

Annual Report 2014 – 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 of seismic sources activity, and research and education activities, especially in countries that are in the process of working towards full scientific development.

During the inter-assembly years IASPEI's regional commissions have their own general assemblies. In particular the launch of the African Seismological Commission and the first General Assembly of the Latin American and Caribbean Seismological Commission are worth to be highlighted. IASPEI efforts during 2014 were also directed towards the IUGG 2015 General Assembly in Prague (Czech republic), in particular to prepare IASPEI Symposia and the IASPEI-led Inter-Association Symposia. Several 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 ESC-EAEE 2013/4 Assembly in Istanbul 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.)

In Johannesburg the African Seismological Commission (AfSC) was formally established. The President is Atalay Ayele (Ethiopia) and the Secretary General Michelle Grobbelaar (South Africa).

- Other matters

Website. The IASPEI website was moved from the BGS in Edinburgh to the ISC in Thatcham (UK). The new IASPEI webmaster is now Przemek Ozgo.

Newsletters. IASPEI Newsletters has have been regularly sent as pdf- file attachments to e-mails. The Newsletters are also available for downloading from the website. Four issues were distributed in 2014.

3. ACTIVITIES (max. 2 pages)

- Scientific Assemblies, Workshops/Symposia etc.

- The African Seismological Commission (AfSC) was launched on the 22 January 2014 during an Africa-Array workshop held at WITS university University in Johannesburg, South Africa. The meeting was well attended and an attendance register was circulated in order to build a contact database of all interested parties. There were representatives from 21 African countries at the meeting: Algeria, Ethiopia, Madagascar, Ghana, Malawi, Zimbabwe, Zambia, Angola, Egypt, Senegal,

Morocco, Libya, Nigeria, Cameroon, DR Congo, Tanzania, Mozambique, South Africa, Cape Verde Republic, Botswana and Rwanda. The meeting was opened by the IASPEI President, Domenico Giardini, and Secretary General/Treasurer, Peter Suhadolc. Due to the small number of IUGG members within Africa, the statutes were adopted temporarily and will be reassessed in 2018.

- The Latin American and Caribbean Seismological Commission (LACSC) held its first General Assembly in Bogota, Colombia, July 23-25. More than 230 participants from 25 different countries presented 242 papers. Three simultaneous sessions had 149 oral presentations. 93 posters were displayed in the Exhibit Hall. The meeting fully accomplished the main LACSC goals: to establish in the Latin American community a framework for discussions, collaborations, and new acquaintances, besides motivating seismology students and young scientists. 65 students accounted for 27% of the papers. Very few no-shows were noticed in the oral sessions. Partial travel support from IUGG and IASPEI was given to 24 students and young scientists. The next LACSC Regional Assembly will be held in Costa Rica in 2016.
- The 34th General Assembly of the European Seismological Commission (ESC) was organized at the Istanbul Convention & Exhibition Centre (ICEC), in İstanbul, Turkey, from 24 to 29 August 2014, jointly with the 15th European Conference on Earthquake Engineering of the European Association of Earthquake Engineering (EAEE), in the framework of the Second European Conference on Earthquake Engineering and Seismology (2ECEES). About 1000 participants from 76 different countries presented 1550 contributions. There were also 13 Keynote Lectures and 40 Theme Lectures. There are two new ESC Titular Member countries: Azerbaijan Republic, represented by Gurban Yetirmishli; and Georgia, with Observer status, and represented by Tamaz Chelidze. The week before the General Assembly (20-23 August 2014) the 2nd Young Seismology and Engineers Training Course on ‘Ambient noise measurements’ took place at the Istanbul Technical University at Maçka. There were eight lecturers at the course with 25 participants from more than 10 countries.
- The 10th General Assembly of the Asian Seismological Commission (ASC), with theme “*Working together towards an earthquake-resilient Asia*”, was held at the Dusit Hotel, Makati City, Philippines from 18-20 November 2014 with 156 participants from 21 different countries. It was organized by the Philippine Institute of Volcanology and Seismology (PHIVOLCS) in cooperation with the Geological Society of the Philippines (GSP). The combined financial support from the Seismological Society of Japan (SSJ) and IASPEI enabled the conference to award full/partial support to 31 travel grantees from 11 countries. In addition to the formal opening ceremonies, a press briefing was also held on 18 November, with panelists Gary Gibson, Domenico Giardini, and Renato U. Solidum Jr. Eight invited talks were delivered in the plenary sessions and 133 papers were presented in the parallel sessions during the assembly. A 5-day Pre-Conference Training - “*Contributions of Seismology to Earthquake Risk Mitigation*” was held from 12-16 November”, and was conducted by 2 invited trainers - Dr. Gary Gibson and Dr. Mark Quigley. A total of 21 young scientists from various Asia and Oceania countries attended. The training was supported with funds from the Government of the Philippines. The ASC flag was officially turned over by Dr. Solidum to Brian Kennett of the Australian National University, representing Australia, the ASC 2016 host.

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

- The 17th International Workshop organized by the IUGG EMSEV Inter-Association Working Group on Electromagnetic Studies of Earthquakes and Volcanoes was held in Konstacin-Jeziorna nearby Warsaw, in Poland, from September 22 to 26, 2014.

- The IUGG Union Commission on the Study of the Earth's Deep Interior (SEDI) held its 14th SEDI International Symposium in Shonan Village Center, Kanagawa, Japan, from 3 to 8 August 2014. About 150 participants attended, coming from 14 fourteen different countries. The Doornbos Prize for outstanding work by early career scientists was presented to Nick Schmerr, Kenji Ohta and Binod Sreenivasan.

- Some 2,000 hard copies of the first printed edition of the IASPEI New Manual of Seismological Observatory Practice (NMSOP 2002) are currently in use in more than 100 countries at seismological observatories, data and analysis centers, in teaching, research, and field applications, used as basic material in national and international seismology training courses, or by private enterprises and individual scientists.

In 2014, a rigorously updated and amended electronic second edition, NMSOP-2, was completed and put online, thanks to the efforts of Peter Borman. This version, as well as future ones, are professionally maintained, further developed and edited by the GFZ German Research Centre for Geosciences under a long-term commitment, the auspices of IASPEI and its Commission on Seismological Observation and Interpretation (CoSOI). All versions, including the slightly corrected 2009 electronic version of the first edition, are freely available and downloadable via <http://nmsop.gfz-potsdam.de>. This Website is mirrored by IASPEI (<http://www.iaspei.org/projects/NMSOP.html>) and the ISC (<http://www.isc.ac.uk/standards>).

- Scientific Programmes, Projects, Publications

The *Global Earthquake Model (GEM)* program, initiated by the OECD in 2009 and managed by the Secretariat located in Pavia (Italy), completed its first 5-year implementation phase in 2013, and is moving now to more engineering aspects of seismic hazard and risk in its second phase, initiated in 2014. The open-access OpenQuake software for hazard and risk assessment has been released and is available online to the scientific community. Five GEM Global Components have been completed in 2013-2014 with the participation of IASPEI experts and producing new global standards of high interest for the whole IASPEI community: the *ISC-GEM Global Instrumental Earthquake Catalogue*, with more than 20,000 events covering 110 years of seismic history in a highly homogenous way (IASPEI organized the Scientific Advisory Board), the *Global Geodetic Strain Rate model*, the global database of active faults and seismic sources (*Faulted Earth*), the *Global Earthquake History* database and the compilation of *Global Ground-Motion Prediction Equations*. Domenico Giardini, IASPEI President and GEM founding member, attended several Board meetings on behalf of IASPEI.

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*), continued its mission under the guidance of Willie Lee. IRIS is archiving the scanned seismograms. The Project for scanning old Batavia seismograms is well underway.

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

- *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)

- *IUGG 2015 Assembly in Prague, Czech Republic, June 22 - July 2, 2015. Website: <http://iahs-iapso-iaspeiiugg2015prague3.com/index.asp>*
- In 2016 four *Regional commission assemblies* will be held:
 - ESC will hold its 35th General Assembly in Trieste (Italy).
 - ASC will hold its 11th General Assembly in Australia.
 - LACSC will hold its 2nd General Assembly in Costa Rica.
 - AfSC will hold its 1st General Assembly (to be decided where).
- *GEM* will complete a global hazard model by end 2015, including also the results of regional projects such as SHARE (Europe), EMME (Middle-East) and EMCA (Central Asia).