

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

Quadrennial Report 2019-2022

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 2019 and 2021, most of the IASPEI efforts were directed towards the IUGG General Assembly in Montréal, Canada, and the 3rd Joint IAGA-IASPEI Scientific Assembly planned for Hyderabad, India, which could only be organized as a virtual Assembly due to the outbreak of the COVID-19 pandemic and the related world-wide restrictions on traveling.

During 2020 and 2022, most IASPEI efforts were directed towards the Assemblies of IASPEI's four Regional Commissions (Africa, Asia, Europe, Latin America and Caribbean). However, also due to the COVID-19 pandemic, almost all IASPEI activities planned for 2020 were cancelled or postponed. The European Seismological Commission managed to organize a virtual meeting in 2021 and all four Regional Commissions could reunite in-person or through hybrid meetings in 2022.

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

2. ADMINISTRATION

- ExeCom & Bureau meetings

The IASPEI Bureau and Executive Committee met several times in Montréal during the GA in July 2019 and twice virtually during the Scientific Assembly in Hyderabad in 2021.

In December 2022, the IASPEI Executive Committee met via video conference.

Several e-mails regarding important questions on financial support or business to be solved immediately were exchanged between the members of the Bureau and ExeCom throughout each year.

Information about the actual Members of the 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.)

No changes.

- 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. The IASPEI statutes and by-laws were not changed during the reporting period. 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 4000 e-mail addresses (status end of 2022). The Newsletters are also available for downloading from the IASPEI website. Five issues were distributed in 2019, three issues in 2020 and four issues in 2021 and 2022. In addition, six bulk e-mails were distributed with ad-hoc information.

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.

2019

40th IASPEI General Assembly in Montréal, Canada

The 40th GA of IASPEI was held during the IUGG General Assembly in Montréal, Canada, from 8 to 18 July 2019. This IASPEI GA (<http://www.iaspei.org/assemblies-conferences>) had 494 officially registered IASPEI delegates. The scientific program included 26 IASPEI and 26 Inter-Association symposia with IASPEI participation.

Training Course „Seismology and Seismic Hazard Assessment 2019”

The international training course “Seismology and Seismic Risk Assessment” was conducted at the German Geosciences Research Center GFZ (Potsdam, Germany), with 26 participants, from 12 August to 6 September 2019.

*International Training Course on Ocean Bottom and Amphibian Experiment
Seismological Data*

From 5 to 6 September 2019, the GFZ Potsdam hosted a two-day training course for young scientists on the use of seismological data on the seafloor and amphibian experiments. About 16 participants came from 6 different countries.

2020

Due to the outbreak of the COVID-19 pandemic all IASPEI related or supported Conferences, Workshops and Summer Schools planned for 2020 were cancelled or postponed to a later date.

2021

41st IASPEI Scientific Assembly and Third Joint Scientific Assembly of IAGA and IASPEI

The 41st IASPEI Assembly (<http://www.iaspei.org/assemblies-conferences>) was held as virtual 3rd Joint Assembly with the International Association of Geomagnetism and Aeronomy (IAGA) in Hyderabad, India, from 21 to 27 August 2021. The conference had 828 registered participants from 53 different countries of which nearly 300 gave IASPEI as their primary Association. The scientific program consisted in total of 43 symposia (27 IAGA, 17 IASPEI and 8 Joint Symposia).

1st IASPEI Summer School for Early Career Research Scholars

The IASPEI Commission on Education and Outreach organized a pre-Assembly Summer School in the week before the Joint IAGA-IASPEI Scientific Assembly, in which 13 instructors gave lessons for 30 students.

13th General Assembly of the Asian Seismological Commission (ASC)

Due to the ongoing outbreak of the COVID-19 pandemic, the 13th ASC GA, which had been originally planned for 2020, was now held as part of the virtual IASPEI GA Assembly in Hyderabad, India, with 19 attendees.

37th General Assembly of the European Seismological Commission (ESC)

The 37th General Assembly of the European Seismological Commission (ESC) was originally planned to be held on Corfu (Greece), in September 2020. Due to the COVID-19 pandemic, the Assembly was postponed and then held as a fully virtual conference with 596 attendees, from 19 to 24 September 2021.

Peter Bormann Young Seismologist Training Course

ESC organized in the week before the 37th General Assembly the Peter Bormann Young Seismologist Training Course (YSTC) of 2021 as webinar titled “Seismology for Science and Society”.

AfSC Commemorated the World Tsunami Day

On Friday, 5th November 2021, the African Seismological Commission (AfSC) organized a webinar, to commemorate the World Tsunami Awareness Day, broadcasted via the Commission's Facebook page. The webinar had a pretty good reach, the Facebook video having 1562 online viewings, with 149 engagements.

Workshop “Role of Early Warning Systems in Geo-Meteorological Hazards Risk Reduction”

The IASPEI Commission on Education and Outreach in collaboration with a) the South Asia Alliance of Disaster Research Institutes (SAADRI), b) the National Science and Technology Center for Disaster Reduction (NCDR), Taiwan, c) the Multidisciplinary Centre for Geoinformatics, Delhi Technological University (DTU) and d) the National Institute of Disaster Management (NIDM), Ministry of Home Affairs, Govt. of India, organised a Three-day Online International Workshop on the “Role of Early Warning Systems in Geo-Meteorological Hazards Risk Reduction”, which was held from 8 – 10 December, 2021.

2022

38th General Assembly of the European Seismological Commission (ESC)

The 38th General Assembly of the European Seismological Commission (ESC) was held together with the 17th European Conference on Earthquake Engineering as 3rd Joint European Conference on Earthquake Engineering and Seismology (3ECEES) in Bucharest, Romania, from 4 to 9 September 2022. As originally planned, the Assembly was organized as an in-person meeting with about 800 participants from more than 60 countries.

Peter Bormann Young Seismologist Training Course

During the week after its General Assembly, the ESC organized the Peter Bormann Young Seismologist Training Course (YSTC) of 2022 with the title “Intermediate-depth seismicity and strong ground motions with large displacement demands – Challenges and Insights in Seismology and Earthquake Engineering”, which was attended by 10 people.

4th General Assembly of the Latin American and Caribbean Seismological Commission (LACSC)

The 4th General Assembly of the Latin American and Caribbean Seismological Commission (LACSC) was held as hybrid meeting in Quito (Ecuador), from 3 to 5 October 2022. The Assembly had 209 in-person participants from 28 different countries and 33 people participated on-line.

Two pre-congress courses were given on the weekend before the start of the meeting. A 2-day course on SeisComp platform for beginners attended by 18 people and an afternoon course on the new developments of the "Shake Map" attended by about 30 people.

14th General Assembly of the Asian Seismological Commission (ASC)

3rd General Assembly of the African Seismological Commission (AfSC)

The 3rd General Assembly of the African Seismological Commission (AfSC) and the 14th General Assembly of the Asian Seismological Commission (ASC) met together as *1st Joint ASC-AfSC Assembly* in a hybrid conference in Hurghada, Red Sea (Egypt), between 10 and 13 October 2022. The Assembly had about 180 participants (about 40 on-line) from 38 different countries. After the Assembly, the Organizing Committee convened a three-day long training course for early career seismologists that focused on the modern methods for nanoseismicity and infrasound monitoring and which was attended by 20 seismologists.

7th International Meeting on Heat Flow and the Thermal Structure of the Lithosphere (Čermák7)

The “7th International Meeting on Heat Flow and the Thermal Structure of the Lithosphere” was held from 20 to 22 June 2022 in Potsdam, Germany, and hosted by the GFZ German Research Center for Geoscience under the auspices of the International Heat Flow Commission (IHFC) of the IASPEI/IUGG.

Electromagnetic Studies of Earthquakes and Volcanoes EMSEV22

The EMSEV2022 was held at the National Central University in Taiwan, 22 – 24 August 2022. The meeting was initially scheduled for the summer of 2020 but was postponed for two years due to COVID-19.

- 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/>).

- Scientific Programs, Projects, Publications

During the whole quadrennium, IASPEI continued to support the Inter-Association 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).

The IASPEI Working Group “Historical Seismology”, under the IASPEI Commission on Seismological Observation and Interpretation (CoSOI), planned and published a Focus Section themed “Past and Present of Historical Earthquake Data and Research” in the Seismological Research Letters (Volume 91, August 2020).

In 2021, the Asian Seismological Commission celebrated the 25th anniversary of its foundation with a special issue of the Journal of the Geological Society of India (Volume 97, December 2021).

- 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 the IASPEI General Assembly in Montréal, the 2019 IASPEI medal was awarded to **Brian L. N. KENNETT** (Australia).

During the virtual IASPEI Scientific Assembly in Hyderabad, the 2021 IASPEI medal was awarded to **Barbara ROMANOWICZ** (France/USA).

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.

The award was given by the ESC in 2021 to **Irina DALLO** (Switzerland) and in 2022 to **Luca LAUDI** (Malta), and by the AfSC in 2022 to **Olivier MUNGUIKO** (Congo DR).

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

4. PLANNED FUTURE ACTIVITIES/ ANNOUNCEMENTS

- In 2023, the main focus will be on the 42nd General Assembly of the Association during the General Assembly of the IUGG in Berlin, Germany, in July 2023.

- In 2024, the IASPEI main activity will be again concentrated on the General Assemblies of the four regional commissions of IASPEI (AfSC, ASC, ESC, LACSC). Some preparation work will already be ongoing in 2023.

- In 2025, the 43rd Scientific Assembly of IASPEI is planned as 4th Joint Assembly together with IAGA, to be held in Lisbon, Portugal, in August 2025.



Some former and newly elected members of the IASPEI Executive Committee after the IASPEI closing plenary of the General Assembly in Montréal. (Photo: courtesy M. Pirli)



The opening ceremony of the IAGA-IASPEI Joint Assembly 2021 was attended in person by selected local participants and streamed online for all others (Photo: courtesy LOC)