



December 2014



MERRY CHRISTMAS AND  
HAPPY NEW YEAR 2015 to all of you!

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## Foreword



Dear readers,

Our 2015 Prague IUGG General Assembly is approaching fast. Abstract deadline is set on January 31, 2015. Hurry up!

Some important news in this issue: The IASPEI website has moved to ISC, read about how it all began! Reports about the recent EMSEV and ASC meetings are provided.

Unfortunately, several prominent seismologists and geophysicists have left us recently: Freeman Gilbert, Don Anderson, Anton Dainty, Torild van Eck....

Keep on supporting all IASPEI activities!

**Peter Suhadolc**  
Secretary General

## IUGG 2015 GENERAL ASSEMBLY IN PRAGUE

The **26<sup>th</sup> IUGG General Assembly 2015** will be held in [Prague Congress Centre](#) from June 22 to July 2, 2015.

On the website of the IUGG 2015 General Assembly in Prague (Czech republic),

[www.iugg2015prague.com](http://www.iugg2015prague.com)

the scientific program, registration and abstract submission are now available.

Please visit the site, note the key dates and deadlines, inspect the scientific program and decide to submit your abstract as early as possible.

### Key dates to remember

<b>September 2014</b>	Registration & Accommodation OPEN
<b>September 2014</b>	Call for abstracts OPEN
<b>January 15, 2015</b>	Grant applications CLOSE
<b>January 31, 2015</b>	Abstract submission DEADLINE
<b>March 31, 2015</b>	Notification to successful grantees
<b>April 10, 2015</b>	Registration Early Bird fee DEADLINE
<b>April 10, 2015</b>	Registration DEADLINE for grantees
<b>June 15, 2015</b>	Registration Standard fee DEADLINE
<b>June 22 - July 2, 2015</b>	GENERAL ASSEMBLY IN PROGRES

## New Home for the IASPEI website at the ISC



The IASPEI website has a new home at the International Seismological Centre (ISC), Thatcham, UK. IASPEI expresses its thanks to the ISC Executive Committee, for their approval of the move, which will provide greater stability to the service. The domain name will remain unchanged, [www.iaspei.org](http://www.iaspei.org), and its formal ownership is now with the IASPEI Secretary General. Over the next few months, the structure of the website will be modernised using a new generation of web-software (Typo3 Neos). This will ensure that it is robust and responsive on all devices and that drop-down menus will deliver the information to the community.

One of the major tasks is to provide better accessibility and more details about the particular work of the commissions – each commission with its own page detailing its work and outputs. It is important that, to improve the website, we receive material from the commission chairs, and we welcome their cooperation and input in the coming months.

The IASPEI website pre-dates the "iaspei.org" domain name by several years. In the late 1990s, Eric Bergman suggested to Bob Engdahl that a modest website for IASPEI be put together. The exact date, at which the website went on-line, is lost, but it was probably in late 1997 or very early 1998. However, Bob was already announcing a minor change in the URL of the website in the IASPEI Newsletter of February 1998. It was a great achievement as the use of html was in its infancy and not widely used by the scientific community. Despite this, IASPEI was the first Association of IUGG to go on-line. The web pages for IASPEI lived first in a subdirectory of the website of Eric's consulting company. This was convenient because there was no

extra cost to anyone, but it was certainly not very professional.

The first discussions about registering the [iaspei.org](http://iaspei.org) domain name for use with the website occurred in November 1998, at the suggestion of Tim Ahern. Although Bob authorized Tim to go ahead and register the domain at that time, it seems not to have happened, probably because he discovered that Willie Lee had already registered the domain name for use with his own activities with the IASPEI Committee on Education. In April 1999, there were a series of e-mails and phone conversations between Bob, Willie and Eric, discussing various arrangements that would bring the IASPEI website on-line under its own domain and still allow Willie to meet his objectives. As a result of those conversations Willie turned the domain over to Eric and Bob, who in June 1999 finalized the transfer of the domain registration, with the site hosted at the ISP that handles Eric Berman's website for no extra charge. Development of the website continued for the next several years, but there were no further changes to ownership or hosting until Alice Walker took over, assisted by Julian Bukits, the maintenance of the website in 2007. For a while, Alice maintained the website on Eric's server, but then the files were moved to a server at the British Geological Survey (BGS), and the domain registration was changed to point to that server.

Alice Walker put together a new-look web-site, which included information about the IASPEI officers, their CVs, a latest news section and, also, a newsletter and conference section that included photos, abstracts, resolutions and PowerPoint presentations from the keynote lectures and IASPEI opening and closing ceremonies. The domain registration itself stayed with Eric's ISP until just recently, when finally the transfer of the domain registration was completed to Peter Suhadolc, as representative of IASPEI, with the website being hosted now at the ISC.

For now, the website will be kept updated in its present form at ISC until the new modernised site is launched in June/July 2015. We urge the IASPEI community to help in supplying material and information so that we can project a "modern shop window" to the world that is up-to-date and informative, and achieves a prestigious profile for IASPEI.

AB Walker, P Suhadolc, D Storchak, ER Bergman, J Bukits, P Ozgo

## **The 2014 International EMSEV meeting on Electromagnetic Studies of Earthquakes and Volcanoes**



Visit of the lively city of Warsaw, September 24, 2014

The 17<sup>th</sup> International Workshop organized by the IUGG EMSEV Inter-Association Working Group on Electromagnetic Studies of Earthquakes and Volcanoes was held in Konstancin-Jeziorna nearby Warsaw, in Poland, from September 22 to 26, 2014 (<http://emsev2014.cbk.waw.pl/>, <http://www.emsev-iugg.org/emsev/>). This workshop was supported by IASPEI, IAGA, and IAVCEI Associations, and was hosted by the Institute of Geophysics and the Space Research Centre with the contribution of the Polish Academy of Science. Professor Jan Blecki with the help of very powerful local organizing committee produced a very successful, efficient and smoothly run meeting.

The focus of the meeting was on the observation and understanding of the various kinds of electromagnetic phenomena associated with seismic and volcanic activities, particularly from a multidisciplinary point of view. Session topics covered the following areas of interest: (1) Physics and Observations of Earthquake Preparatory Processes, (2) Constraints from Seismology, Geodesy and Other Geophysical Techniques, (3) Electrodynamics in Solids and Rock Materials – Theory and Laboratory Results, (4) Related Electromagnetic Signals and Other Physical Parameters to Earthquakes – Ground Base and Satellite Observations, (5) Related Electromagnetic Signals and Other Physical Parameters to Volcanoes, Geothermal Fields and Landslides – Ground Base and Satellite Measurements, (6) Signal Recognition, Data Processing and Modeling, and (7) Future Experiments, Missions and Theoretical Developments.

More than 60 participants from 16 different countries attended the meeting and presented their most up-to-date results in oral presentations and with posters. The posters were displayed in the central meeting area during the meeting with significant results from each identified in short 2-minute summaries before the general poster viewing. In



addition, invited talks on global-scale prediction of earthquakes, earthquake mechanics, volcano seismology, and geochemistry contributed to a better identification of the physical mechanisms involved in the generation of electromagnetic signals related to both volcanic and earthquakes activity.

The presentations during the meeting clearly show the incredible progress made in documentation of reliable electromagnetic signals related to earthquake and volcano activity during the thirteen-year existence of EMSEV. Many powerful international groups have been set up and cross-correlations between electromagnetic and other geophysical data have successfully emerged. The two activities promoted by EMSEV in under-developed countries related to volcanic (Taal volcano, Philippines) and tectonic activities (Bishkek, Kyrgyzstan). Each now involves powerful consortiums for joint observations. For Taal, experts from the Philippines, Japan, France, USA, Belgium, Italy, and Greece are working together while, in Kyrgyzstan, joint efforts involve researchers from Kyrgyzstan, Russia, Japan, France, Greece, China and Poland. The identification of signals related to the transient disturbances of the ionosphere that might be associated with earthquakes is the target of a cooperative effort between USA, Japan, Russia, Taiwan, and France. Renewed and enthusiastic interest in using satellites to identify precursory EM signals related to earthquakes and volcanic eruptions will follow the launch of Chinese micro-satellites in 2016. Already, our EMSEV community is getting together on this issue.

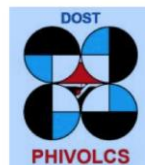
The round table at the end of the meeting raised discussions on different topics particularly the testing of predictability of EM and other geophysical parameters for impeding earthquakes and eruptions. If signals are occasionally identified, it is extremely difficult to demonstrate reliable and repeatable estimates precursor time delay, likely magnitude and likely location for an earthquake, although it is much easier for volcanic eruptions. Some proposals discussed were the importance of re-analyzing very long time series (i.e. over ten years) to build database of reliable characteristics of signals, to produce 4-window tables corresponding to Anomaly (A) with Earthquake (EQ), A with No EQ, No A and EQ, No A and No EQ, and to work on the repeatability of signals such as in the case of the recurrent seismicity in Taiwan. The methodology on precursory electric signals used in Greece is now in the process of being tested in Kyrgyzstan and Romania.

During the 17<sup>th</sup> business meeting, Professor Xuebin Du, from Lanzhou Institute of Seismology of China Earthquake Administration, offered to host the next EMSEV meeting in 2016. This proposal was accepted, and Chinese colleagues will discuss how to involve the largest possible Chinese community.

Detailed information on EMSEV activities can be found at <http://www.emsev-iugg.org/emsev/>.

October 25, 2014

For EMSEV, J. Zlotnicki, M.J.S. Johnston, T. Nagao, and J. Blecki.



## The 10<sup>th</sup> Asian Seismological Commission General Assembly 18 – 20 November 2014 Makati City, The Philippines

The 10<sup>th</sup> 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. Participants came from Australia (4), Bangladesh (1), Chile (2), China (1), Indonesia (9), Iran (8), Japan (26), Kazakhstan (1), South Korea (1), Mongolia (3), Nepal (2), Pakistan (1), Poland (1), Russia (7), Singapore (2), Switzerland (1), Taiwan (4), Thailand (2), USA (2) and Philippines (76).

The ASC2014 was organized by Philippine Institute of Volcanology and Seismology (PHIVOLCS) in cooperation with the Geological Society of the Philippines (GSP), and support from the Government of the Philippines, International Association of Seismology and Physics of the Earth's Interior (IASPEI) and Seismological Society of Japan (SSJ). The combined financial support from SSJ and IASPEI enabled the conference to award full/partial support to 31 travel grantees from 11 countries.

The Mayor of Makati City, Jejomar Erwin S. Binay, graced the opening program to welcome the participants. Gary Gibson (ASC President) gave the opening remarks followed by a message from Domenico Giardini (IASPEI President) and a Keynote delivered by Undersecretary Carol Yorobe of the Department of Science and Technology (DOST). The formal declaration to open the assembly was given by Local Organizing Committee Chairman and Director of PHIVOLCS, Renato U. Solidum, Jr.

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, in their capacities as representatives of their organizations.



*Plenary Session*

Eight (8) invited talks were delivered in the plenary sessions and 133 papers (89 oral and 44 posters) were presented in the parallel sessions during the assembly. The 7 technical sessions included: strong ground motion earthquake hazards and risks, earth structure, geodynamics, and seismotectonics, volcano seismology, significant and recent devastating earthquakes, seismic monitoring observations and data analysis products, seismic sources and prediction, education, outreach and cooperation. In addition, 10 companies, mostly equipment and services suppliers, participated in the exhibits.



*Briefing for the local media. Panelists Gary Gibson (ASC President), Domenico Giardini (IASPEI President) and Renato U. Solidum, Jr. (PHIVOLCS Director and LOC Chairperson).*

A 5-day Pre-Conference Training - "Contributions of Seismology to Earthquake Risk Mitigation was held from 12-16 November", was conducted by 2 invited trainers-Dr. Gary Gibson and Dr. Mark Quigley. Five special talks about monitoring, hazards and risk assessment and public awareness and preparedness in the Philippines were invited from PHIVOLCS. Selected participants included young scientists from India (3), Iran (3), Mongolia (1), Thailand (2), Australia (1) and

Philippines (11). The training was supported with funds from the Government of the Philippines. A 1-day Post-Conference field visit to Taal Volcano, where 19 participants joined, was also held, led by local organizer Mariton Bornas of PHIVOLCS.



*Participants during the Pre-Conference Training*

During the closing ceremony, PHIVOLCS Director Renato U. Solidum, Jr, as LOC Chairman presented the summary and highlights of the ASC 2014, and thanked all the participants coming from different countries. He also acknowledged the Philippine Government, JSS and IASPEI for the support that financed travel costs of invited plenary speakers and, conveners, and selected participants, pre-conference training and conference costs, to be able to hold the successful assembly. The ASC flag was officially turned over by Dr. Solidum to Brian Kennett of The Australian National University, representing Australia, the ASC 2016 host.

***See you all in Australia ASC 2016!!***

## AWARDS 2014

**Gregory Houseman** (Co-Chair, IASPEI Commission on Earth Structure & Geodynamics) was awarded the EGU 2015 Augustus Love Medal.

**Thorne Lay** (University of California, Santa Cruz, USA), Second Vice-President of IASPEI, was awarded the 2014 AGU Lehmann Medal.

Congratulations to Greg and Lay!

## OBITUARIES



**Torild van Eck**  
**1949 – 2014**

On 30 November 2014 our dear colleague Torild van Eck unexpectedly passed away. Torild has worked for almost 20 years as Secretary General of ORFEUS (Observatories and Research facilities for European Seismology) and was the FDSN (International Federation of Digital Seismographic Networks) Secretary between 2007 and 2013. In both roles his contribution to the seismological community was significant, above all by his quality to organize and communicate with people.

After studying in The Netherlands and Sweden and having worked in Sweden, and Israel and at the Utrecht University (Netherlands), Torild continued his scientific career at the Royal Netherlands Meteorological Institute (KNMI), shortly after the magnitude 5.8 earthquake (April 1992) in the Netherlands. His work at the KNMI was focused on seismic hazard studies for the Netherlands, one of his expert fields, first in collaboration with colleagues in Belgium and Germany for the Limburg region in The Netherlands. Later, to provide valuable advice to the government and private sector, and more recently his work focused on the seismic hazard study for induced events in the Groningen region.

Around 1996, Torild became Secretary General of ORFEUS, the European organization for broad-band seismology, which together with the ORFEUS Data Center was and is hosted by the KNMI. Gently and

naturally, he positioned himself as a spider in the European web of seismology, by hard working and above all by human interaction to become the expert in European seismology, spanning science, technology and management. By leading numerous projects like MEREDIAN, NERIES and NERA his skills brought the European infrastructure for seismology on a very high level.

Torild was a very friendly, modest and gentle person, a warm and always welcome friend, with dedicated time for an in-depth discussion on seismological issues and far beyond, or just for a chat. He always had a positive attitude, a wonderful sense of humor and he respected everyone in the same way, with a smile and without prejudice. Bridging age differences, cultural diversities and geographical distances between people, as if they do not exist, was one of his strongest qualities, always with an open mind. He was universally liked.

He worked hard, with enthusiasm, and dedicated his career with generosity to the broadest seismological community on a national, a European and a global scale, always in the same way: unselfish, constructive and cooperative, a style that we all appreciated so much in him. He was respected by his peers around the world. Torild was convinced that working together in harmony was always beneficial on the long term, and would strengthen both individuals and the group. Therefore he always searched for cooperation with other groups and people within the KNMI, ORFEUS and beyond, and supported people, new ideas and developments to strengthen each of us.

His loss to seismology is enormous, the loss of the person Torild even greater. His ability to get on well with everyone he met is an inspiration for all.

Torild was a good man and we will miss our friend daily.

<http://www.orfeus-eu.org/inmemoriam/index.html>

Reinoud Sleeman  
ORFEUS / KNMI





**Freeman Gilbert**  
**1931 – 2014**

James Freeman Gilbert, a renowned professor emeritus of geophysics in the Institute of Geophysics and Planetary Physics (IGPP) at Scripps Institution of Oceanography, UC San Diego, died in Portland, Oregon, on Aug. 15, 2014, from injuries related to a car accident. He was 83 years old.

A leading contributor in computational geophysics, seismology, earthquake sources, and geophysical inverse theory, Gilbert was the author of numerous research papers, book chapters, reviews, and other publications.

Gilbert was a leading expert in seismic research. With his Scripps colleague George Backus in the 1960s, Gilbert pioneered a method of inverting data for problems such as Earth structure, a theory that changed the course of modern geophysical sciences and that is used throughout all physical sciences.

He was instrumental in establishing modern seismograph networks, most notably the International Deployment of Accelerometers (IDA), a network built with the backing of his friend Cecil Green, co-founder of Texas Instruments that has transformed modern earthquake studies as well as areas such as nuclear test-ban treaty monitoring.

Born in Vincennes, Indiana, USA, in August 1931, he attended the Massachusetts Institute of Technology (MIT) and received a B.S. in 1953 and a Ph.D. in geophysics in 1956. While at MIT, he was a National Science Foundation Postdoctoral Fellow and a research associate (1956-57). He was an assistant professor of geophysics at the University of California, Los Angeles, in 1957-59, followed by two years as a senior research geophysicist at Geophysical Service Inc. in Dallas, TX. After joining Scripps, he held two Guggenheim Fellowships, in 1964-65 and in 1972-73.

Gilbert was the second director of IGPP from 1976 to 1988, following in the steps of founding director Walter Munk. Together, they established IGPP as a leading geophysical institute in the world – a role it continues to occupy to this day.

In 1972, he was elected to the National Academy of Sciences and in 1981, he was awarded the Royal Astronomical Society's Gold Medal. He was the 1985 recipient of the Council of the Geological Society of America's Arthur L. Day Medal for outstanding contributions to geologic knowledge and in 1990, he won the Balzan Prize from the Fondazione Internazionale Premio E. Balzan in Milan, Italy. In 1994, he was awarded the Doctor Honoris Causa at Utrecht University and, in the same year, was named Foreign Associate of the Accademia Nazionale dei Lincei in Rome. In 1999, the American Geophysical Union (AGU) awarded Gilbert the William Bowie Medal, the organization's highest honor that recognizes outstanding contributions to fundamental geophysics and for unselfish cooperation in research.

Gilbert received the 2004 Medal of the Seismological Society of America for outstanding contributions in seismology and earthquake engineering. Also in 2004, he received an honorary doctor of engineering degree from the Colorado School of Mines.

He served on several boards and committees, including the National Research Council and National Academy of Sciences' Board on Earth Sciences and Resources. He was a senior fellow of the San Diego Supercomputer Center, an honorary foreign fellow of the European Union of Geosciences, and a fellow of the Geological Society of America, the American Academy of Arts and Sciences, AGU, and the Explorers Club.

He is survived by Sally Gilbert, his wife, his children and grandchildren.

Adapted after the obituary published on Scripps website, Peter Suhadolc



## **Don L Anderson** **1933 – 2014**

Don Lynn Anderson, Eleanor and John R. McMillan Professor Emeritus of Geophysics at the California Institute of Technology, passed away peacefully at his home in Cambria, California, 2nd December, 2014, aged 82.

Don was born March 5, 1933 at Frederick, Maryland. He worked for most of his career at the California Institute of Technology, where he gained his Ph.D. degree under the tutelage of Frank Press. In turn, Don advised numerous graduate students of his own, many of whom went on to become eminent in their fields.

Among Don's many leadership roles were Director of the Seismological Laboratory, Caltech, from 1967-1989, principal investigator on the 1971 Viking mission to Mars, and President of the American Geophysical Union. He was honored with numerous awards including the Crafoord Prize (1998, with Adam Dziewonski), the National Medal of Science (1998), the Bowie Medal of the American Geophysical Union (1991), the Gold Medal of the Royal Astronomical Society (1988), the Arthur L. Day Gold Medal of the Geological Society of America (1987), the Emil Wiechert Medal of the German Geophysical Society (1986), and the NASA Exceptional Scientific Achievement Medal (1977). He held Fellowships of the American Philosophical Society (1990), the American Association for the Advancement of Science (1988), the National Academy of Sciences (1982), and the American Academy of Arts and Sciences (1972).

In a career spanning more than half a century, Don made pioneering contributions to understanding the large-scale structure of the Earth, taking on undaunted anisotropy, anelasticity, asphericity and anharmonicity. One of his great strengths was integration of physics, thermodynamics, petrology and geochemistry. He

investigated the behaviour of mantle materials at high pressures and temperatures, the phase transformations of mantle minerals, and the generation of earthquakes. He and his colleagues developed the theory of wave propagation in complex media and he introduced the term "tomography" into seismology. He made major contributions to understanding plate-tectonic motions and convection in the Earth's mantle. In collaboration with Adam Dziewonski he developed the Preliminary Reference Earth Model (PREM), a cornerstone of modern global geophysics.

In the latter part of his career, Don became most famous for ideas that depart from conventional wisdom, but which he felt are more consistent with thermodynamics and classical physics. He challenged standard geochemical and evolutionary models for the Earth, and presented alternative theories for the mineralogical and isotopic composition of the mantle. He viewed the Earth as being chemically stratified into layers, the deeper ones being refractory, convecting sluggishly, and having essentially no direct involvement with surface magmatism. He considered the mid-mantle to be pyroxene- and garnet-rich, not composed of olivine-dominated peridotite. These ideas led him to challenge the hypothesis of deep-mantle plumes, convective upwellings that are widely assumed to explain volcanic oceanic islands such as Hawaii and Iceland. Instead, he considered such volcanism to be fed from the shallow mantle through extensional fissures induced by plate tectonics. Don considered plate tectonics to be a natural result of a planet cooled from above, and for essentially all volcanism on Earth to result from this process.

I first met Don at the AGU Fall Meeting in 1999. After that, life was never the same again. Don had discovered that email made the world one big Department. He loved the Internet and embraced it with huge enthusiasm, supporting and contributing to his favourite site [www.mantleplumes.org](http://www.mantleplumes.org). He devoted countless hours to mentoring young scientists the world over, some of whom were never destined to meet him. He inspired numerous papers, projects and collaborations with his startling ideas, radical challenges, and infectious out-of-the-box thinking. And he couldn't hide the fact that he loved every minute of it.

Don bequeathed to his colleagues a commitment to the total, unrestricted and free sharing of resources, leading from the front by example. In the last months of his life, when he knew he would soon have to shut his laptop down for the last time, he worked tirelessly to finish his papers in progress and to make free and unrestricted to everybody his legacy to science. This includes over 300 published papers, his books *Theory of the Earth* and



New Theory of the Earth, videos, web pages, blogs, hundreds of presentation slides and his tongue-in-cheek metaphorical voyage into minds and planets What Planet Do You Live On Anyway? All this is available unrestricted from his personal resources webpage at [www.mantleplumes.org/DLA.html](http://www.mantleplumes.org/DLA.html). The many details of his extraordinary life and career that are absent from this brief tribute are accessible from his Wikipedia page at [http://en.wikipedia.org/wiki/Don\\_L.\\_Anderson](http://en.wikipedia.org/wiki/Don_L._Anderson).

Gillian R. Foulger  
12<sup>th</sup> December, 2014



**Anton M Dainty**  
**1943 – 2014**

We were saddened to learn of the death, on August 15, 2014, of Anton Dainty. He was an accomplished seismologist who was best known for his work on seismic-wave propagation and for using seismic waves to monitor a nuclear test ban treaty. He passed away, suddenly and unexpectedly, in his home, at the age of 71. Anton had worked at the University of Toronto, MIT, Georgia Tech., NORSAR, Phillips Lab (U.S. Air Force) and the Defense Threat Reduction Agency. After retiring from the Defense Threat Reduction Agency in 2012 he became an Editor for both the BSSA and PAGEOPH.

Adapted after the obituary published on Springer website, Peter Suhadolc

## Science and Technology 2015 Conference (SnT2015)

**Call for papers deadline:** 1 February 2015

**Organizer:** Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO)

**Type of event:** Multidisciplinary international scientific conference

**Venue:** Hofburg Palace, Vienna, Austria

**Dates:** 22 to 26 June 2015

**Website:** <http://www.ctbto.org/specials/snt2015/>

**Contact details:** SnT@ctbto.org for specific enquiries about the conference that are not available on the web page; denise.brettschneider@ctbto.org for non-scientists and the media

**Main themes:**

- The Earth as a complex system
- Events and their characterization
- Advances in sensors, networks and processing
- Performance optimization

**Background:** Scientists have been working together for over 50 years to develop and implement the most comprehensive and complex multilateral verification regime ever created. Its goal is to monitor compliance with the Comprehensive Nuclear-Test-Ban Treaty (CTBT) by detecting and thus deterring any nuclear explosion conducted anywhere on Earth. This is the fifth in a series of international conferences promoting the exchange of knowledge and ideas between the CTBTO and leading scientists around the world.

**Overall aim:** Further strengthen the relationship between the CTBTO and the broader scientific community to promote the wider scientific application of data that are used for test-ban verification.

**Participants:**

Scientists and technologists, science administrators, academics, representatives to the CTBTO's policy-making organs, representatives of agencies involved in research and development in areas potentially relevant to the Treaty's verification regime, and media representatives.

The CTBTO's International Monitoring System is a global network comprising 337 facilities that monitor the entire planet. The monitoring stations use infrasound, radionuclide, hydroacoustic and seismic technologies to collect up to 26 gigabytes of data daily on natural and manmade events. The data could make a valuable

contribution to climate change research. More information.

#### **What will be gained from SnT2015?**

- Your poster/presentation could assist the CTBTO in its efforts to improve the verification regime and its technical capabilities
- Interact with key figures in all four CTBT verification technologies: seismology, infrasound, hydroacoustics and radionuclide monitoring, as well as with specialists in on-site inspection techniques and procedures
- Enhanced visibility in your scientific discipline and interaction with R&D sponsors
- Become part of the scientific community engaged in nuclear test-ban monitoring

## **Meetings Calendar**

A calendar of scientific meetings relevant to the interests of IASPEI scientists is maintained at:

<http://www.iaspei.org/meetings/forthcoming.html>

where more details can be found. We report below just the titles, dates, places and websites of the forthcoming meetings.

### **2015**

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

21 – 23 April 2015, Pasadena, California

URL: <http://www.seismosoc.org/meetings>

#### **“Passive Imaging and monitoring in wave physics: from seismology to ultrasound” workshop**

May 11-15, 2015, Cargese (Corsica), France.

URL:

<http://isterre.fr/recherche/equipes/ondes-et-structures/passive-imaging-and-monitoring>

#### **7<sup>th</sup> International Conference of Seismology and Earthquake Engineering - SEE7**

May 18-21, 2015, Tehran, Iran

URL: <http://www.see7.org>

#### **Workshop meeting “Active and Passive Seismics in Laterally Inhomogeneous Media”**

June 8-12, 2015, Loučeň Castle , Czech republic

Focus on: theoretical and computational aspects of **seismic wave propagation** in complex structures, **passive seismics**. Main topics: forward and inverse modeling of seismic wave fields in laterally inhomogeneous, isotropic and anisotropic, elastic and anelastic structures, and passive seismics, including the monitoring of the hydraulic fractures.

URL: <http://sw3d.cz/apslim/>

#### **Science and Technology 2015 Conference (SnT2015)**

22 to 26 June 2015, Hofburg Palace, Vienna, Austria

Contact: [SnT@ctbto.org](mailto:SnT@ctbto.org)

URL: <http://www.ctbto.org/specials/snt2015/>

#### **International Union of Geodesy and Geophysics (IUGG), General Assembly**

22 June-2 July, 2015, Prague, Czech Republic

URL: <http://www.iugg2015prague.com>

#### **6th International Conference on Earthquake Geotechnical Engineering (6ICEGE)**

2-4 November 2015, Christchurch, New Zealand

Website: [www.6icege.com](http://www.6icege.com)

## General Information about IASPEI

The International Association of Seismology and Physics of the Earth's Interior 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

IASPEI welcomes all scientists throughout the world to join in research into Seismology. IASPEI is subdivided into a number of 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-the-minute results of current research. The IASPEI web site gives, or provides links to, information on the range of IASPEI activities.

## The IASPEI Web site

Information on IASPEI can be found 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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