## **Annual Report 2013 – IASPEI**

## 1. SHORT INTRODUCTION OF ASSOCIATION (max. ½ page)

The International Association of Seismology and Physics of the Earth's Interior is the leading international association promoting the studies of the structure and of the geodynamical processes ongoing in our Earth's interior. IASPEI achieves its goals through scientific conferences, primarily those organized by IASPEI and its Commissions, but sponsoring also other international initiatives, fosters international cooperation, both in the monitoring seismic activity, research and education activities, especially in countries that are in the process of working towards full scientific development.

IASPEI main efforts during 2013 were directed towards the joint IAHS-IAPSO-IASPEI 2013 Scientific Assembly in Gothenburg (Sweden). The Assembly was successfully held during July 22-26. However, a few important scientific meetings have been also sponsored by IASPEI and several ongoing projects continued.

#### 2. ADMINISTRATION (max. ½ page)

#### - EC & Bureau meetings

The IASPEI Bureau has met during the joint IAHS-IAPSO-IASPEI 2013 Scientific Assembly in Gothenburg in July. Several e-mails regarding important questions on financial support or business to be solved immediately have been exchanged with the members of the Bureau and EC throughout the year.

- Changes in administration (setting up of new Commissions, Working Groups, etc., or termination of old Commissions, Working Groups, etc.)

During the Gothenburg Scientific Assembly Johannes Schweitzer has been appointed as IASPEI Assistant Secretary to work for the next two years with the IASPEI Secretary-General. The new Chair of the Commission on Earthquake Source Modeling and Monitoring for Prediction is Vladimir Smirnov (Russian Federation), the first Chair of the newly established Latin American and Caribbean Seismological Commission (LACSC) is Carlos Vargas, (Colombia) and the new Chair of the International Federation of Digital Seismograph Networks (FDSN) is Göran Ekström (USA).

## - Other matters

Website. The IASPEI website, hosted by the BGS in Edinburgh, has been updated continuously, mainly with the help of the IASPEI webmaster Alice Walker.

*Newsletters*. Also the IASPEI Newsletter has been regularly sent as pdf file attachment to e-mails. The Newsletters are also available for downloading from the website. Four issues were distributed in 2013.

#### 3. ACTIVITIES (max. 2 pages)

- Scientific Assemblies, Workshops/Symposia etc.

The 37<sup>th</sup> IASPEI General Assembly was organized as a Joint Assembly of the three Associations IAHS, IAPSO and IASPEI in July 2013 in Gothenburg, Sweden (<a href="http://iahs-iapso-iaspei2013.com/">http://iahs-iapso-iaspei2013.com/</a>). The 454 participants from 48 countries contributed to the success of the assembly by presenting 330 contributions and 200 posters within 36 symposia. 75 participants were supported with grants by IASPEI. The Assembly started on Monday, July 22 with the IASPEI Opening Plenary (<a href="http://www.iaspei.org/gothenburg\_2013/plenary\_presentations\_2013.html">http://www.iaspei.org/gothenburg\_2013/plenary\_presentations\_2013.html</a>). During

the Plenary, the first IASPEI medal was awarded to Robin Adams. In addition, two keynote lectures were presented by IASPEI President Domenico Giardini on GEM and by Roger Musson on the History of British Seismology. A third keynote lecture was given in the afternoon during the Joint Plenary by James Mori on drilling the plate boundary in the source region of the 2011 Tohoku-Oki earthquake. All three keynote lectures be downloaded can http://www.iaspei.org/gothenburg 2013/keynote lectures 2013.html. During the Assembly, the IASPEI Commissions and the IASPEI sponsored bodies also had their business meetings. Commission reports and reports from different working groups can Commission found on the web-pages, respectively (http://www.iaspei.org/commissions/commissions.html).

On Friday, July 26, a round table discussion was held on "The role of scientists in the communication of risk: lessons from L'Aquila and international perspectives". **Domenico Giardini** presented an overview on the actual status of the L'Aquila case while Kenji Satake (Japan) and David Jackson (USA) explained how authoritative information to administrations and the public are organized in their countries in the case of an earthquake crisis. All three presentations can be found at <a href="http://www.iaspei.org/gothenburg\_2013/LAquila\_Trial.html">http://www.iaspei.org/gothenburg\_2013/LAquila\_Trial.html</a>. They were followed by a lively debate, for which the allocated time window in the assembly program proved to be too short.

## - Activities of Association Commissions, Working Groups, Divisions, Services etc.

#### Global Earthquake Model

The IAEE-IASPEI Joint Working Group on the International Alliance of Seismology and Earthquake Engineering Professional Associations activities were related to one of its missions: the GEM project, a global risk assessment initiative. Domenico Giardini, IASPEI President and GEM Foundation Governing Board member, attended several Board meetings in 2013 on behalf of IASPEI. The GEM initiative is progressing well, moving now to more engineering aspects of seismic hazard.

# IASPEI-IAG-IAGA Monitoring crustal deformation and the ionosphere by GPS in the Caribbean project

In the frame of the IUGG Grants Program, the project *Monitoring crustal deformation* and the ionosphere by GPS in the Caribbean was given a grant for the term 2012-2014. This project is further sponsored by IASPEI, IAG, and IAGA. The main objective of this initiative is to invite the Caribbean countries to participate actively in geodetic and geophysical projects going on in the Central and South American region, in order to enable the use the acquired data for practice and science in their countries, and to promote geosciences. This includes capacity building activities providing the basis for profound education and sustainable development as well as the establishment of international and interdisciplinary contacts to participate in research projects at regional and global scales. According to this, a capacity building called *School on Reference Systems, Crustal Deformation and Ionosphere Monitoring* was carried out in Panama City, from October 21 to 23, 2013. 145 participants from 28 countries attended the School. An extension of the Project duration was approved by IUGG.

IASPEI has sponsored also the following workshops/symposia held in 2013:

The "13<sup>th</sup> International Workshop on Modelling of Mantle and Lithosphere Dynamics", held in Norway at Klækken Hotel in the vicinity of Oslo. 95 scientists attended the workshop, among which 32 graduate students and 17 postdoctoral

researchers, from Europe, North America and Japan. Thirteen keynote speakers gave overviews and discussed latest developments in subduction dynamics, plume dynamics, numerical techniques, surface and deep processes and dynamics of planetary interiors.

- IRIS Seismological Workshop "Managing Waveform Data and Related Metadata for Seismic Networks", Kuwait, January 14-18, 2013. More information can be found at http://www.iris.edu/workshops/2013/kuwait\_metadata/
- The International Workshop "Training course in full waveform inversion for moment tensors and multiple source models" was held at Brasilia University in December, organized by the Seismological Observatory. 20 Latin American geoscientists from eight different countries attended the course. At its end, all participants presented a seminar discussing the results of the inversion of their own data. All participants were strongly encouraged to continue working on the code to improve their regional studies and present their results in the First LACSC General Assembly in Bogota, Colombia, July 2014.

## - Scientific Programmes, Projects, Publications

The IDEA (International Digital Earthquake Archives) project of the Committee for Preservation of WWSSN and Historical Seismograms (also called simply Seismoarchives: Seismogram Archives of Significant Earthquakes of the World), is continuing under the guidance of Willie Lee. IRIS is archiving the scanned seismograms. A new Project for scanning old Batavia seismograms has been initiated.

The IUGG-funded IASPEI-ISC Project Networking of world seismologists (Improving Geophysical Science Link to the Society during Natural Extreme Events, Especially in Developing Countries) was completed in 2013.

Several publications are available from the IASPEI Secretariat. IASPEI on approval distributes free copies of its publications to institutional libraries in less developed countries.

- IASPEI: Cooperation for Better Understanding of the Earth
- International Handbook of Earthquake and Engineering Seismology (Part A and B)
- New Manual of Seismological Observatory Practice

#### - Awards/Anniversaries/Obituaries

- The first *IASPEI medal* was awarded to Robin Adams during the IASPEI Scientific Assembly in Gothenburg, Sweden.
- *Anniversaries* of several important seismologists of the past were commemorated with special articles in the IASPEI Newsletters.
- *Obituaries* for prominent scientists are also regularly published in the IASPEI Newsletters.

## 4. PLANNED FUTURE ACTIVITIES/ ANNOUNCEMENTS (max. ½ page)

- In 2014 three *Regional commission assemblies* will be held:
  - LACSC will hold its first General Assembly in Bogota, Colombia, July 23-25.
  - The 34<sup>th</sup> General Assembly of the European Seismological Commission will be held in Istanbul (Turkey) on 24-29 August, 2014. This Assembly will become the second to be held jointly with the General Assembly of the European Association of Earthquake Engineering.
  - The 10<sup>th</sup> General Assembly of the ASC will be in held in Makati City (near Manila), The Philippines, during November 17-21, 2014.

-	In January 2014 the founding meeting of the African Seismological Commission will be held in Johannesburg.