



## Annual Report 2012 – 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.

During the inter-assemblies years IASPEI's regional commissions have their own general assemblies. IASPEI efforts during 2012 were also directed towards the joint IAHS-IAPSO-IASPEI 2013 Scientific Assembly in Gothenburg (Sweden), 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 EUG conference in Vienna in April. 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 during the year.

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

Following the resolution passed at the General Assembly in Melbourne the Latin American and Caribbean Seismological Commission (LACSC) of IASPEI was formed at a meeting in Lima, Peru, on September 24, 2012, during the Seismology Symposium of the Geological Congress of Peru. M Assumpcao, IASPEI Exec member, attended the meeting and took an active role in the LACSC formation.

#### - 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. Six issues were distributed in 2012.

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

#### - Scientific Assemblies, Workshops/Symposia etc.

The *European Seismological Commission (ESC)* held its 33rd General Assembly in

Moscow, Russia, from August 19 to 24, 2012, on the premises of the Russian Academy of Sciences. 548 people from 51 countries representing all five inhabited continents of our planet participated to the Assembly. The Assembly motto “*Seismology without Boundaries*” proved its value to the full.

In the framework of the ten topics into which the scientific program of the Assembly was built there were 39 scientific symposia with 845 scientific presentations – 490 oral and 355 poster presentations. Some symposia were organized in cooperation with the Seismological Society of America and with the Asian Seismological Commission.

In the week following the ESC GA, the 9<sup>th</sup> International Young Seismologists Training Course “Modern Methods of Seismological Data Processing and Interpretation” was held in Obninsk. Ten lecturers presented a series of lectures to 19 female and 17 male participants from 15 countries. All of them were very satisfied with the course and received personal certificates of attendance.

The *Asian Seismological Commission (ASC)* held its 9th General Assembly in Ulaanbaatar, Mongolia, from September 17 to 20, 2012, under the motto “International Scientific Cooperation for Prevention and Mitigation of Seismic Disaster”. About 300 scientists (115 foreign) from 20 countries participated to the conference and made 87 oral and 50 poster presentations. The excellent premises were kindly provided by the Mongolian Government. In particular, the opening session was held in the Mongolian Parliament. The Young Scientist Training Course which took place in the days before the conference, was sponsored by the Young Scientist grant of Deputy Prime Minister of Mongolia and IASPEI. Eight foreign and eleven Mongolian participants took part to the course.

- 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 2012 on behalf of IASPEI. The GEM initiative is progressing well and several Projects have been already accomplished, among which the ISC-GEM global instrumental catalogue, with more than 20,000 events covering 110 years of seismic history in a highly homogenous way.

*IASPEI New Manual of Seismological Observatory Practice (2<sup>nd</sup> edition) on the Web*

Since March 2012, the larger parts of an updated and significantly amended second edition of the IASPEI New Manual of Seismological Observatory Practice, NMSOP-2, is freely accessible on the Internet, almost completed in the course of 2012. With some 2000 pages of texts and figures, plus linked sources of information, NMSOP-2 is the largest seismology E-book available to date.

The first printed edition of the IASPEI New Manual of Seismological Observatory Practice (NMSOP), elaborated by an international WG of the IASPEI Commission of Seismological Observation and Interpretation (CoSOI) and other contributors under the conceptual guidance and editorship of Prof. Dr. Peter Bormann, was published in 2002 by the GFZ German Research Centre for Geosciences (Helmholtz Association). NMSOP-1 is used already in more than 100 countries in seismological practice, national and international training courses, teaching and research. Meanwhile, it is

also available as a print publication in Chinese and in partial translations into Russian, Indonesian and Turkish language.

Again under the umbrella of CoSOI and with P. Bormann (GFZ) as editor, 73 authors from Australia, Japan, Taiwan, USA and 15 European countries have since 2006 contributed to NMSOP-2 and more than 70 experts from 20 countries provided peer reviews of manuscripts. Most of the original 13 NMSOP-1 chapters have been revised significantly and five new topical areas were added.

All items can be viewed and downloaded via the NMSOP website maintained by the GFZ German Research Centre for Geosciences in Potsdam, Germany. The NMSOP-1 and NMSOP-2 websites are also mirrored on the websites of the International Association of Seismology and Physics of the Earth's Interior and the International Seismological Centre.

IASPEI has sponsored also the following workshops/symposia held in 2011:

- *ECGS 2012: Earthquake source physics on various scales*. This workshop was organized by the European Center for Geodynamics and Seismology and held during three days, from 3 October 2012 until 5 October 2012, at the Alvisse Parc Hotel in Luxembourg City.

- *Latin American Seismology Symposium*. Held in Peru, it was the venue where the Latin American and Caribbean Seismological Commission (LACSC) was formed.

- 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.

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)* is almost completed. IASPEI and ISC are developing and maintaining a worldwide registry of seismologists & geophysicists willing to serve as a point of contact in countries with and without affiliation to IUGG.

IASPEI has set up an Scientific Advisory Board (SAB) for the GEM hazard global component project *Global Instrumental Earthquake Catalogue* under the leadership of ISC. The catalogue will be published early 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

- *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)

- *IAHS, IAPSO, IASPEI Joint 2013 Assembly in Gothenburg, Sweden, July 22-26, 2013: Knowledge for the Future.* Website: <http://iahs-iapso-iaspei2013.com/index.asp>
- *GEM Global Components:* IASPEI will review their results, setting the new standards for global seismology, including the ISC-GEM global instrumental catalogue (already mentioned), the new collections of active faults (GEM Faulted Earth), the new global historical catalogue and database, the global model of geodetic strain rates and the tectonic-base GMPE global selection.
- In 2014 three *Regional commission assemblies* will be held:
  - LACSC will hold its first General Assembly in Bogota, Colombia.
  - The next 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 venue of the next ASC will be in Manila, The Philippines, in 2014.