

International Association of Seismology and Physics of the Earth's Interior (IASPEI)

Quadrennial Report 2015-2018

1. SHORT INTRODUCTION OF ASSOCIATION

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

During 2015 and 2017, most of the IASPEI efforts were directed towards the IUGG2015 General Assembly in Prague, Czech Republic and the First Joint Scientific Assembly of IASPEI together with IAG in Kobe, Japan, 2017.

During 2016 and 2018, most of the IASPEI efforts were directed towards the General Assemblies of IASPEI's four Regional Commissions (Africa, Asia, Europe, Latin America and Caribbean), which were sponsored by IASPEI and IUGG.

In addition, several scientific workshops have been supported or sponsored by IASPEI and several ongoing projects continued.

2. ADMINISTRATION

- EC & Bureau meetings

The IASPEI Bureau and Executive Committee met several times in Prague during the GA in June/July 2015 and twice during the Scientific Assembly in Kobe in 2017.

In September 2016 and in December 2018, the IASPEI Bureau met via phone conference.

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 ExeCom throughout each year.

Information about the actual Members of IASPEI Bureau and Executive Committee and Commission Chairs and National Correspondents can be found on the IASPEI website (<http://iaspei.org>).

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

During the GA in Prague in 2015, the name of the IASPEI **Commission on Earthquake Source Modeling and Monitoring for Prediction** was changed to **Commission on Earthquake Generation Process – Physics, Modeling and Monitoring for Forecast** and a new Commission was established with the title **Commission on Earthquake Source Mechanics (ESM)**.

During the Joint Scientific Assembly of IAG and IASPEI in Kobe, Japan a new inter-association working group for “**Seismo-Geodesy**” was initiated.

- Other matters

Website. The IASPEI website has the address <http://iaspei.org>. The website is managed by the International Seismological Centre in Thatcham, UK.

Statutes. After discussing the possibility of personal membership in IUGG Associations, the Statutes and By-laws of IASPEI were modified during the GA in Prague and the SA in Kobe. The IASPEI Statutes and By-laws are available for download from the IASPEI website. IASPEI is registered as a Norwegian organisation (Norwegian Org. Number 916 047 495).

Newsletters. IASPEI Newsletters have been regularly sent as pdf-file attachments to more than 3000 e-mail addresses (status 2018). The Newsletters are also available for downloading from the IASPEI website. Four issues were distributed in 2015, 2016 and 2017 and five issues in 2018.

3. ACTIVITIES

- Scientific Assemblies, Workshops/Symposia etc.

During the years 2015 – 2018, IASPEI organized and (financially) supported the following Assemblies, Conferences, Workshops and Summer Schools. Some of them were in addition financially supported directly by IUGG.

2015

38th IASPEI General Assembly in Prague, Czech Republic

This IASPEI GA (<http://www.iaspei.org/assemblies-conferences>) had 505 officially registered as IASPEI delegates. The scientific program included 13 IASPEI, 16 Inter-Association symposia with IASPEI participation and an ad-hoc symposium about the Nepal 2015 Earthquake.

ECGS Workshop on “Earthquake and Induced Multi-hazard early warning and rapid response”

IASPEI supported this workshop which was held 18 – 20 November 2015 in Luxembourg (<http://www.ecgs.lu/ewrr2015/>).

IRIS workshop “Managing Data from Seismic Networks”

IASPEI supported this workshop, also via donations received for this purpose, which was held Hanoi, 9 – 15 September 2015 with 37 participants from 19 countries.

2016

1st General Assembly of the African Seismological Commission (AfSC)

The first GA of the AfSC was held during a Nile cruise in Egypt, 2 – 5 April 2016. The assembly had 92 participants and was followed by the “2nd African Workshop on Seismic Hazard” (6 – 9 April 2016).

2nd General Assembly of the Latin America and Caribbean Seismological Commission (LACSC)

The second GA of the LACSC was held in San José, Costa Rica, 20 – 22 June 2016. The assembly had 207 participants. A one-week course on “Seismic Moment Inversion” was given before the assembly.

35th General Assembly of the European Seismological Commission (ESC)

The ESC GA was held in Trieste, Italy, 4 – 9 September 2016. The assembly had 536 participants. A one-week “School on Seismology beyond Textbooks” was organized before the assembly (29 August – 3 September 2016).

11th General Assembly of the Asian Seismological Commission (ASC)

The 11th ASC GA was held in Melbourne, Australia, 25 – 27 November 2016. The assembly had 45 participants. A workshop on “Seismological Contributions to Earthquake Risk Reduction” was organized before the assembly.

Xth International Workshop on “Physics and Forecasting of Rock Destruction”
(<http://www.xmsc.ru>)

IASPEI supported this workshop, which was held in Apatity, Murmansk region, Russia, 13 – 17 June 2016.

2017

39th IASPEI Scientific Assembly and First Joint Scientific Assembly of IAG and IASPEI

The 39th IASPEI Assembly (<http://www.iaspei.org/assemblies-conferences>) was held as Joint Assembly with the International Association of Geodesy (IAG) at the Kobe International Conference Center, Japan, from July 30 through August 4, 2017. The conference had 1107 registered participants from 65 different countries of which 747 gave IASPEI as their primary Association. The scientific program consisted in total of 43 symposia (7 IAG, 27 IASPEI and 9 Joint Symposia).

IRIS Workshop “Managing Data for Seismic Networks”

This workshop was held in Pretoria, South Africa, 20 – 26 August 2017
(<http://ds.iris.edu/ds/workshops/>).

12th International Seismological Workshop “Modern Methods of Processing and Interpretation of Seismological Data”

This workshop was held in Almaty, Kazakhstan, 11 – 15 September 2017.

6th Scientific Biennial Conference “Problems of Complex Geophysical Monitoring of the Russian Far East”

This Conference was held Petropavlovsk-Kamchatsky, Russia, 1 – 7 October 2017
(<http://www.emsd.ru/en/conf2017/>).

2nd Cargèse “School on Seismogenesis”

This summer school was held in Cargèse, France, 2 – 6 October, 2017
(<http://earthquakes2.sciencesconf.org/>).

2018

2nd General Assembly of the African Seismological Commission (AfSC)

The second AfSC GA was held in Al Hoceima, Morocco, 23 – 25 April 2018. The assembly had about 150 participants and was followed by three training courses on “Seismotectonics”, “Analysis of Seismic Signals” and “Usage of Radar Images” (26 – 27 April 2018).

12th General Assembly of the Asian Seismological Commission (ASC)

The 12th ASC GA with 129 ASC participants was held in Chengdu, China, 12 – 14 May 2018, jointly organized with the International Conference for the Decade Memory of the Wenchuan Earthquake, and as part of the 4th International Conference on Continental Earthquakes. A pre-conference, four weeks long training course entitled “The North-Central Asian Earthquake Observation Techniques” was presented from April 16 to May 11, 2018.

3rd General Assembly of the Latin America and Caribbean Seismological Commission (LACSC)

The third GA of the LACSC had been planned to be in Puerto Rico, jointly with the Seismological Society of America (SSA). However, due to the devastating impacts of hurricanes Irma and Maria in September 2017, LACSC and SSA decided to move the meeting to Miami, USA, 14 – 17 May 2018. The assembly had 122 participants from LACSC countries.

36th General Assembly of the European Seismological Commission (ESC)

The 36th ESC GA was held in Valletta, Malta, 2 – 7 September 2018. The assembly had 802 participants. The one-week Peter Bormann Young Seismologist Training Course, entitled “Array Seismology”, was organized before the assembly (27 – 31 August 2018).

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

In 2014, a rigorously updated and amended electronic second edition of the IASPEI New Manual of Seismological Observatory Practice, NMSOP-2, was completed and put online, thanks to the efforts of the late Peter Bormann. 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 and the auspices of IASPEI and its Commission on Seismological Observation and Interpretation (CoSOI). All versions are freely available and downloadable from the website of the GFZ Library (<http://bib.telegrafenberg.de/publizieren/vertrieb/nmsop/>). Several colleagues have worked on translations of the Manual or parts of it from English to their language. During the last years, efforts were made to translate the whole Manual to Russian and Arabic.

- Scientific Programs, Projects, Publications

The IDEA (International Digital Earthquake Archives) project of the Committee for Preservation of WWSSN and Historical Seismograms (also called *Seismoarchives: Seismogram Archives of Significant Earthquakes of the World*), continued its mission. The Incorporated Research Institutions for Seismology (IRIS) is archiving the scanned seismograms. During the General Assembly in Prague it was decided that Graziano Ferrari (Istituto Nazionale di Geofisica e Vulcanologia (INGV), Italy) take over the IDEA Project from W.H.K. Lee. A project for scanning old Batavia seismograms continued in 2015 – 2017.

During the whole quadrennium, IASPEI continued to support the Inter-Associations working group “Electromagnetic Studies of Earthquakes and Volcanoes (EMSEV)” (<http://emsev-iugg.org/>) jointly organized together with the International Associations of Geomagnetism and Aeronomy (IAGA) and Volcanology and Chemistry of the Earth's Interior (IAVCEI).

- Awards/Anniversaries/Obituaries

- *Awards*

The **IASPEI Medal** is awarded for distinguished contributions in seismology: for sustaining IASPEI goals and activities and for scientific merits in the field of seismology and physics of the Earth's interior. The Medal is awarded every 2nd year during the IASPEI Assemblies.

During IASPEI General Assembly in Prague, the 2015 IASPEI medal was awarded to **Willie H.K. LEE**.

During the IASPEI Scientific Assembly in Kobe, the 2017 IASPEI medal was awarded to the former IASPEI President and former Secretary General of IASPEI **Eric Robert ENGDAHL**.

In 2016, the IASPEI Bureau established an **IASPEI Early Career Scientist Award** program aimed at engaging excellent young researchers in the IASPEI community. Each of the four IASPEI Regional Commissions was asked to select one Early Career researcher (graduate student, postdoctoral research, pre-tenure faculty member) from their commission at each even-year Assembly of that Regional Commission.

In 2018, the first three awards were given by the AfSC to **Sofia BENAMRI**, Morocco, by the LACSC to **Esteban CHAVES**, Costa Rica and by the ESC to **Roseanne CLEMENT**, UK.

- *Obituaries* for prominent scientists were regularly published in the IASPEI Newsletters and on the IASPEI website ([http://www.iaspei.org/about/bios-
obituaries](http://www.iaspei.org/about/bios-obituaries)).

4. PLANNED FUTURE ACTIVITIES/ ANNOUNCEMENTS

- In 2019, the main focus will be on the 40th General Assembly of the Association during the Centennial General Assembly of the IUGG in Montreal, Canada in July 2019.

- In 2020, the IASPEI main activity will be again concentrate on the General Assemblies of the four regional commissions of IASPEI (AfSC, ASC, ESC, LACSC). Some preparation work will already be ongoing in 2019.

- The 2021 41st Scientific Assembly of IASPEI is planned as a joint assembly together with IAGA, to be held in Hyderabad, India in August 2021.



The members of the IASPEI Bureau 2011 – 15 (elected in Melbourne, 2011) and 2015 – 2019 (elected in Prague, 2015). (Photo: courtesy M. Pirli)



Opening of the First Joint IAG-IASPEI Scientific Assembly in Kobe in 2017. (Photo: courtesy K. Satake)