

IASPEI OPENING PLENARY

IASPEI 2015, Prague, Czech Republic

Agenda

- 1) Welcome address by IASPEI President
 - 2) In memoriam (2013-2015)
 - 3) Composition of Committees
 - 4) Nominations of 2015-2019 Officers
 - 5) Regional assemblies 2016
 - 6) General Assembly in 2017
 - 7) Grants
 - 8) Statutes and Bylaws
 - 9) Seismology Day
 - 10) Housekeeping items
 - 11) Closing Plenary announcement
- IASPEI MEDAL Award
- KEYNOTE LECTURE – V. Vavryčuk

1 Presidential Welcome



IASPEI numbers 2011-2015

- Membership: 67 member countries, 51 paying/8 observers/8 associates
- 5 thematic commissions
- Commission on Education and Outreach
- 6 inter-association commissions and WG
- International Federation of Digital Seismic Networks
- 4 Regional Seismological Commissions (ESC, ASC, AfSC, LACSC), each with its own structure of WGs and sub-commissions, and its own regional assemblies
- Gold Medal



In addition to the activities and projects carried out by its commissions and as part of the General Assemblies (detailed in the IASPEI periodic reports), in the 2011-2015 period IASPEI focused its efforts on a few key issues.

IASPEI regional structure and activities

- We completed establishing the African Seismological Commission and the Latin-American and Caribbean Seismological Commission; these join the European and Asian commissions in providing an almost complete global coverage of regional organizations.
- With the 2014 meetings of Bogotá, Manila, Istanbul and Johannesburg, all regional commissions demonstrated lively participation and cross-boundary cooperation.
- In 2016, 4 more regional meetings are in program; from now on, IASPEI scientists will meet every year, all together in our general assemblies and every two years in regional assemblies to discuss science and issues specific to each region.



IASPEI governance

- IASPEI strives to build a modern association, fostering the participation of scientists from all countries in the activities of IASPEI and its regional commissions.
- In agreement with IUGG Statutes and Bylaws, IASPEI will consider to
 - ✓ extend voting rights to individual scientists in addition to national delegates, on all scientific matters and election matters apart from Association President
 - ✓ elect individual scientists from all countries to officer positions in the association (apart from President) and its commissions
 - ✓ introduce more autonomy in raising and managing its funding



Global products and standards

- As part of the Global Earthquake Model initiative, our community completed important new global reference databases for hazard assessment, including (i) a global instrumental earthquake catalogue, (ii) an historical seismic database and catalogue, (iii) a new global model of geodetic strain rate, (iv) a database of active faults, (v) a regionalized compilation of Ground-Motion Prediction Equations (GPME).
- The effort will now continue towards the generation of a new global hazard model, to serve as basis for risk assessment, national hazard mapping, city scenarios and other applications for risk mitigation.
- The recent event hitting Nepal and Kathmandu is a dire reminder that although our scientific understanding is improving, our capacity of protecting population is still insufficient. IASPEI will devote a special session to understand the Kathmandu earthquake in Prague.



Inter-association cooperation

- IASPEI strives to increase inter-disciplinary cooperation and held a very successful scientific assembly in 2013 in Gothenburg jointly with IAHS and IAPSO, and will vote in Prague on organizing the 2017 scientific assembly jointly with IAG in Kobe, Japan.
- 6 inter-association commissions and WG
 - ✓ IASPEI/IAVCEI/IAPSO International Heat Flow Commission
 - ✓ IASPEI/IAVCEI Commission on Physics and Chemistry of Earth Materials
 - ✓ IAVCEI/IASPEI Committee on Volcano Seismology
 - ✓ IAPSO/IASPEI/IAVCEI Joint Tsunami Commission
 - ✓ IASPEI/IAVCEI WG on subduction zones located in developing countries
 - ✓ IAGA/IASPEI/IAVCEI WG on electromagnetic studies of Earthquakes and Volcanoes



Responsibility of scientists and commissions

- In the aftermath of the L'Aquila trial, IASPEI fostered a thorough debate on the responsibility of scientists when serving in an authoritative capacity or with a responsibility for societal safety; our Italian colleagues have now been acquitted in appeal, but confirmation of the verdict in the final third degree trial is pending, and the discussion will continue.



Looking into the future

In the coming years, IASPEI will

- continue supporting activities in fundamental science
- continue expanding regional activities
- expand efforts in areas of societal relevance: geo-hazards, geo-risks and geo-resources
- promote emerging scientific themes, including
 - i. the origin, internal structure and evolution of planets
 - ii. induced seismicity
 - iii. experimental facilities and near-fault observatories to observe at close distance fault activation and earthquake generation
 - iv. global coordination of mobile deployments

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IN MEMORIAM
(2013-2015)

2 In memoriam (2013-2015)

Eduard SULSTAROVA
Albania (1934 – 2014)



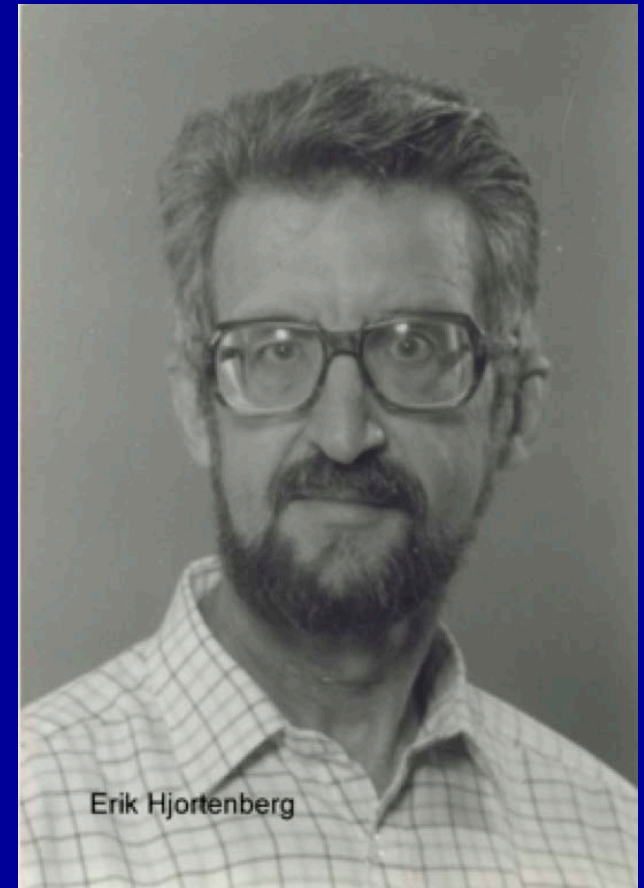
Betim MUÇO
Albania (1947 – 2015)

In memoriam (2013-2015)

Erik HJORTENBERG
Denmark (1930 – 2015)



Georgios STAVRAKAKIS
Greece (1954 – 2015)



In memoriam (2013-2015)

Hans BERCKHEMER
Germany (1926 – 2014)



Peter BORMANN
Germany (1939 – 2015)

In memoriam (2013-2015)

Torild VAN ECK

The Netherlands (1949 – 2014)



Vladimir Isaakovich KEILIS-BOROK
Russia (1921 – 2013)



In memoriam (2013-2015)

Alan DOUGLAS
UK (1936 – 2015)



John Russell (Russ) EVANS
UK (1949 – 2014)

In memoriam (2013-2015)

Freeman GILBERT
USA (1931 – 2014)



Don L ANDERSON
USA (1933 – 2014)



Anton M DAINITY
USA (1943 – 2014)

3 COMPOSITION OF COMMITTEES

RESOLUTION COMMITTEE

- **Kevin FURLONG (Chair)** **USA**
- **Li LI** **China**
- **Adrien OTH** **Luxemburg**

3 COMPOSITION OF COMMITTEES

AUDITING COMMITTEE

- **Ian JACKSON (Chair)** **Australia**
- **Marijan HERAK** **Croatia**
- **Wolfgang LENHARDT** **Austria**

SUBMISSION OF RESOLUTION PROPOSALS

All resolution proposals have to be received
by the Resolutions Committee by

Monday 15:00 at the latest

- Please provide the draft of the resolution proposal in digital form on a memory stick to one of the members of the Resolutions Committee or leave it in the IASPEI office (Room 247).

4 NOMINATIONS

The Nominating Committee members are:

Gary Gibson (Australia)

Remy Bossu (France)

Carlos Alberto Vargas Jimenez (Colombia)

Kojiro Irikura (Japan)

Kevin Furlong (USA)

Wu Zhongliang, Past-President, Chairman (China)

Past-presidents Brian L. N. Kennett and
Eric R. Engdahl have been also consulted.



IASPEI

Bureau/Executive Committee (2015-2019) Nomination for Election

- **IASPEI By-Laws**

- Adopted by the General Assembly of the Association, Grenoble, 1975 and amended by the General Assembly, London, Canada, 1981, and by the General Assembly, Melbourne, 2011.

- **XIII. Nominations**

- 1. At least two years before an election, the President shall appoint a Nominating Committee whose charge is to bring before the Plenary Meeting of the Association at the quadrennial General Assembly a slate of candidates for election to the Association Offices and the Executive Committee. The candidates for election shall be announced at *least 4 days in advance of the Plenary Meeting*.
- 2. The Nominating Committee should keep in mind the need for persons of executive ability, comprehensive scientific interests, and broad geographical representation and should consult, where possible, with former Presidents of the Association.
- 3. At the Plenary Meeting, additional nominations for each office may be made from the floor.
- 4. If no-one objects, the election may be conducted by acclamation. Otherwise, the election should be by written ballot, one ballot passed out to the principal delegate of each member country or to an official proxy.

Nomination Committee adopted in the 2013 IASPEI Assembly

Gary Gibson
Remy Bossu
Carlos Alberto Vargas Jimenez
Kijoro Irikura
Kevin Furlong
Wu Zhongliang (Chairman)

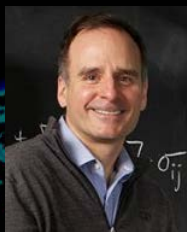
Past Presidents
Brian Kennett
Eric R. Engdahl

The election will be held at the Closing Plenary of the IASPEI Assembly, July 1, 2015



IASPEI Bureau/Executive Committee (2015-2019) Nomination

Russ Pysklywec (Canada)
EC member



Thorne Lay (USA)
President



Dmitry Storchak (UK)
EC member



Johannes Schweitzer (Norway)
Secretary General



Domenico Giardini (Switzerland)
Past President as EC member



Li Li (China)
EC member



Kenji Satake (Japan)
First Vice President



Marcelo Assumpcao (Brazil)
EC member



Michelle Grobbelaar (South Africa)
Second Vice President



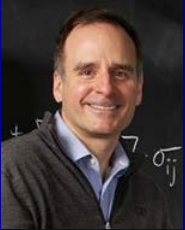
The election will be held at the Closing Plenary of the IASPEI Assembly, July 1, 2015



'New' faces



Li Li is the executive deputy director of the Key Laboratory of Seismic Observation and Geophysical Imaging of China Earthquake Administration (CEA). Working on seismological and geodetic instrumentation and network, she has coordinated several international cooperative projects, such as the Phase III upgrading of the China-US cooperative China Digital Seismograph Network (CDSN), and seismic networks of the Lao PDR and Myanmar. She also worked as the project manager or assistant PI in several national key projects, such as the China Digital Earthquake Observation Networks, and the Wenchuan earthquake Fault Scientific Drilling (WFSD).



Russ Pysklywec is professor and chair of Earth Sciences and McRae-Quantec Chair in Geosciences, University of Toronto. The focus of his research program is to study deformation of the solid Earth—in particular exploring the complex dynamical couplings between convection in the mantle, tectonics in the crust, and surface processes controlled by the atmosphere. Broadly, the goal of the work is to determine the driving forces for lithospheric tectonics on the active surface of the Earth and other planetary bodies. The research program is characterized by a cross-disciplinary methodology where computational models of mantle-crust-climate processes are used in conjunction with geophysical, geological, and geodetic observational constraints.



Dmitry Storchak is the director of the International Seismological Center (ISC). With IASPEI he has been involved with setting and improving seismological observation standards (consistent magnitudes, reporting standards, etc). At the ISC he has been responsible for a very rapid period of modernization, and expansion of the scope of work undertaken by ISC. During his period as director of ISC, a number of innovative projects have been implemented (development of earthquake location methods, the GEM project providing earthquake parametric data optimized for hazard studies, development of a new earthquake event bibliography, etc). He has excellent contacts throughout the seismological world.

The election will be held at the Closing Plenary of the IASPEI Assembly, July 1, 2015



IASPEI

Acknowledges the contribution of the
Bureau and Executive Committee (2011~2015)
especially

President **Domenico Giardini**, who also served as the Second Vice-President (1995~1999)

First Vice-President **Ian Jackson**, who also served as the Second Vice-President (2007~2011)

Secretary-General **Peter Suhadolc**, who has been serving as the Secretary General since 2003
and

Executive Committee Member **Alexey Zavyalov**

Executive Committee Member (Past president) **Wu Zhongliang**



IASPEI

Cooperating Internationally for
Better Understanding the Earth

The election will be held at the Closing Plenary of the IASPEI Assembly, July 1, 2015

5 IASPEI 2016 Regional Assemblies

ESC 35th General Assembly
Trieste (ITALY) – Aug 29-Sep 02

ASC 11th General Assembly
Melbourne (AUSTRALIA) – 2nd half of Nov

LACSC 2nd General Assembly
San Jose (COSTA RICA) – June 20-22

AfSC 1st General Assembly
TBD

6 IASPEI 2017 Scientific Assembly

IASPEI will have its 37th General Assembly in

KOBE, JAPAN
JULY 30 – AUGUST 4, 2017

**The related 2017 scientific program to be
discussed on Tuesday
at the joint meeting of the Executive
Committee and Commission Chairs**

IASPEI 2017

July 30 - August 4, 2017

Kobe, Japan

The 39th General Assembly of International Association
of Seismology and Physics of the Earth's Interior

Kobe International Conference Center



Co-hosted by Science Council of Japan (TBD) and Seismological Society of Japan

7 GRANTS

- IASPEI along with IUGG and LOC, have set aside about USD 50,000 for grants to help participants attend this meeting.
- The allowance grants are distributed by the LOC.

For further information please contact the IASPEI Secretary General.

8 STATUTES AND BYLAWS

- IUGG is going to approve its new Statutes.
- IASPEI Exec has agreed a proposal for new Statutes and By-Laws that consider the possibility of individual membership.
- The most important change in this respect is that National Correspondents will have the exclusive vote in the election of the IASPEI President and on financial matters, whereas all other matters, including the election of other Exec members, are to be voted by ALL IASPEI members (including individual ones).

8 STATUTES AND BYLAWS

- The opportunity was also taken to polish other aspects of the old Statutes and By-Laws.
- The proposed new Statutes and By-Laws have been posted on the IASPEI Web site
<http://www.iaspei.org/>
- The adoption of these Statutes and Bylaws will be voted as a block at the Closing Plenary.
- Last-minute remarks are possible in written form to the SG until TUESDAY June 30 at 12:00.

9 SEISMOLOGY DAY

- The main purpose of a Seismology Day is to reach out to the society in general, scientific boards, policy makers, young students, media, etc. The full scope of seismology is, in fact, often under-appreciated and by highlighting the broad impact, we may hope to draw more student and public policy awareness of the large reach of the discipline.

9 SEISMOLOGY DAY

- Seismology Day should help to promote better awareness of the many societal and basic research applications of the discipline of Seismology, including quantification of earthquakes, guidance on earthquake engineering needs to mitigate earthquake hazards, energy and resource exploration, determinations of internal Earth structure from core to crust, environmental monitoring of hydrologic systems and the cryosphere, studies of volcanic systems, and nuclear test treaty monitoring.

9 SEISMOLOGY DAY

PROPOSALS TO BE VOTED

- **April 17** (Day when the first seismogram was recorded, E. von Rebeur-Paschwitz, Nature 1889).
- **May 13** (Birth day of Inge Lehmann, the “mother” of seismology)
- **May 22** (Chile 1960 earthquake, the strongest up to now)
- **June 3** (Birth day of Robert Mallet, the “father” of seismology)
- **November 1** (Lisbon 1755 earthquake, the start of research in seismology)

9 SEISMOLOGY DAY

PROPOSALS TO BE VOTED

- Seismology Day
 - Earthquake Safety Day
 - Restless Earth Day
-
- A poll is organized in the IASPEI Room (247) to select the two most voted dates and a name for the day. Afterwards a web-based poll will finalize which of the two dates and which name is the most suitable one.
-
- ALL IASPEI PARTICIPANTS ARE INVITED TO
VOTE!

10 HOUSEKEEPING - 1

- All ORAL SESSIONS will be held in this Congress Centre.
- Please remember to upload your talk the day before your presentation!
- Please could the conveners adhere to the allocated times of the talks. Thus, when a speaker has not arrived, please could you rather open up a discussion session to occupy the time slot and do not move on to the next talk before the allotted time.

Program updates MUST be communicated by the conveners to the LOC no later than 16:00 of the day before the session.

- If you experience any problems with the projectors and/or computer, there will be a technician there to assist.

10 HOUSEKEEPING - 2

- IASPEI office is located on the second floor: Room 247
- LOC is located in Room 223
- Session rooms are reserved for meetings at noon (12:00-13:30) and in the evenings (18:00-20:00).
- At lunchtime rooms are still available for ad-hoc meetings. To reserve a room please contact the IASPEI office!

**IMPORTANT: ALL MEETINGS ON MONDAY SHOULD
END AT 19:30, SINCE THE DEPARTURE FOR THE
IASPEI SOCIAL DINNER BY METRO WILL BE FROM
19:15 to 19:45**

10 HOUSEKEEPING - 3

- **POSTER SESSIONS**

On the second floor (in front of the Congress Hall)

Attendance at Poster sessions
from 15:00 to 16:30

10 HOUSEKEEPING - 3

- **NEW COMMISSION CHAIRS**

The following Commissions will have to appoint a new chair (to be then nominated by the IASPEI President):

- Commission on Tectonophysics and Crustal Structure
- Commission on Earthquake Hazard, Risk and Strong Ground Motion
- Commission on Earth Structure and Geodynamics
- Commission on Earthquake Generation Process – Physics, Modeling and Monitoring for Prediction
- Commission on Earthquake Source Mechanics
- Commission on Education and Outreach

ALL Commission Chairs have to report the results of the elections to the SG

10 HOUSEKEEPING - 4

Publication of Conference Proceedings

- IASPEI has an agreement with Elsevier to publish the proceedings of the conference in one of their Solid-Earth Sciences journals.
- As you all are aware of, IASPEI gets royalties from this publishing that help supporting various activities. I strongly recommend the conveners, in case they decide to publish their symposia/workshops papers, to select a special issue of an Elsevier journal.

10 HOUSEKEEPING - 5

IASPEI SOCIAL DINNER

at the “GLOBUS” restaurant

<<http://www.globushotelprague.com>>

Price: CZK 750

Tickets available at the Secretary General
Book possibly within SATURDAY!

Transportation by Metro (line C-red) from 19:00 to 19:45! Roztyly station, 5 stops towards Haje, ~12-15 min. from the Congress Centre, then ~3 min. walk on a small hill.

Roztyly
Metro
station

GLOBUS
Hotel



MENU: Czech and Slovak inspiration
max 120 persons

Aperitiv: Bohemia sekt

Prague ham on the bone with horseradish and apples (roll)

Potato soup with mushrooms

“Bašta “ (Confit Duck leg, roast pork, smoked neck, potato and bread dumplings, red cabbage)

Homemade poppy seed cake with plums

Cheese sticks and beer pretzels

Salad buffet with assorted dressings

Price: 750 Kč /pers.

Unlimited consumption of soft drinks, beer, wine and coffee during dinner time (3 hours)

11 CLOSING PLENARY announcement

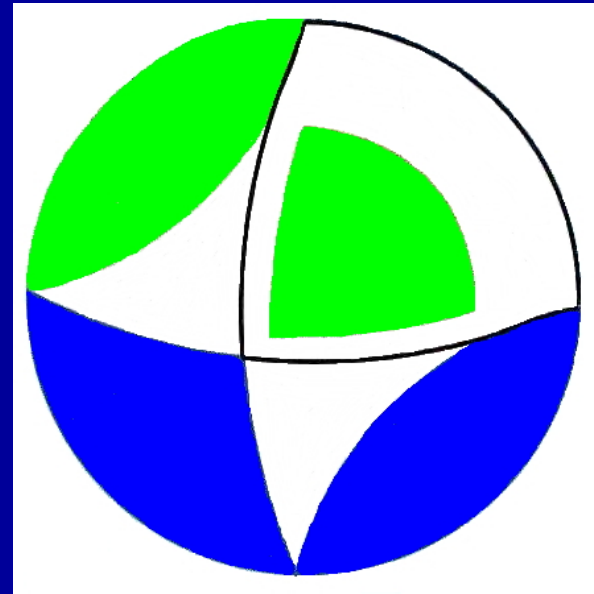
To be held on

WEDNESDAY, July 1, at 16:30

South Hall (3rd floor)

International Association of Seismology and Physics of the Earth Interior

IASPEI
MEDAL
AWARD



2015 IASPEI MEDAL RECIPIENT

William H. K. Lee



Dr. William H. K. (Willie) Lee, Emeritus Scientist U. S. Geological Survey, had a career of leadership in seismology and study of physics of the earth's interior -- a career marked by a strong emphasis on international cooperation and sharing of data and procedures and marked by organization of, and significant contributions to, important projects that are specifically identified with IASPEI.

Willie Lee received his Ph.D. from the latter in 1967. His early contributions were on the subject of his PhD dissertation, the thermal history of the earth, and on heat-flow measurement and analysis. As a graduate student, Willie served on the International Heat Flow Committee, a precursor to his extensive future involvement with international organizations.

Willie came to the U.S Geological Survey (USGS) in 1967 and was soon involved with pioneering observational studies of small earthquake activity on the San Andreas Fault system in central California. Working with Jerry Eaton and others, Willie created the first large-scale continuously-telemetered local seismic network designed to systematically study local earthquakes, which by 1970 had over 100 stations in the San Francisco Bay Area.

The studies of central California seismicity led Willie and his USGS colleague John Lahr to write a computer program, HYPO71, for the determination of earthquake hypocenters recorded by a local seismograph network. About 1000 copies of this program were requested and distributed worldwide, and the program is still in use today. Beyond HYPO71, Willie has a strong interest in seeing that software, whether his own or that of others, be made widely available, and he early recognized the importance of personal computers in enabling the dissemination of seismological software. He chaired the IASPEI Working Group on Personal Computers, established in 1988, and edited the IASPEI Software Library, which made a suite of computational tools available through the Seismological Society of America.

In the late 1970's, Willie began addressing the problem of preserving seismograms from the pre-digital age, so that records of early earthquakes would be available to be reexamined in light of future seismological hypotheses, new analysis methods, and future data. This led to the establishment of a joint IASPEI/UNESCO Working Group on Historical Seismograms which led to the Historical Seismogram Filming Project, in which over a half-million paper seismograms from globally significant seismographic stations were microfilmed. He has recently organized the *SeismoArchives* project at Incorporated Research Institutions for Seismology (IRIS) as a joint project between IRIS, IASPEI, and the USGS.

Willie formally retired from the USGS in 1995, but he has continued to make significant contributions to international seismology. A major post-retirement accomplishment was his co-editorship of the two-printed-volumes, three-CD, *International Handbook of Earthquake and Engineering Seismology*, published on the occasion of the IASPEI centennial year. This Handbook involved participation of over 1200 scientists from more than 50 countries.

RESPONSE BY WILLIE H.K. LEE

- I was surprised to receive the IASPEI medal, and I am very grateful. I am a strong supporter of the mission of IASPEI: to promote international study of the structure, properties, and processes of the Earth. In addition, I feel honored to follow 2013 medalist Robin Adams, my friend and colleague for many decades, as a recipient of the award. I regret that my health has prevented me from traveling to Prague.
- I entered geophysics by chance, focusing on the field after more general study of physics, chemistry, and mathematics. I graduated from the University of Alberta, in 1962, and I would like to acknowledge the inspiration of faculty members George D. Garland, Keeva Vozoff, and Jack A. Jacobs. I chose to do graduate study in California, in order to spend time in a warm climate after four years in Canada. I treasure the memory of a 2.5 month cruise to the Caribbean, Atlantic, and Mediterranean soon after my arrival at La Jolla. My graduate work benefitted from such distinguished mentors as Freeman Gilbert, George Backus, Walter Munk, Gordon J.F. MacDonald, Edward Bullard, W. Gary Ernst, William M. Kaula, William W. Rubey, and Seiya Uyeda. Thanks to Sir Edward Bullard, I became the first Secretary of Heat Flow Committee in the summer of 1963 and edited the book Terrestrial Heat Flow (1965) two years later. I then completed my Ph.D. degree in February 1967, working on the thermal history of the earth.

- RESPONSE BY WILLIE H.K. LEE (cont'd)

I joined the U.S. Geological Survey in June, 1967. The USGS had recently begun its program of intensive seismological monitoring of the central San Andreas fault system, and within two years my research focus had changed to the study of microearthquakes. The work was scientifically fascinating and presented challenging issues concerning the location of large numbers of microearthquakes, the determination of their magnitudes from records with limited dynamic range, and the hypocenter biasing of locally recorded earthquakes by lateral velocity inhomogeneity. From among a number of important colleagues of this period, I would like to specifically acknowledge Keiiti Aki, E. Robert Engdahl, and Robin Adams.

- RESPONSE BY WILLIE H.K. LEE (cont'd)

Igor Nersesov came to the U.S. for a visit in the winter of 1976, and I had the pleasure of welcoming him in my office. I showed him a copy of the Lawson report of the 1906 California earthquake, which interested him greatly. This ultimately led to the IASPEI/UNESCO project to microfilm historical seismograms, which has been mentioned in the medal citation. The project was, from many perspectives, very successful, but the job of preserving historical seismograms is still only half finished. It is now necessary to preserve the historical data as digital scanned images and, ultimately, as digital time series. This is a job for my successors who recognize the value of preserving historical data, but it needs to be done soon, because the microfilmed data are physically deteriorating. I have particularly appreciated the wisdom and collegiality of Hiroo Kanamori during my work on preserving historical data.

- RESPONSE BY WILLIE H.K. LEE (cont'd)
- In the summer of 1995, I retired from the U.S. Geological Survey. I have had many wonderful colleagues at the USGS through the years. The medal citation specifically mentions my USGS colleagues Jerry Eaton, John Lahr, and Sam Stewart, but I wish also to gratefully acknowledge my other USGS colleagues, who enriched my career in so many ways before and after retirement.
- By the summer of 1995, Hiroo Kanamori, Paul C. Jennings, Carl Kisslinger and I had begun 8-year editorship of the major work, "International Handbook of Earthquake and Engineering Seismology". This work enlisted the efforts of a large number of scientists as contributors and reviewers, including some who will be attending the 2015 IASPEI meeting. I express sincere appreciation to those of you who helped with that project, and to those who helped with other projects that are mentioned in the citation.

IASPEI KEYNOTE LECTURE

Dr. Václav VAVRYČUK

EARTHQUAKE SWARMS
IN WEST BOHEMIA AND
VOGTLAND