions for the Nominating Committee:

<b>NAME</b>	<b>COUNTRY</b>	<b>NOMINATED BY</b>
Prof. Dhiraj M. Banerjee	India	Krishan Lal, India National Science Academy
Prof. Jacques Charvet	France	Pierre Barbey, French National Committee
Mr. David Govoni	Italy	Meng Wang/Jo Venus, YES
Prof. Harsh Gupta	India	R.H. Sawkar, Geological Society of India
Dr. Edmund Nickless	UK	Alan Lord, Geological Society of London & SEPM
Dr. Ricardo Olea	USA	Vera Pawlowsky-Glahn, IAMG
Prof. Lopo Vasconcelos	Mozambique	Aberra Mogassie, GSAf
Dr. Peter Bobrowsky	Canada	
Prof. Alberto Riccardi	Argentina	IUGS, Past President

### b. Alternative Proposals (for President, Vice President and Councilor)

Alberto Riccardi reviewed the candidates for officers:

- Presidential candidates: John Ludden and Roland Oberhaensli
- Vice Presidential candidates: Yildirim Dilek, Marko Komac, and Ashok Sahni
- Secretary General: Ian Lambert and Treasurer: Dong Schuwen

**c. Election of new Officers of the Executive Committee**

- **Election of President**

- **Candidates address the Council**

- John Ludden is the first to address the Council followed by Roland Oberhaensli

- **Ballot for President**

- Proceed to submit the votes for the President, IUGS – 2012 - 2016.

Total Votes: 52      John Ludden: 15      Roland Oberhaensli: 37

**Result: New President of the IUGS is Roland Oberhaensli.**

Roland addressed the group and thanked them saying he was proud of their courage.

- **Election of Vice President**

- **Candidates address the Council**

- There are three candidates and Yildirim Dilek presented to the Council first followed by Marko Komar, and Ashok Singhv.

- **Ballot for Vice Presidents**

- A call for votes for two of the three candidates and ballot submissions were made.

Total Votes: 94    Yildirim Dilek : 32    Marko Komac: 41    Ashok Singhv : 20    Abstain: 1

**Result: the new Vice Presidents for the IUGS are Yildirim Dilek and Marko Komac.**

- **Election of Secretary General and Treasurer**

- Ian Lambert presented to the Council as the only candidate for Secretary General.

- Dong Shuwen presented to the Council the only candidate for Treasurer.

**Result: Ian Lambert and Dong Shuwen were endorsed by acclamation to the positions of Secretary General and Treasurer, respectively.**

- **Election of Councilors**

- **Candidates address the Council**

- 2012 – 2016

Hassina Mouri presented first followed by Victor Kurnosov, and Yuijiro Ogawa

- 2014 – 2018

Jack Hess presented to the Council first followed by Amel Barich, and Stephen Johnston.

- **Ballot for Councilors**

- A call for ballots to be completed and submitted voting for two of the candidates on the ballot.

- 2012 - 2016

Total Vote: 89    Hassina Mouri: 35    V. Kurnosov: 18    Yuijiro Ogawa: 36

**Result: Councilors Yurijiro and Hassina Mouri were elected for the term 2012-2016.**

- 2014-2018

Total Vote: 91    Jack Hess: 26    Amel Barich: 37    Stephen Johnston: 28

**Result: Councilors Amel Barich and Stephen Johnston were elected for the term 2014-2018**

**d. Appointment of New Nominating Committee**

The votes for the Nominating Committee to select six of the seven candidates to the Nominating Committee were submitted at the same time as the Councilor's vote.

Total Votes: 267    Charvet: 40    Govoni: 29    Gupta: 38    Nickless: 39  
 Olea: 43    Vasconcelos: 40    Bobrowsky: 38

**Result: The new Nominating Committee – Ricardo Olea, Jacques Charvet, Lopo Vasconcelos, Edmund Nickless, Harsh Gupta, and Peter Bobrowsky, in addition to Alberto Riccardi as the Past President of IUGS.**

**e. Ratification of Officers of Commissions**

The following were submitted for Ratification by Council as Officers of IUGS Commissions for 2012 – 2016

**Commission on the Management & Application of Geoscience Information (CGI)**

<b>Position</b>	<b>Current</b>	<b>Proposed 2012-2016</b>
Chair	Kristine Asch (Germany)	Francois Robida, BRGM, France

Secretary General	Ian Jackson (UK)	Kristine Asch (Germany)
Treasurer	Francois Robida (France)	Robert Tomas, EC (Czech Republic)

**Officers:**

Argentina	Gabriel Asato	Gabriel Asato
Australia	Bruce Simons	Oliver Raymond
Canada	John Broome	
China	Wang Jun	
Germany	Peter Baumann	Peter Baumann
Japan	Koji Wakita	Kazuhiro Miyazaki
Namibia	Anna-Karren Nguno	
United Kingdom		Richard Hughes
United States		Mike Frame
United States		David Percy

**Commission on Education, Training and Tech Transfer (COGE)**

<b>Position</b>	<b>Current</b>	<b>Proposed 2012-2016</b>
Chair	Jesus Martinez-Frias (Spain)	Jesus Martinez-Frias (Spain)
Vice Chair	Chris King (UK)	Chris King (UK)
Secretary/Treasurer	Jennifer Nocerino (USA)	Jennifer Nocerino (USA)
Former Chair	Gary Lewis (GSA-USA)	Gary Lewis (GSA-USA)
IUGS VP	Ochir Gerel (Mongolia)	Ochir Gerel (Mongolia)

**Officers:**

Argentina	Adriana Niz	Adriana Niz
Australia	Greg McNamara	Greg McNamara
Australia	Ian Clarke	Ian Clarke
Canada	Alan Morgan	Alan Morgan
India	R. Shankar	R. Shankar
Malawi	Elyvin Nkhonjera	Elyvin Nkhonjera
Morocco	Yamina Bourgeoini	Yamina Bourgeoini
Phillippines	Miguel Cano	Miguel Cano
South Korea	Chan-Jong Kim	Chan-Jong Kim
Sri Lanka	Ashvin Wickramasooriya	Asvin Wickramasooriya

**Geoscience in Environmental Management (GEM)**

<b>Position</b>	<b>Current</b>	<b>Proposed 2012-2016</b>
Chair	Kevin Telmer (Canada)	Kevin Telmer (Canada)
Sec. General (Acting)	Dr. Brian Marker (UK)	Dr. Brian Marker (UK)
Vice Chair	Dr. Qingcheng He (China)	Dr Qingcheng He (China)
Treasurer	Dr. Kaj Laz (Sweden)	Dr. Kaj Laz (Sweden)

**Officers:**

Southern Africa	Dr. Ben Mapani (Namibia)	Dr. Ben Mapani (Namibia)
Western Africa	Dr. Sulemana Al-Hassan (Ghana)	Dr. Sulemana Al-Hassan (Ghana)
Southern Asia	Professor Mihir Deb (India)	Professor Mihir Deb (India)

North America	Prof. Norm Cato (Canada)	Dr. Jose Centeno (USA)
Southern Europe	Prof. Eduardo da Silva (Portugal)	Prof. Eduardo da Silva (Portugal)
Northern Europe	Dr. Philipp Schmidt-Thome'	Dr. Philipp Schmidt-Thome'
East Europe Eurasia	Prof. Igor Zektser (Russia)	Prof. Igor Zektser (Russia)
Eastern Asia	Prof. Hisashi Nirei (Japan)	Prof. Hisash Nirei (Japan)
Caribbean/South America	Dr. Jose Centeno (USA)	Dr. Adriana Niz (Argentina)

### **International Commission on the History of Geological Sciences (INHIGEO)**

<b>Position</b>	<b>Current</b>	<b>Proposed 2012-2016</b>
President	Dr. Silvia Figueiroa (Brazil)	Prof. Kenneth Taylor (USA)
Secretary General	Dr. Kennard Bork (USA)	Dr. Barry Cooper (Australia)
Editor		Prof. Wolfgang Mayer (Australia)
Past President		Dr. Silvia Figueiroa (Brazil)
<b>Officers:</b>		
Asia	Prof. Jiuchen Zhang	Prof. Jiuchen Zhang
Australiasia/Oceania	Prof. David Oldroyd	Dr. Michael Johnston
Europe	Dr. Martina Kolbl-Ebert	Dr. Martina Kolbi-Egbert
Latin America	Mr. Gerardo Soto	Prof. Luz Fernanda Azuela
North America	Dr. Gregory Good	Dr. Gregory Good

### **Commission on Tectonics and structural geology (TECTASK)**

<b>Position</b>	<b>Current</b>	<b>Proposed 2012-2016</b>
Chair	Prof. Cees Passchier (Germany)	New Officer
Vice Chair	Dr. Mark Jessell (France)	New Officer
Secretary General	Dr. Herman Lebit (USA)	Dr. Herman Lebit (USA)
Treasurer	Dr. Elena Druguet (Spain)	Dr. Elena Druguet (Spain)

<b>Officers:</b>		
Australia	Prof. Alison Ord	Prof. Bruce Hobbs
Australia		Prof. Ron Vernon
Belgium	Prof. Manuel Sintubin	
Burkina Faso		Prof. Martin Lompo
Germany		Prof. Paul Bons
India	Prof. Manish Mamtani	Prof. Sudipta Sengupta
Italy	Prof. Giorgio Pennacchioni	
Italy	Prof. Rudolfo Carosi	
Japan		Prof. Toru Takeshita
Sweden	Prof. Hemin Koyi	
South Africa		Prof. Kim Hein
Switzerland	Prof. Neil Manktelow	
USA/UK		Prof. John Dewey

<b>Junior Officers:</b>		
Canada		Anna Chanou, U. of Western Ontario
Spain		Dr. Miguel Gutierrez, U. of Santander
Finland		Dr. Taija Torvela, U. of Helsinki

## International Commission on Stratigraphy (ICS)

<b>Position</b>	<b>Current</b>	<b>Proposed 2012-2016</b>
Chairman	Dr. Stanley Finney (USA)	Dr. Stanley Finney (USA)
Vice Chair	Dr. Shanchi Peng	Dr. Shanchi Peng
Secretary	Professor Paul R. Bown (UK)	Professor Paul R. Brown (UK)
<b>Officers:</b>		
Chair- <b>Quaternary</b>	Dr. Philip Gibbard (UK)	Prof. Martin Head (Canada)
Vice Chair	Dr. Brian Pratt (Canada)	Prof. Brad Pillans (Australia)
Secretary		Prof. Jan Zalasiewicz (UK)
Chair- <b>Neogene</b>	Prof. Frederik Hilgen (Neth)	Prof. Isabella Raffi
Chair- <b>Paleogene</b>	Dr. Eustoquio Molina (Spain)	Prof. Simonetta Monechi (Italy)
Vice Chair		Prof. Noel Vandenberghe (Belgium)
Secretary		Prof. Laia Alegret (Spain)
Chair- <b>Cretaceous</b>	Prof. Isabella Silva (Italy)	Prof. Malcolm Hart (UK)
Vice Chair		Prof. James Haggart (Canada)
Secretary		Prof. Brian T. Huber (USA)
Chair- <b>Jurassic</b>	Dr. Jose Palfy (Hungary)	Prof. Stephen P Hesselbo (UK)
Vice Chair		Prof. Jingeng Sha
Chair- <b>Triassic</b>	Dr. Marco Balini (Italy)	Dr. Marco Balini (Italy)
Vice Chair		Prof. Mark Hounslow (UK)
Vice Chair		Prof. Jinnan Tong (China)
Secretary		Prof. Christopher A. McRoberts (USA)
Editor/Webmaster		Prof. Wolfram M. Kuerschner (Norway)
Chair- <b>Permian</b>	Dr. Charles Henderson (Canada)	Prof. Shuzhong Shen (China)
Vice Chair		Prof. Joerg W. Schneider (Germany)
Secretary		Prof. Lucia Angiolini (Italy)
Chair- <b>Carboniferous</b>	Dr. Barry C. Richards (Canada)	Dr. Barry C. Richards (Canada)
Vice Chair		Dr. Wang Xiangdong (China)
Secretary		Prof. Markus Aretz (France)
Chair- <b>Devonian</b>	Dr. Thomas Becker (Germany)	Prof. John E. A. Marshall (UK)
Vice Chair		Prof. Carlton E. Brett (USA)
Chair- <b>Silurian</b>	Prof. Michael Melchin (Canada)	Prof. Michael Melchin (Canada)
Vice Chair		Prof. Peep Mannik (Estonia)
Secretary		Prof. Zhan Renbin (China)
Chair- <b>Ordovician</b>	Prof. David A.T. Harper (UK)	Prof. David A. T. Harper (UK)
Vice Chair		Prof. Andre Dronov (Russia)
Secretary		Prof. Ian Percival (Australia)
Chair- <b>Cambrian</b>	Dr. Shanchi Peng (China)	Prof. Loren E. Babcock (USA)
Vice Chair		Prof. Xingliang Zhang (China)
Secretary		Prof. Per Ahlberg (Sweden)
Chair- <b>Precambrian</b>	Dr. Martin Van Kranendonk	Dr. Martin Van Kranendonk (Australia)
Vice Chair		Dr. Wouter Bleeker (Canada)
Secretary		Dr. Robert Rainbird (Canada)
Chair- <b>Stratigraphic</b>	Dr. Brian Pratt (Canada)	Dr. Brian Pratt (Canada)
Vice Chair		Prof. Helmut Weissert (Switzerland)
Vice Chair		Prof. Jan Zalasiewicz (UK)
Secretary		Prof. Maria Rose Petrizzo (Italy)
Chair- <b>Neoprotozoic</b>	Dr. James Gehling (Australia)	
Chair- <b>Cryogenian</b>		Prof. Graham Shields (UK)

Vice Chair  
Secretary  
Chair- **Ediacaran**  
Vice Chair

Prof. Galen P. Halverson (Canada)  
Prof. Susannah M. Porter (USA)  
Prof. Shuhai Xiao (USA)  
Prof. Dmitriy Grazhdankin (Russia)

**The official Election of Officers was ratified as submitted.**

**20. PROGRAM PRIORITIES AND TENTATIVE BUDGET ALLOCATIONS FOR 2012 – 2016** – This duty will be handled by the new IUGS Executive Committee.

**21. OTHER BUSINESS – Nothing discussed at this time.**

**22. PLACE, DATE OF NEXT ORDINARY SESSION OF COUNCIL**

To be determined

**23. CLOSING OF THE MEETING:** The Head of the Italian Delegation, Atilio Boriani thanked the Australians for the outstanding Congress. He also thanked Alberto Riccardi for leading the Union in such a good way over the last four years. President Riccardi responded thanking Lio and stating “we did our best.”

Neil Williams officially closed the Session noting that it had been a long day and he thanked everyone for their dedication and participation. The 3<sup>rd</sup> Ordinary Session of the Joint Council of IGC and IUGS adjourned at 06:24 p.m.