

## **IASPEI Newsletter**

September 2018

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Please do not forget to inform me about international conferences and workshops with IASPEI related topics. Then, I can add these events to the Meetings Calendar of future Newsletters.

Johannes Schweitzer Secretary General

### **Foreword**



Dear Readers,

This Newsletter contains at first some information about next year's 27<sup>th</sup> General Assembly of the IUGG in Montreal, Canada.

Then, we have two reports from the General Assembly of the African Regional Commission and from the 3<sup>rd</sup> Regioanl Assembly of the of the Latin American and Caribbean Regional Commission.

In addition, we received a short contribution regarding the 150<sup>th</sup> anniversary of the birth of Fusakichi Omori.

Finally, I must inform you with great sadness that three of our colleagues passed away. We remember them in the obituaries.

## The 2019 IUGG in Montreal, Canada

The dates for the 27<sup>th</sup> General Assembly of the IUGG are 8 – 18 July 2019. All IASPEI relevant activities are planned for the last six conference days (12 – 17 July 2019).

The Scientific Program Committee (SPC) for the 27<sup>th</sup> General Assembly has now finalized the Joint Symposia program. At this moment, the program will consist of 10 Union and 59 Joint Symposia. IASPEI will participate with conveners in all Union and 27 Joint Symposia, 9 of which will be led by IASPEI. In addition, IASPEI plans for 27 own symposia based on input from the IASPEI Commissions.

The plan is that all Symposia relevant information will be published on the conference web-site during these days and abstract submission will be opened in the beginning of October 2018 (http://iugg2019montreal.com/).

## 2<sup>nd</sup> General Assembly African Seismological Commission



The 2<sup>nd</sup> General Assembly of the African Seismological Commission (AfSC) took place from 23 to 27 April 2018 at the Faculty of Sciences and Techniques of Al Hoceima (FTSH), Morocco. The opening ceremony, presided over by the Governor of the province of Al Hoceima, was conducted with presentations by Taoufik Mourabit, the Dean of the FSTH and head of the local organizing committee, Johannes Schweitzer, the Secretary General of IASPEI and Atalay Ayele, the President of AfSC.

The General Assembly lasted 5 days, including 3 days of scientific presentations and two days of training with about 150 participants. The plenary scientific session was initiated by 3 plenary lectures given by Mustapha Meghraoui (University of Strasbourg, France), Robert Reilinger (MIT-Boston, USA) and Driss Bensari (Mohamed V University-Rabat, Morocco). The Local Organizing Committee took the opportunity to pay tribute to these speakers for their work on the geodynamics, seismotectonics and seismic risk in Africa.

The organizing and scientific committees were able to prepare from 23 to 25 April a rich scientific programme with 110 oral and posters presentations covering the following themes:

- Active Tectonics, Paleoseismology and Historical Seismicity
- Geodynamics, GPS, InSAR and remote sensing
- Seismic source/Induced seismicity
- Ground motion and site effects

- Earthquake Hazard Assessment
- Tsunami hazard: data collection and modelling
- Earth structures in Africa/The East African Rift System
- GIS and Risk Scenario

Beside the scientific sessions other activities took place such as business meetings of the AfSC and accompanying projects (UNESCO-IUGS-IGCP-601 "Seismotectonics and Seismic Hazards in Africa"; NSF "Geodynamics and GPS monitoring of African regions").

The AfSC business meeting, organized by the Executive Committee, took place on 24 April as a late afternoon and evening session. Reports on the past activities and from the five working groups (Observational Seismology, Earth Structure, Active Fault and Seismotectonics, Seismic Hazard and Risk, Earthquake Scientific Response) were presented. A discussion on bylaws with an election of the new Executive Committee was conducted by Michell Grobbelaar (AfSC Secretary General) and Johannes Schweitzer (IASPEI Secretary General). The business meeting ended with proposals and suggestions for the location of the next GA of AfSC in 2020. Details on the AfSC can be found in www.afsc-web.org.za.

The scientific sessions ended with a general discussion session and recommendations on the future of the AfSC and the conditions for the launch of an Earthquake Data Centre for Africa. The IASPEI early career award was attributed to Miss Sofia Benamri (a grant for the attendance to the forthcoming IUGG General Assembly in Montreal in 2019) for her outstanding presentation. The final session was the occasion to address warm thanks and congratulations to the LOC and to its President, Taoufik Mourabit. The LOC and all participants were thankful to all the generous sponsors that contributed to the success of the 2<sup>nd</sup> General Assembly of AfSC.

All details on the 2<sup>nd</sup> General Assembly of the AfSC can be found in https://afsc2018.sciencesconf.org/.

Three training courses organized on 26 and 27 April were attended by over 55 participants and mainly students and young researchers. The courses consisted of:

- Training in Seismotectonics on 26 April supervised by Mustapha Meghraoui (IPG Strasbourg), Vunganai Midzi (CGS, Pretoria), Atalay Ayele (Addis-Ababa University), Mohamed El Gabry & Ahmed Hosni (NRIAG, Cairo) and Ahmed Ksentini (Sfax University).
- Training in the Analysis of Seismic Signals on 27 April supervised by Abdelouaheb Agrebi, Ezekiel Jonathan and Alexander Poplavskiy, three experts of CTBTO (Vienna).
- Training on the use of Radar Images for the monitoring of superficial movements of the lithosphere, supervised by Professors Kharki Omar and Boulaassal Abdel Hakim (University of Tangier) on 27 April (in parallel to the CTBTO session).

As a social happening, all delegates and participants were invited to a gala dinner held at the Mira Palace Hotel of the Al Hoceima city center.

3<sup>rd</sup> Regional Assembly Latin American and Caribbean Seismological Commission



The 2018 Regional Assembly of the IASPEI's Latin American and Caribbean Seismological Commission (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, in agreement with the Puerto Rican members of the Program Committee, decided to move the meeting to Miami. This decision was announced on 30 October 2017.

The joint SSA/LACSC "Seismology of the Americas" had a total of 743 participants, mainly from the U.S.A., as usually happens in an SSA meeting. The number of papers with first author from a LACSC country was 148 (excluding 15 withdrawn papers), evenly spread in 78 orals and 70 posters. 122 registered participants came from Latin America and the Caribbean. This compares well with the two previous LACSC assemblies in Colombia and Costa Rica when about 160 participants, on average, had come from LACSC countries.

During the opening ceremony, Leandro Rodríguez (CERESIS representative) showed a video as a tribute to Alberto Giesecke, who had passed away in 2016 at the age of 98. Giesecke founded CERESIS (Regional Center for Seismology in South America) and dedicated most of his career to promote collaboration and joint projects across Latin America.

The LACSC travel-grant fund for students and early career researchers (ECR) was composed of three sources: IASPEI (US\$ 10,000), IUGG (US\$ 1,500) and an SSA/LACSC donation fund (US\$ 7,000), amounting to a total of US\$ 18,500. A separate fund for Puerto Rico Students and ECRs was also organized by SSA and the Puerto Rico Seismic Network (PRSN), in addition to the SSA's own travel grant. We are especially grateful to SSA for the successful fund-raising campaign, and the SSA members for their generous support. A total of 20 students and 13 ECRs applied for travel support and 12 students and 7 ECRs were granted support. The supported applicants came from nine different countries: Argentina (3), Brazil (1), Chile (2), Costa Rica (4), Colombia (3), Cuba (1), Ecuador (2), Mexico (2), and Nicaragua (1). The list of grant recipients was published in the meeting Program Book, which included a special

acknowledgement of the IASPEI and IUGG support as well as the SSA donation fund. Fig. 1 shows a picture of most LACSC and SSA travel grant recipients.



Fig. 1. Photo of most SSA and LACSC Travel Grant recipients (Source: SSA)

A call for the IASPEI Award was announced at the meeting web-page, as well as by emails sent by the LACSC Executive Secretary, and emails from SSA sent to their members. A total of 26 applications were received and evaluated by the members of the LACSC Executive Committee, with administrative support from SSA. The IASPEI award for the best presentation was given to Esteban Chaves (Santa Cruz University, CA / OVSCORI, Costa Rica) for the work "Variability in Seismic Source Spectra and Stress Drop from Repeating Earthquake Sequences along the Nicoya Peninsula Megathrust". Esteban Chaves will receive IASPEI support to attend the 2019 IUGG Assembly in Montreal, Canada.

The new LACSC statutes allow any participant attending a LACSC Assembly to vote for the members of the Executive Committee and also for the venue of the next LACSC Assembly. On Wednesday, May 16, a Plenary Meeting with about 30 participants of the LACSC/SSA meeting approved the renewal of the LACSC Executive Committee. which is now composed of: Mario Ruiz (Ecuador, President), Marino Protti (Costa Rica, Vice-President), Victor Huérfano (Puerto Rico, Past-President), Marcelo Assumpção (Brazil, Secretary), Leandro Rodríguez (Peru, CERESIS representative), and six additional members: Franck Audemard (Venezuela). Sergio Barrientos (Chile), Xyoli PérezCampos (Mexico), Eduardo Camacho (Panama), Patricia Alvarado (Argentina), and Lloyd Lynch (Trinidad-Tobago). Johannes Schweitzer (Norway) is also part of the EC as IASPEI representative, by statute rule.

The Plenary also approved the Ecuador proposal to host the 2020 LACSC Regional Assembly in Quito, which will be organized by the Instituto Geofísico of the Escuela Politécnica Nacional (IGEPN). The probable date is late July or early August 2020.

LACSC thanks IASPEI, IUGG and the donors of the LACSC and Puerto Rico Funds which greatly contributed to the success of the joint LACSC/SSA Seismology of the Americas 2018. Fig. 2 shows most of the LACSC participants of the 2018 Seismology of the America. We thank SSA staff for efficiently organizing an excellent joint meeting.



Fig. 2. LACSC participants of the 2018 LACSC-SSA Joint Meeting. Standing in front of the steps are Nan Broadbent (SSA Executive Director) and Peter Shearer (SSA President). Victor Huérfano (LACSC president) stands in the middle with his hands in the guardrail. (Source: SSA)

# The 150<sup>th</sup> Anniversary of Fusakichi Omori (1868-1923)



Professor Fusakichi Omori

With a short note, we would like to draw the attention of the scientific community to the jubilee of the outstanding Japanese seismologist Fusakichi Omori. He was born 150 years ago, on October 30, 1868, received a brilliant education at the Imperial University of Tokyo, and made a discovery at the age of 26 widely known as Omori's law. The Omori law states that after a strong earthquake, the frequency of aftershocks n, i.e., the repeated shocks that follow the main shock, decay with time t, on average, according to the hyperbolic law

$$N(t) = k / (c + t)$$
(1)

with k > 0, c > 0, and  $t \ge 0$ .

It was really the first law in the field of earthquake physics, if we talk about the chronological sequence of outstanding discoveries in seismology. As the second law, the Gutenberg-Richter law describing the distribution of earthquakes over magnitudes must be mentioned.

Thirty years after the discovery of Omori (in 1924), another Japanese seismologist, R. Hirano, investigated the Great Kanto earthquake on September 1, 1923, M = 8.1 and came to the conclusion that formula (2) better approximates the attenuation of aftershocks than formula (1):

$$n(t) = k / (c+t)^{p} \tag{2}$$

The power-law exponent p, generally speaking, varies from location to location and from case to case in wide limits. After another 40 years (in 1961), Tokuji Utsu proposed to consider p = const for each particular series of aftershocks. Utsu, who has done much to introduce the remarkable achievement of Omori into the practice of seismic research, proposed calling formula (2) the modified Omori law.

Over the years since then, there has been a vast amount of literature on this law, and the significance of its discovery has been universally recognized. There is, however, a profound division of opinion as to the interpretation of the law. Some argue that Omori just proposed a simple data-fitting formula and replace this formula by a power-law one with a negative fractional exponent, whereas for others the Omori law makes physical sense. However, we believe that Omori's original formulation of the law correlates well with the current understanding of the rock destruction mechanism at the earthquake source.

Fusakichi Omori was a devoted student of John Milne and enjoyed the encouraging support of his teacher, as did all young Japanese seismologists of that time. An earthquake with the magnitude M = 8 took place on 28 October 1891 (Mino-Ovari earthquake). Milne seismographs registered numerous aftershocks. Their analysis allowed Omori in 1894 to formulate the law that bears his name.

Professor Omori lived the active life, full of creative searches. He traveled a lot, gained international fame, and was the president of the Japanese Imperial Earthquake Investigation Committee. The circumstances of his death were tragic. On Saturday September 1, 1923, the Great Kanto earthquake occurred. Yokohama and Tokyo were destroyed. Many people died. At that time, Fusakichi Omori was in Australia. Upon learning of the disaster, he left for home immediately. During the voyage, he fell seriously ill and died on November 8, 1923 at the age of 55 years, shortly after his return to Tokyo.

Thus, in Japan at the end of the 19<sup>th</sup> century, modern seismology was conceived owing to a remarkable combination at that time and at that place of the demand from society, state support, and personal genius of Fusakichi Omori.

Anatol V. Guglielmi & Alexey D. Zavyalov Schmidt Institute of Physics of the Earth, Russian Academy of Sciences, Moscow, Russia (guglielmi@mail.ru, zavyalov@ifz.ru)

#### **Obituaries**

## Jiří Vaněk (1927 – 2018)



Jiří Vaněk, who passed away on February 17, 2018, was an internationally renowned geophysicist, for years a doyen of Czech seismologists. Born in Prague on August 8, 1927, he graduated from the Faculty of Mathematics and Physics of the Charles University in Prague in 1950. He belonged to a strong generation of geophysicists and geodesists who stood at the genesis of the Institute of Geophysics of the newly established Czechoslovak Academy of Sciences in 1953 – at the age of only 26. All Jiří's scientific life was connected with the existence of the Institute.

Jiří's early scientific interest gradually proceeded towards reliable determination of the earthquake magnitude and culminated in 1983 by a widely respected and used monograph "Earthquake Magnitude in Seismological Practice", with L. Christoskov and N. V. Kondorskaya, his close international friends, as co-authors. In the late seventies, Jiří was fascinated by the then newly formed theory of lithospheric plates, particularly by its seismological evidence. Together with Václav Hanuš, a structural geologist, and later also with me and some of our students, Jiří has

authored several tens of scientific papers explaining some specific features of the Wadati-Benioff zones, relations between seismic and volcanic processes at convergent plate margins, and other seismotectonic phenomena.

Besides successful basic research, Jiří had been involved in teaching at the Charles University from the very beginning of his career. Among many students influenced by his innovative approach to quickly developing geophysical disciplines were such personalities as Vlastislav Červený (seismic ray theory) and Jiří Zahradník (seismic source modelling). Jiří's educational skills opened for him a position of associate professor at the Mining Academy in Freiberg, Germany, in 1958-1959, and at the Leipzig University in 1960. Later, Jiří served as the United Nations education expert at the International Institute of Seismology and Earthquake Engineering in Tokyo in 1970 – 1971, as a visiting professor at the Universidad Autónoma de México in 1978, and at the Escuela Politécnica Nacional in Quito, Ecuador, in 1984.

Jiří Vaněk is remembered as a cheerful fellow, with a broad cultural scope which included, among other things, passion for philately, excellent knowledge of international cuisine and good wine, as well as appreciation of a good football game. We do miss his relentless positive energy and joy of life.

Aleš Špičák, co-worker of Jiří Vaněk 1996 – 2017 (copied from the ESC web-page)

# Brian J. Mitchell (1936 – 2018)



Brian J. Mitchell, PhD and Professor Emeritus died on 29 May 2018. Brian was born 25 July 1936 in Minneapolis, Minnesota, where he also received his B.S. and M.S. degrees in physics and geophysics from the University of Minnesota in the 1960s. He then moved to Texas, where he completed his PhD in geophysics at Southern Methodist University in 1970. After a postdoc appointment at Caltech working with Don Helmberger on deep mantle structure from 1971 to 1972 and a brief position in the exploration industry in 1973, he was appointed Assistant Professor at Saint Louis University in Missouri, in 1974. He advanced through Associate Professor to full Professor by 1981 and remained at Saint Louis University until his retirement as Professor Emeritus in 2012. Brian served as Chair of the Department of Earth and Atmospheric Sciences from 1980 to 1993 and became Paul C. Reinert Professor of Natural Sciences in 1993. Over the years he held several visiting research appointments at various universities and institutes in the USA and Europe, including Harvard University, Massachusetts Institute of Technology, Woods Hole Oceanographic Institution, NORSAR, and the University of Trieste.

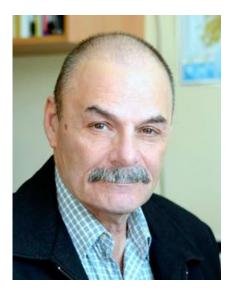
Brian Mitchell focused on seismological investigations of propagation and attenuation of Rayleigh-wave fundamental modes and overtones, and he became a widely

recognized authority on this topic. Throughout his career he sustained interest in different aspects of seismic-wave attenuation: he worked with numerous co-authors and advisees on S-wave attenuation in the mantle. coda-Q, surface wave attenuation, the frequency dependence of attenuation, the attenuation of Lq waves, the influence of crustal fluid content on the attenuation of seismic waves, seismic wave attenuation in different tectonic regimes and lateral heterogeneous Q distributions. Other main topics of his work include S-wave velocities and anisotropy, T-phase propagation and intraplate seismicity in USA (New Madrid) and, together with Norwegian colleagues, in the European Arctic (Svalbard Archipelago). He published more than 70 peer-reviewed papers on these topics.

In addition to his many contributions on seismic wave analysis, Brian became well known to the global seismological community for his many years of service as the Chief Editor of Pure and Applied Geophysics (PAGEOPH) and for sustaining the high scientific standard of that journal. In this function he edited a large volume on Q of the Earth and a set of seven volumes on various aspects of monitoring the Comprehensive Nuclear Test-Ban Treaty. He was an elected Fellow of the American Geophysical Union and the Geological Society of America and received the Peter Raven Lifetime Achievement Award from Saint Louis University in 2004. Brian is survived by his wife of 58 years, Judith Mitchell and his sons David and Peter, along with four grandchildren.

Johannes Schweitzer & Thorne Lay, based on different Internet sources.

## Alexander A. Gusev (1945 – 2018)



Alexander A. Gusev, the head of the Seismology Laboratory at the Institute of Volcanology and Seismology of the Far Eastern Branch of the Russian Academy of Sciences, passed away on September 21, 2018. He was a wonderful person, an outstanding seismologist, and an exceptional leader, known for his extensive knowledge, pedagogical talent, and the ability to captivate others with his ideas.

Born 5 February 1945, Alexander A. Gusev grew up in Moscow. In 1967 he graduated from the Department of Physics of the Moscow State University and travelled to Kamchatka, which would become the focus of his professional interests. A. A. Gusev's scientific career began at the Pacific Seismological Expedition of the Institute of Physics of the Earth of the Academy of Sciences of the USSR. He joined the postgraduate at IPE in 1969 and transferred to the Institute of Volcanology and Seismology of Far Eastern Scientific Center of the Academy of Sciences of the USSR (now Institute of Volcanology and Seismology of the Far Eastern Branch of the Russian Academy of Sciences). In 1978, he defended his candidate of science thesis "Numeric detection of hypocenters of close-range earthquakes (example of Kamchatka)," and in 1993 he presented his doctoral dissertation

"Properties and origins of short-period emission of earthquake source."

In 2002, a group of researchers including A. A. Gusev was honored with a national award in science and technology of the Russian Federation for the development of a set of seismic zoning maps of Russia. In the last ten years A. A. Gusev did extensive work on the next generation of such maps.

Among A. A. Gusev's main research areas were the earthquake source and its tectonophysical nature; fractal properties of seismic and volcanic processes, signals, and fields; engineer seismology; absorption and dispersion of seismic waves; precursor detection. In all of these areas of scientific research he received fundamental results. widely known and acclaimed in Russia and in the international scientific community. Numerous techniques and numeric methods developed by A. A. Gusev are actively used at the Kamchatka branch of the Geophysical Survey of the Russian Academy of Sciences. As early as 1978, A. A. Gusev was active in digitizing the card earthquake catalogue of Kamchatka. He visited the Institute of Physics of the Earth often, to participate in seminars and conferences and to meet with colleagues. His presentations were always thoughtful and generated a lot of interest in the audience.

A. A. Gusev received recognition and esteem nationally and in the international seismological community. He acted as convener at international meetings. His invited talks captivated his audiences. His opinions were appreciated by the world's leading seismologists. He was one of the greatest seismologists not only in Russia but also over the world. His studies on the theory of random wave-fields generated by earthquake sources and on simulation techniques of strong ground motions have made remarkable impacts.

A. A. Gusev spent a lot of time working with students. He prepared five candidates of science (PhD). He generously shared his knowledge, experience and ideas, the stock of which has never dried up.

Alexander Gusev was extremely active and productive in his work till the end. We lost a person of such scale that is rarely to be seen. His significance to modern seismology is hard to overestimate, and this loss is irretrievable. A warm memory of him will always be in the hearts of his collaborators, colleagues, and friends.

Alexey Zavyalov, Inst. of Physics of the Earth RAS, Moscow, Russia

### **Meetings Calendar**

We report below titles, dates, places and websites of the forthcoming meetings relevant to the interests of IASPEI scientists. If you are aware of events not listed below, please inform the Secretary General.

#### 2018

**Australian Geoscience Council Convention** (AGCC) 2018

October 14 -18, 2018, Adelaide, Australia URL: https://www.agcc.org.au

**Geophysical Methods in Decision of Actual** Problems of Modern Seismology" -**TASECO-2018 (Tashkent Seismological** Conference – 2018)

October 15 – 16, 2018, Tashkent, Uzbekistan Contact: tash.seismo2018@mail.ru & taseco2018@gmail.com

6th Assembly of the Arab Conference on **Astronomy and Geophysics (ACAG)** 

October 15 – 17, 2018, Cairo, Egypt URL: https://acag-conf.net

2<sup>nd</sup> International School on Advanced **Modeling of Seismic Hazard in Africa** 

October 17 – 18, 2018, Helwan, Cairo, Egypt URL: https://acag-conf.net/advancedmodeling-seismic-hazard-africa/

#### **AGU Fall Meeting**

December 10 – 14, 2018, Washington D.C., USA

URL: <a href="https://fallmeeting.agu.org/2018/">https://fallmeeting.agu.org/2018/</a>

#### **2019**

#### **EGU General Assembly 2019**

April 7 – 12, 2019, Vienna, Austria URL: <a href="http://www.egu2019.eu/">http://www.egu2019.eu/</a>

#### **Seismological Society of America (SSA)**

April 23 – 26, 2019 Seattle, Washington, USA URL: <a href="https://www.seismosoc.org/meetings/">https://www.seismosoc.org/meetings/</a>

#### Science and Technology (SnT) 2019

June 24 - 28, 2019, Vienna, Austria

URL: https://www.ctbto.org/specials/snt2017/

#### 27th IUGG General Assembly

July 8 – 18, 2019, Montreal, Canada URL: <a href="http://iugg2019montreal.com/">http://iugg2019montreal.com/</a>

#### AOGS2019 16th Annual Meeting

July 28 – August 2, 2019, Singapore URL:

http://www.asiaoceania.org/aogs2019/public.a sp?page=home.htm

#### **AGU Fall Meeting**

December 9 – 13, 2019, San Francisco, USA

#### 2020

#### Seismological Society of America (SSA)

April 27 – 30, 2020, Albuquerque, New Mexico, USA

URL: https://www.seismosoc.org/meetings/

#### **EGU General Assembly 2019**

May 3 – 8, 2020, Vienna, Austria

#### **AOGS2020 17th Annual Meeting**

June 28 - July 4, 2020, South Korea

#### LACSC 4th General Assembly

August 3 – 5, 2020, Quito, Ecuador

#### **ESC 37<sup>th</sup> General Assembly**

September 6 – 11, 2020, Corfu, Greece

#### **AGU Fall Meeting**

December 7 – 11, 2020, San Francisco, USA

#### 2021

#### AOGS2021 18th Annual Meeting

August 1 - 6, 2021, Singapore

#### 2<sup>nd</sup> Joint IAGA-IASPEI Scientific Assembly

August 22 - 27, 2021 Hyderabad, India

#### 2022

## 3<sup>rd</sup> European Conference on Earthquake Engineering and Seismology

2022, Bucharest, Rumania

# General Information about IASPEI

The International Association of Seismology and Physics of the Earth's Interior [IASPEI] is one of the eight Associations of the International Union of Geodesy and Geophysics [IUGG].

The other IUGG Associations are:

Int'l Association of Cryospheric Sciences [IACS]

Int'l Association of Geodesy [IAG]

Int'l Association of Hydrological Sciences [IAHS]

Int'l Association of Meteorology and Atmospheric Sciences [IAMAS]

Int'l Association for the Physical Sciences of the Oceans [IAPSO]

Int'l Association of Geomagnetism and Aeronomy [IAGA]

Int'l Association of Volcanology and Chemistry of the Earth's Interior [IAVCEI]

#### Scientific Assemblies

IASPEI holds an Ordinary General Assembly every four years in conjunction with each Ordinary General Assembly of IUGG. Between the General Assemblies, IASPEI holds a Scientific Assembly, sometimes meeting with one of the other Associations of IUGG.

#### **Participation in IASPEI Activities**

Since July 2015, all scientists participating in IASPEI activities are counted as members of IASPEI (see <a href="http://www.iaspei.org/statutes.html">http://www.iaspei.org/statutes.html</a>). IASPEI welcomes all scientists throughout the world to join in seismological research.

IASPEI is subdivided into several Commissions, many of which have working groups for the study of particular subjects in their general areas of interest. On occasion, these internal IASPEI groups issue their own newsletters or circulars and many maintain their own web sites. At the IASPEI Assemblies, the groups organize specialist symposia, invite scholarly reviews and receive contributed papers that present up-to-theminute results of current research. The IASPEI web site gives, or provides links to, information on the range of IASPEI activities.

#### The IASPEI Web site

IASPEI can be found on the web at: http://www.iaspei.org/

#### **Contacting IASPEI**

The Secretary-General is the main point of contact for all matters concerning IASPEI.

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