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NEWSLETTER No. 36 June 1995

6th International Symposium on Seismic Reflection Probing of the Continents and Their Margins Budapest, Hungary 12-17 September 1994

The Symposium was organized by the Association of Hungarian Geophysicists and the Eotvos Lorand Geophysical Institute of Hungary at Hotel Agro in Budapest. The hotel stands in one of the most beautiful areas of the green belt of Budapest. A conference room, poster and banquet halls were made available for the symposium. The weather was also favorable for the participants, who could enjoy the panorama unfolded before their eyes from the spacious terraces.

The Symposium received substantial financial help from ACCORD (Assistance of the Community in Co-operation in R&D with a financial contribution by OMFB), IASPEI, ILP, ISF (International Science Foundation), LITHOPROBE, MOL Rt. (Hungarian Oil and Gas Co.), OMFB (National Committee for Technological Development) and PACE FOUNDATION (Programme for Association on Cooperation in Earth Sciences). These organizations are thanked for their support.

143 researchers from 27 countries participated in the Symposium. A significant part of the support was used by the organizing committee to sponsor speakers who arrived from countries of the former eastern block. This helped not only increase the diversity of presentations, but also allowed for the participation of scientists who would not have been able to make their presentations without such support.

The Scientific Program of the Symposium was developed around the following themes:

Deep seismic reflection profiling results and techniques.

Seismic reflection studies of the Precambrian crust.

Seismic reflection studies of the sub-crustal lithosphere and the asthenosphere.

Long-range seismic profiles using nuclear sources; Earthquake (teleseismic) data.

Potential of deep seismic reflection profiling for hydrocarbon exploration.

Modelling deep reflections; results of bore hole studies; laboratory results and integrated models.

68 oral and 57 poster presentations were given. The greatest number of presentations dealt with results and techniques of deep reflection profiling.

The program and abstracts of the symposium were distributed to the participants in the form of a booklet. Papers read at the symposium will be published in volumes of Tectonophysics and of Geophysical Transaction.

The 6th International Symposium was a great success: scientifically in both the oral and poster presentations and the informal discussions that continued throughout the meeting; and socially with the special events and opportunities to enjoy the beautiful surroundings.

The organizers are particularly obliged to Dr. E. R. Engdahl, Secretary General of IASPEI, and Dr. D. Finlayson, Chairman of the Commission on Controlled Source Seismology, for their support to the organization of the Symposium.

Dr. Károly Posgay (Chairman)

STEND: A System for Technology Exchange for Natural Disasters

STEND is an information exchange programme aimed at increasing awareness of available technology. It is particularly targeted at developing countries, and has been approved as an IDNDR Demonstration Project. It is being developed by the Hydrology and Water Resources Department of the World Meteorological Organization (WMO) in Geneva, and is closely modelled on a similar scheme that they have been successfully operating for hydrology for the last twelve

years or so. The STEND Advisory Committee, which includes representatives of IASPEI, IAVCEI and GSHAP as well as meteorologists and hydrologists, recently held its first meeting and approved the immediate establishment of STEND in the fields of hydrology, seismology and volcanology, including related engineering topics. Later extension to include disciplines such as meteorology, tsunamis and landslides is envisaged.

The technology involved could be in the form of instruments, software or publications in the fields of data acquisition, interpretation, analysis and methodologies. Both new and established submissions are welcome, from laboratories, research establishments and the commercial sector. The description of each "component" should be brief enough to fit on two pages, and should comprise details of its purpose, a description of exactly what is offered, how it is presented, from where it is available and any cost involved.

After review by the Advisory Committee, components will be classified according to topic and included in a "STEND Reference Manual", which will be available in a computer-readable form as well as in a printed version. Copies of the manual will be made available at national centres such as IDNDR focal points and national seismological and volcanological agencies, and regional scientific and engineering centres, such as the GSHAP Regional Centres. Those interested in obtaining an item or service specified in the manual should contact the supplier directly, with a copy to WMO. WMO has agreed to act as Secretariat for the scheme, and to be responsible for maintaining and updating the Reference Manual, with Unesco also acting as a sponsor.

A major publicity and collection effort is planned for the IUGG Assembly at Boulder in July 1995, and it is hoped that enough components will have been submitted for the first issue of the STEND Reference Manual to be published by the end of 1995. *There is, however, no reason why those wishing to have software or equipment listed in the STEND Reference Manual should not submit them now.*

For further information, and detailed instructions on the preparation and submission of information on components, please contact:

The STEND Project, Hydrology and Water Resources Department, World Meteorological Organization, 41 Ave Giuseppe-Motta, Case postale No 2300, CH-1211 Geneva 2, SWITZERLAND (Tel: 41 22 730 8111; Fax; 41 22 734 8250; E-Mail: jmiller@ties.itu.ch)

R.D. Adams

**Workshop on Earthquake Risk
and Loss Assessment
Eilat, Israel
4-5 December, 1994**

The IASPEI Working Group on Earthquake Risk and Loss Assessment (ERLA) held its fourth meeting as a workshop organized by the Seismology Division of the Institute for Petroleum Research and Geophysics, Holon, Israel. Financial support was kindly provided by the Israel Ministry of Energy and Infrastructure, the American International Group, New York, USA, Bowring Insurance, London and Ecolin Ltd., Israel. About 60 participants (including earth scientists, engineers, planners and insurance experts) from nine countries attended the Workshop.

At the opening session, the participants were addressed by Mr. A Ron, Director General of the Ministry of Energy and Infrastructure and by Dr. Engdahl, the IASPEI Secretary General.

The Workshop included five scientific sessions:

Session A: Earthquake response plans - basic requirements (Chairpersons: Prof. Chen Yong and Dr. G. Shamir)

Session B: Earthquake risk and loss assessment in the insurance industry (Chairpersons: Mr. E. Keable and Prof. Chen Yong)

Session C: Techniques, procedures and case histories (Chairpersons: Prof. V. Schenk and Prof. M. Erdik)

Session D: Vulnerability and earthquake scenario (Chairpersons: Prof. L. Esteva and Dr. M. Celebi)

Session E: The geology and seismicity of the Eilat region (Chairpersons: Dr. G. A. Sobolev and Dr. M. Beyth)

Forty reports were presented at this Workshop, describing the existing methods and procedures in Russia, Mexico, the Czech

Republic, USA and China. These practices were reviewed and discussed. It was concluded that the preferred way of proceeding with the task is to use available seismological engineering and inventory data of a given site/region to evaluate the earthquake risk and loss assessment from future earthquakes by using various evaluation techniques and comparing the results. The first test site selected is the northern Gulf of Eilat/Aqaba, bordering Egypt, Saudi Arabia, Jordan and Israel. At this Workshop a significant amount of geological, seismological and engineering data relevant to the test site were presented and the methodology in evaluation discussed.

Four recommendations were discussed and adopted at the closing session:

Recommendation 1: The Working Group welcomes the letter from Haresh Shah, Chairman of WSSI, indicating their willingness to cooperate with our Working Group on a world map of future earthquake losses.

We propose that a task force be formed by the IASPEI Working Group and the IAEE WSSI to pursue the endeavor. The task force should meet in Boulder, Colorado, next July to finalize the work schedule.

Recommendation 2: Participants in the 4th Workshop suggest that methodological evaluations should begin in the test area (Gulf of Eilat/Aqaba). Israeli specialists will supply participants with necessary data to allow them to make the first steps in earthquake hazard evaluation independently. Simultaneously, data concerning vulnerability will be evaluated by Israeli engineers.

Participants suggest that the results be ready before the IUGG Assembly in Boulder in July 1995. They should consider: the need for developing new methods; reduction of effect by means of prevention based on loss estimation; applicability to other similar regions; and generalization.

The work to be carried on outside Israel lacks financial support. Financial support was called for from IASPEI, the international insurance industry and Israeli government organizations, and active participation of the countries neighboring the Gulf of Eilat/Aqaba was also called for.

Recommendation 3: During the discussions related to the vulnerability of the building inventory in Eilat and elsewhere in Israel, it was indicated that the buildings in general appear to have significant shear wall area percentage and the quality of construction as reported is quite good. However, in order to evaluate the capability of these structures to sustain vibratory motion, new correlation functions or matrices should be developed between ground motion parameters and damage.

Recommendation 4: It was strongly recommended that efforts be made to develop seismic hazard, structural vulnerability and damage cost functions expressed in terms of

instrumental measures of intensity such as peak ground accelerations or velocities or properly selected ordinates of response spectra. The decisions regarding the intensity measures to be used for this purpose must be based on judicious calculations of theoretical predictions with empirical observations.

Acknowledgments: The Working Group would like to thank the local organization, the Israel Ministry of Energy and Infrastructure, particularly Dr. Avi Shapira, for their effective arrangements and for making this Workshop such a successful and enjoyable event. The Working Group also appreciates Dr. Engdahl (IASPEI Secretary-General) and Mr. Keable (Bowring Worldwide Insurance Brokers Ltd.) for their full support of this Workshop.

Prof. Chen Yong (Working Group Chairman),
Dr. Avi Shapira

Meeting on the Formation of an Asian Seismological Commission Guangzhou, China 17-19 April 1995

In response to an invitation from Prof. Zhu Chuanzhen of the Institute of Geophysics, SSB, a meeting was held at Guangzhou, China, in April among the representatives of IUGG Member Countries in Asia and southern Pacific region to discuss the need for and formation of an Asian Seismological Commission (ASC).

The meeting was attended by representatives of Asia and southern Pacific region countries, IASPEI and SSB. Dr. Engdahl, Secretary General, IASPEI, briefly reviewed various steps taken in connection with the formation of the ASC. Prof. Zhu Chuanzhen informed the group of the support of the countries in Asia and southern Pacific region for the formation of an Asian Seismological Commission. There was a positive response from 14 countries of Asia and southern Pacific region and 10 of these countries promised to send representatives to participate in the Guangzhou meeting. In general, there was support from the representatives of various countries to the formation of Asian Seismological Commission and for interaction among the member countries to mitigate earthquake hazard.

After a detailed discussion, draft statutes were prepared for ASC to act upon. These statutes

will be tabled for approval at the forthcoming IASPEI Executive Committee meeting during the IUGG General Assembly in Boulder.

There was some discussion about nominating an Acting President and an Acting General Secretary so that ASC could start to function. Dr. Harsh K. Gupta and Prof. Zhu Chuanzhen were nominated to these positions, respectively.

It was also felt necessary to hold a IASPEI Regional Assembly in Asia, for the first time in China, during August 1996. There were detailed discussions on the topics to be covered, place of the meeting and the duration. Finally, it was recommended to hold this meeting during

August 1-3, 1996 either at Beijing or Tangshan in China just before the International Geological Congress. An information circular to be included in the Second Circular of the Geological Congress issued by the Local Organizing Committee was also formally approved in the meeting at Guangzhou. The following is the announcement of the IASPEI Regional Assembly in Asia:

In order to promote academic exchange, cooperation, upgrading of seismological research and strengthening measures to mitigate earthquake disasters, as well as in response to the UN's IDNDR, an IASPEI Regional Assembly for Asian and southern Pacific countries will be held in Beijing/Tangshan, China, August 1-3, 1996 (just before the XXXth International Geological Congress). This Assembly is sponsored by the International Association of Seismology and Physics of the Earth's Interior (IASPEI), the State Seismological Bureau (SSB) of China and other organizations. The newly established IASPEI Asian Seismological Commission (ASC) and the SSB of China will organize the Assembly. The scientific topics will focus on the regional seismological interests, earthquake precursors, earthquake hazard assessment, strong motion seismology and earthquake impact on society, etc. There will be limited funds available to support the participation of scientists from Asian and southern Pacific countries. For more information, please see the attached circular.

The following topics are tentatively selected to be addressed at the IASPEI Regional Assembly:

Earthquake Precursors.

Earthquake Hazard Assessment.

Data Acquisition and Processing.

Active Tectonics and Crustal Movement.

Strong Motion Seismology.

Earthquake Source Physics.

Wave Propagation.

Geothermics and Volcanology.

Recent Devastating Earthquakes in Asia.

Tomographic Imaging.

Societal Impact of Impending Earthquakes.

Induced Seismicity.

It is also proposed that a nominating committee will be constituted at Boulder for nominations to be made and approved during the first ASC General Assembly, which will be held jointly with the IASPEI Regional Assembly in Asia.

Harsh K. Gupta (ASC Acting President)

**21st General Assembly, IUGG
28th General Assembly, IASPEI
Boulder, Colorado, U.S.A.
2-14 July 1995**

The Third Circular for this Assembly, which includes scopes for Symposia and Workshops, registration materials, and information on accommodations, was distributed by the American Geophysical Union (AGU) in December 1994.

To receive further information on the IUGG XXI General Assembly, contact the American Geophysical Union, 2000 Florida Avenue, N.W., Washington, DC 20009, USA, e-mail iugg_xxiga@kosmos.agu.org, telephone 1-202-464-6900, fax 1-202-328-0566.

The titles and locations of IASPEI Business Meetings, Association Lectures, Association Events, IASPEI-related Symposia and Workshops, IASPEI Commission, Sub-Commission, Working Group, and Special Interest Group Meetings, and an IASPEI Framework Program follow.

Association Business Meetings

S B1 Opening Plenary (UMC CENTER)

The Opening Plenary will be held on Monday July 3, from 8:30 to 10:00 am, at the University Memorial Center. An agenda follows:

1. President's welcome.
2. Respect for deceased members.
3. Secretary-General's statement.
4. Composition of Nominations, Resolutions, and Audit Committees.
5. Presidential address:

"Signatures of XXI Geophysics"

IASPEI audited accounts for the years 1991-1994 are presented in this Newsletter.

S B2 Closing Plenary (UMC CENTER).

Association Lectures

S L1 Association Lecture (MUENZ E050).

"The Underdetermined Earth", Lecturer: B.L.N. Kennett.

S L2 Association Lecture (MUENZ E050).

"Geoid And Geodynamics; Certainties and Controversies", Lecturer: C. Froidevaux.

Association Events

S D Mountain Top Barbecue.

Inter-Association Symposia

G JS1 Crustal Deformation Along Plate Boundaries (IAG, IASPEI).

G JS2 Geodetic, Remote Sensing And Seismic Methods For Monitoring Of Volcanic Activities (IAG, IASPEI, IAVCEI).

G JS3 Earth Rotation: An Interdisciplinary Approach To Earth System Science (IAG, IAMAS, IAPSO, IASPEI, IAGA, IAHS, SEDI).

GA JS1.02 Relating Geophysical Measurements to Lithospheric Processes Through Continental Drilling (IAGA, IASPEI, ILP).

GA JS1.05/5.13 Geomagnetic Secular Variation And Core Flow Near The Core-Mantle Boundary (IAGA, IASPEI, SEDI).

GA JS1.07 Lithospheric Anisotropy: Observations And Interpretation (IAGA, IASPEI, ILP).

GA JS1.08 Geophysical Signatures Of Modern And Ancient Continental Margins (IAGA, IASPEI, ILP).

GA JS5.18 Architecture Of The Continents: Interpretation Of Their Main Structural Elements From Magnetic Anomalies And Other Geophysical Data (IAGA, IASPEI, ILP).

M JS14 Climatic Variability And Forcing Over The Past Millennium (IAMAS, IAVCEI, IASPEI, IAPSO).

PS JS4 Tsunami Disaster Reduction (IASPEI, IAPSO).

S JS1 Earthquake Generation Processes: Environmental Aspects And Physical Modelling (IASPEI, IAVCEI) (UMC CENTER).

S JS2 Physical And Chemical Evolution Of The Earth (IASPEI, IAVCEI) (Tues. - DUANE PHYS G020; Wed. - MUENZ E050).

S JS3 Long-Term Seafloor Observations And Networks (IASPEI, IAG, IASPSO, ION) (CIRES AUD).

S JS4 Patterns In Earth's Structure And Dynamics: Observations, Earth Models, And Laboratory Measurements (IASPEI, IAGA, IAG) (JILA AUD).

S JS5 Structure, Evolution And Dynamics Of The Core-Mantle Boundary Region (IASPEI, IAGA, IAG, SEDI) (MUENZ E050).

S JS6 Rock And Soil Properties Related To Environmental Concerns (IASPEI, IAHS, SEG) (JILA AUD).

S JS7 Mantle Dynamics And The Geological Record (IASPEI, SEDI, ILP) (DUANE PHYS G020).

S JS8 Modelling The Earth's Interior (IASPEI, IAVCEI, IAG, SEDI) (MUENZ E050).

V JS1 Mid-Tertiary To Recent Geodynamic Evolution Of The Andean Region (IAVCEI, IASPEI, IGCP, ILP).

V JS2 Subduction Zone Processes At 25-200 Kilometers Depth: The Subducting Slab, Mantle Wedge, And The Slab-Mantle Interface (IAVCEI, IASPEI, ILP).

V JS4 Geochemical And Geophysical Signatures Of Mantle Plumes (IAVCEI, IASPEI, IAG, SEDI).

Inter-Association Workshops

S JW1 Geophysical Networks: Possibilities For And Problems With Co-Location Of Instruments (IASPEI, IAGA, IAG) (CIRES AUD).

S JW2 Geophysical Data Challenges In The 21st Century (IASPEI, IAG, IAGA, CODATA, WDC) (STU REC 3).

V JW1 Electromagnetic Effects Of Earthquakes And Volcanoes (IAVCEI, IASPEI).

Association Symposia

S 1 Seismicity Induced By Petroleum, Mining And Geothermal Activities (IASPEI, SEG) (JILA AUD).

S 2 Earthquake Prediction (RAMAL C250).

S 3 Continental Evolution Revealed In Geophysical Transects (IASPEI, ILP) (MUENZ E050).

S 4 Origin And Evolution Of Sedimentary Basins: Tectonothermal, Geochemical And Hydrological Aspects (IASPEI, ILP, SEG) (STU REC 3).

S 5 Ground Motion Analysis From Recent Strong-Motion Data (JILA AUD).

S 6 Quantification Of Earthquakes (RAMAL C250).

S 7 Rheology And Lithospheric Deformation (IASPEI, ILP) (MUENZ E050).

S 8 Microearthquakes And Tectonics Of The Ocean Bottom (*cancelled*).

S 9 Earthquake Hazard Related To Regional And Local Geological Structures (IASPEI, ILP) (JILA AUD).

S 10 Seismology And Physics Of Anisotropic Heterogeneous Media (IASPEI, SEG) (MUENZ E050).

S 11 Real Time Tectonics (STU REC 3).

S 12 Geophysical Tomography In Complicated Heterogeneous Media (IASPEI, SEG) (MUENZ E050).

S 13 Application Of Artificial Intelligence Computing In Geophysics (IASPEI, SEG) (RAMAL C250).

S 14 Advances In Methods And Interpretation Of 2D And 3D Earth Structure - Case Studies, Computational Techniques, Structures (IASPEI, SEG) (RAMAL C250).

S 15 Dynamics Of The Subduction Process (JILA AUD).

Association Workshops

S W1 Seismological Networks For The Next Century (DUANE PHYS G020).

S W2 Thermoelastic Properties Of Deep Mantle Phases (IASPEI, SEDI) (JILA AUD).

S W3 Acquisition And Processing Of Deep Crustal Seismic Data (IASPEI, SEG) (JILA AUD).

S W4 Reliability Of Earthquake Precursors And Prediction (RAMAL C250).

S W5 Recent Devastating Earthquakes (RAMAL C250).

S W6 Earthquake Warning Systems: Progress And Results (DUANE PHYS G020).

S W7 Intra-Continental Earthquakes (RAMAL C250).

S W8 Seismological Data And Practice Into The 21st Century (FINE ARTS N141).

S W9 Methodology Of Seismic Risk Assessment. (STU REC 3).

S W10 Exploiting Large Volumes Of Digital Waveform Data - Theory And Applications (JILA AUD).

S W11 Deja Q: Anelasticity In The Earth's Deep Interior (IASPEI, SEDI) (MUENZ E050).

S W12 GSHAP Related Advancement In Techniques And Interpretation In Seismic Hazard Assessment (IASPEI, ILP) (JILA AUD).

S W13 Improving Regional Cooperation In Observational Seismology (*cancelled*).

S W14 Seismic Noise - Stability And Change In Time And Space (STU REC 3).

S W15 Statistical Characteristics Of Earth Heterogeneity (IASPEI, SEG) (RAMAL C250).

Poster Sessions

All poster sessions will be held in the Coors Events Center (EC ARENA). Posters may be displayed for the entire day, but are scheduled for viewing from 1700 to 1900.

Commission Meetings

C1 Controlled Source Seismology (IASPEI OFF)

C2 Earthquake Hazard and Prediction (JILA AUD)

C3 Geodynamics and Tectonophysics (FINE ARTS N141)

C4 International Heat Flow Commission (CIRES S274)

C5 Physical Properties of Material of the Earth's Interior (CIRES 340)

C6 Practice (CIRES S274)

C7 Wave Propagation (CIRES AUD)

C8 European Seismological Commission (CIRES AUD)

C9 Federation of Digital Broadband Seismograph Networks (FDSN) (Week 1 - CIRES AUD) (Week 2 - STU REC 3)

C10 Commission for International Decade for Natural Disaster Reduction (CIRES S274)

C11 Committee for Developing Countries (CIRES AUD).

Sub-Commission Meetings

SC21 Earthquake Hazard (Earthquake Hazard and Prediction) (JILA AUD).

SC22 Earthquake Prediction (Earthquake Hazard and Prediction) (CIRES AUD).

SC23 Modelling the Earthquake Source (Earthquake Hazard and Prediction) (CIRES S274).

SC24 Strong Motion Seismology (Earthquake Hazard and Prediction) (JILA AUD).

SC61 Reporting Standards (Practice) (IASPEI OFF).

SC71 Earthquake Algorithms (Wave Propagation & Practice) (IASPEI OFF).

SC72 Anisotropy (Wave Propagation) (CIRES 340).

Working Group Meetings

WG21 Seismic Hazard Assessment Techniques (Earthquake Hazard and Prediction) (CIRES 340)

WG61 Telegraphic Formats (Practice, Reporting Standards) (CIRES 340).

WG62 Regionalization (Practice, Reporting Standards) (IASPEI OFF).

WG63 Manual of Seismological Observatory Practice (Practice, Analysis and Interpretation) (CIRES 340).

WG64 Personal Computers (Practice) (FINE ARTS N141).

Special Interest Group Meetings

SIG1 International Seismological Observing Period (ISOP) (FINE ARTS N141)

SIG2 Global Seismic Hazard Assessment Program (GSHAP) (CIRES S274)

SIG3 Prediction Panel (IASPEI OFF)

SIG4 Space Geodetic Measurements Site Sub-Commission (CIRES S274)

SIG5 Seismic Risk Assessment Panel (IASPEI OFF)

**29th General Assembly, IASPEI
Thessaloniki, Greece
18-29 August 1997**

We are pleased to announce that the Geophysical Laboratory of the University of Thessaloniki has undertaken to organize the 29th General Assembly of the International Association of Seismology and Physics of the Earth's Interior (IASPEI). On behalf of our colleagues, we take great pleasure in inviting you to participate and contribute to this Assembly, which we hope will give the chance to scientists from different disciplines to meet and exchange ideas about present-day problems of the seismological community.

IASPEI plans a full and varied programme of Workshops and Symposia. Topics covered will include wave propagation, earthquake hazard analysis, Earth structure, earthquake prediction, earthquake mechanisms, tectonics, deformation, heat flow and many other specialties. Special symposia on the seismotectonics and the deformation pattern of the Mediterranean area will be organized.

The Assembly will take place at the city of Thessaloniki - a city of great beauty and fascination named after the daughter of King Philip, the father of Alexander the Great. The city is situated in northern Greece and there are magnificent near-sea places in close proximity.

To receive the Pre-Registration Form, please contact the Geophysical Laboratory, University of Thessaloniki, GR-540 06, Thessaloniki, GREECE (Tel: 30 31 998526; Fax 30 31 998528; E-Mail: iaspei@olymp.ccf.auth.gr).

Prof. Basil Papazachos (President, LOC)

**American Geophysical Union
Library Discount Program**

The American Geophysical Union (AGU) has a "Special Discount Program for New Library Subscriptions for Emerging and Developing Countries." The purpose of the program is to provide a mechanism for institutions in countries with severe currency problems or very poor economic conditions to begin subscribing to AGU journals through a graduated discount program that will lead to full payment of the subscription rate over a period of 7 to 10 years. This program will start new subscriptions and is intended to build a loyal following from the institutions that participate. The decreasing discount schedule, which is listed below in yearly percentages of the subscription rate *plus postage*, helps to assure that the libraries do not become overly dependent on outside gifts. The program permits a foundation or a group of individuals to initiate subscriptions for worthy libraries. The prescribed discount would be based on the particular journal selected.

Year 1-3	20-30%
Year 4	40%
Year 5	50%
Year 6	60%
Year 7	70%
Year 8	80%
Year 9	90%
Year 10	100%

To be eligible for this special discount program the institution must meet the following criteria: (1) the institution did not subscribe during the previous 5 years; (2) the institution must have an open library that can be used by researchers and students; and (3) the institutions must agree to make the journal freely available to researchers and students on a regular basis. Once a library enters into this program, they are eligible to continue to obtain special discounts even if there is no sponsor.

To be sure that AGU can continue to recognize these libraries in their program, it is useful and important for them to have the names of the receiving libraries to avoid duplication. The institution must be recommended by an AGU member in that country. The total number of such subscriptions to be added each year will be recommended by AGU staff and approved by the AGU General Secretary.

If there are any third world countries that could benefit from this program, please contact Tenna Randall, International Activities Coordinator, AGU (E-mail: randall@kosmos.agu.org, Fax: 1 202 328 0566).

Publication Transfer

IASPEI, and its Committee for Developing Countries, is deeply aware that in many countries of the developing world there is a lack of even basic texts and publications on seismology and related earth sciences.

IASPEI therefore wishes to set up a mechanism to help transfer books and publications from individuals and institutions that have surplus stocks to institutions in developing areas that have need of them. To prevent duplication, the IASPEI Secretariat is prepared to act as a clearing house for such offers and requests.

OFFERS Those with surplus publications, including back runs of journals, are invited to supply a list to the IASPEI Secretariat.

REQUESTS Institutions in developing countries with specific needs are invited to make these known to the IASPEI Secretariat.

The Secretariat will endeavor to co-ordinate offers and requests, and advise donors of suitable recipients. Publications should be shipped directly from donor to recipient and requests for payment or reimbursement of reasonable shipping costs made to IASPEI.

Offers and requests, and requests for further information should be addressed to the Secretary-General.

IDNDR Newsletter

A special IASPEI/IDNDR Secretariat, under the IASPEI Commission for the IDNDR, was established through the generosity of the State Seismological Bureau in Beijing in December 1992 and special newsletters concerning IASPEI/IDNDR activities have been circulated subsequently. Information on the availability of these newsletters may be obtained directly from the IASPEI/IDNDR Secretariat, No. 63 Fuxing Avenue, Beijing 100036, China (Tel: 86-1-8223724; Fax: 86-1-8210995; Telex: 222351 SSB CN; E-mail: icssb@cdsndmc.css.gov).

Kiyoo Wadati

One of the greatest seismologists and a pioneer of deep-focus earthquake studies passed away on January 5, 1995, at the age of 92. After graduating from the University of

Tokyo (physics major), Dr. Kiyoo Wadati joined Japan Meteorological Agency in 1925 to devote himself to seismological studies. He was very active in broad areas of seismology, physics of the Earth's interior, and natural disaster prevention science. In particular, a series of his studies on deep earthquakes, published in the period from 1928 through 1931, have been

most acclaimed internationally. He served as an IASPEI Executive Committee member (1967-1971), a Vice-President (1963-1967), and the President (1967-1971), and thereby contributed greatly to the Association. Within his country, he served as Director of the Japan Meteorological Agency, Director of the National Research Center for Disaster Prevention, President of Saitama University, and President of the Japan Academy. He was given the Imperial Award of the Japan Academy in 1932, and was awarded the Order of Cultural Merits in 1985. His name will be remembered everlastingly for the Wadati-Benioff zone.

Miti Ohnaka, IASPEI Executive Committee.

ANNOUNCEMENTS

The Seismological Observatory of the University of Brasilia has an open position for a seismology visiting professor for a period of one year, renewable for a maximum of four years. We would appreciate candidates with experience in themes of plate interior seismicity and lithospheric structure. Level of PhD is necessary. The salary is US\$3,100 a month. Contact must be made before July 30 with a summary of the candidates vitae. For further information contact: A. Veloso, Seismological Observatory, University of Brasilia, 70910-900 Brasilia, DF - BRAZIL (Fax: 55 61 274 5927; E-mail: obsis@guarany.cpd.unb.br).

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FORTHCOMING MEETINGS

The following is a selection of forthcoming
meetings in fields of interest to the
Association:

1995 July 2-14

21ST GENERAL ASSEMBLY, IUGG,
28TH GENERAL ASSEMBLY, IASPEI
Boulder, Colorado, U.S.A.

IUGG XXI General Assembly, c/o American
Geophysical Union, 2000 Florida Ave., NW,
Washington, DC 20009, U.S.A. (Tel: 1-202-
464-6900, Fax: 1-202-328-0566;
E-mail iugg_xxiga@kosmos.agu.org)

1995 August 5-12

XXI GENERAL ASSEMBLY
THE INTERNATIONAL ASSOCIATION
FOR THE PHYSICAL SCIENCES OF THE
OCEANS, Honolulu, U.S.A.

(D.S. Luther, School of Ocean and Earth
Science and Technology, University of Hawaii
at Manoa, 1000 Pope Road, MSB 307,
Honolulu, Hawaii 96822, U.S.A.
(Tel: 1 808 956 5875; Fax: 1 808 956 9165;
E-mail: dluther@iniki.soest.hawaii.edu)

1995 August 7-12

6TH INTERNATIONAL KIMBERLITE
CONFERENCE, Novosibirsk, RUSSIA
N.P. Pokhilenko, Conference Secretary,
United Institute of Geology, Geophysics, and
Mineralogy, RAS, Siberian Branch, 630090
Novosibirsk, RUSSIA (Fax: 7 3832 352692;
E-mail: chief@diamond.nsk.su)

1995 August 20-24

1ST INTERNATIONAL CONFERENCE OF
THE LATIN AMERICAN GEOPHYSICAL
UNION, Rio de Janeiro, BRAZIL
Fernando Barbosa de Silva, SBGf, Av, Rio
Branco 156, room 2510, 20043-0900 Rio de
Janeiro, BRASIL (Tel: 55 21 534 2660; Fax:
55 21 533 0064)

1995 October 4-6

2ND WORKSHOP ON APPLICATION
OF ARTIFICIAL INTELLIGENCE
TECHNIQUES IN SEISMOLOGY AND
ENGINEERING SEISMOLOGY

Walferdange, LUXEMBOURG

M. García-Fernández, Institute of Earth
Sciences, *Jaume Almera*-CSIC, Martí i
Franqués s/n, E08028 Barcelona, SPAIN
Tel: 34 3 4900552; Fax: 34 3 4110012;
E-mail: mgarcia@ija.csic.es)

1995 October 17-19
FIFTH INTERNATIONAL CONFERENCE
ON SEISMIC ZONATION, Nice, FRANCE
AFPS Domaine de Saint-Paul, BP 1, 78470
Saint Remy Les Chevreuse, FRANCE
(Fax: 33 1 30 52 75 75)

1995 November 6-17
THIRD WORKSHOP ON NON-LINEAR
DYNAMICS AND EARTHQUAKE
PREDICTION, Miramare-Trieste, ITALY
International Centre for Theoretical Physics,
P.O. Box 586, I-34100, Trieste, ITALY
(E-mail: smr879@ictp.trieste.it)

1995 November 22-25
5TH INTERNATIONAL CONFERENCE ON
PLATE TECTONICS, Moscow, RUSSIA
Dr. Elena Pristavakina, Institute of
Oceanology, RAS, 23 Krasikova St., Moscow
117851, RUSSIA (Tel: 7 095 124 7942; Fax: 7
095 124 5983; E-mail: paleogeo@sovam.com)

1996 March 5-8
INTERNATIONAL CONFERENCE ON
NATURAL DISASTER REDUCTION,
Washington, D.C., USA
NDR '96, Conferences and Conventions
Department, American Society of Civil
Engineers, 345 East 47th Street, New York,
NY 10017 (Tel: 1 800 548 2723; Fax: 1 212
705 7975)

1996 June 10-16
FOURTH INTERNATIONAL MEETING
HEAT FLOW AND STRUCTURE OF THE
LITHOSPHERE
Chateau of Trest, CZECH REPUBLIC
Dr. Vladimir Cermak, Geophysical Institute,
AVCR, Bocni II, 141 31 Praha 4, CZECH
REPUBLIC (Tel: 42 2 67 103 385; Fax: 42 2
76 15 49; E-mail: cermak@ig.cas.cz)

1996 July 8-13
INTERNATIONAL MEETING
GEODYNAMICS OF LITHOSPHERE AND
EARTH'S MANTLE
Chateau of Trest, CZECH REPUBLIC
Dr. Jaroslava Plomerova, Geophysical
Institute, CASci, 141 31 Praha 4, CZECH
REPUBLIC (Tel: 42 2 67 103 049; Fax: 42 2
76 15 49; E-mail: jpl@ig.cas.cz)

1996 July 23-27
5TH INTERNATIONAL SEDI SYMPOSIUM
4TH WESTERN PACIFIC GEOPHYSICS
MEETING, Brisbane, AUSTRALIA
Prof. Frank Stacey, Physics Dept., University

of Queensland, Brisbane Qld 4072,
AUSTRALIA (Fax: 61 7 374 2059)

1996 August 4-14
30TH INTERNATIONAL GEOLOGICAL
CONGRESS
Beijing, CHINA
Prof. Zhao Xun, 30th International Geological
Congress, P.O. Box 823, Beijing 100037,
CHINA (Tel: 86 10 8327772; Fax: 86 10
8328928; E-mail: zhaox@becp2.ihep.ac.cn)