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IASPEI Newsletter

(No. 15, September 1985)

TO: National Correspondents, Officers and Representatives of the Association and related organizations.

Our 23rd General Assembly is now over, acclaimed as one of our most memorable, both for scientific content and the overwhelming hospitality and efficient organization of our Japanese hosts. For some, the only disappointment was that the felt earthquake predicted by Prof. Rikitake at the opening reception with a probability of 70% did not eventuate. Our cooperation with the Inter-Union Commission on the Lithosphere continued fruitfully with ten symposia co-sponsored by ICL, and we are also grateful to Unesco for their continuing financial support. Much of this Newsletter is devoted to reports of the Assembly, and to plans for the 1987 General Assembly at Vancouver, which were largely decided at Tokyo. The decision was also taken to join the International Association of Geomagnetism and Aeronomy for a joint Assembly at Oslo in 1989. The Association, therefore, has the prospect of a continuing full and exciting programme in the next few years.

Robin Adams

Secretary-General

23RD GENERAL ASSEMBLY, TOKYO, JAPAN, 19-30 AUGUST 1985

IASPEI held its 23rd General Assembly at the Keio Plaza Hotel, Tokyo, Japan, 19-30 August 1985. The Assembly was hosted by the Science Council of Japan and the Seismological Society of Japan, and supported by the Japanese Ministry of Education, Science and Culture. Travel funds were made available from Unesco. The Assembly was attended by 651 delegates (297 from outside Japan) and 42 accompanying persons.

OPENING CEREMONY

The Assembly's Opening Ceremony was held in the Keio Plaza Hotel at 1000 on Tuesday 20 August, 1985 with Prof. R Sato, Secretary-General of the Local Organizing Committee in the Chair.

The first speaker was Prof. T Hagiwara, Honorary Chairman of the Local Organizing Committee, who welcomed all participants and reminded them of Japan's long association with seismology and its development.

Prof. T Rikitake, Chairman of the Local Organizing Committee then added his welcome and gave more details of seismological activity in Japan, including the great Kanto earthquake of 1923, and the development of an extensive earthquake prediction programme since 1965.

The President of IASPEI, Professor Z Suzuki, spoke next and pointed out that this was the first ever IASPEI General Assembly to be held in Asia, let alone in Japan. IASPEI's only other meeting in Asia was the Regional Assembly in India in 1984. Professor Suzuki thanked the local organizers for all their work on behalf of the Association.

Professor J Kondo, President of the Science Council of Japan also welcomed participants, and Professor C Kisslinger brought greetings from the President and Bureau of IUGG.

Finally congratulatory telegrams were read from Mr T Fujinami, Minister of State, and Mr H Matsunaga, Minister of Education, Science and Culture.

OPENING PLENARY SESSION, 20 AUGUST 1985

Present: Professor Z Suzuki (President) in the chair and about 280 delegates and guests.

The President opened the meeting at 1045 and welcomed participants to the first IASPEI General Assembly held in Asia. He explained that there was little business for this first plenary session, and that most items would be dealt with at the closing plenary session on 30 August. He then asked those present to stand as a mark as respect to colleagues who had died since the last General Assembly in Hamburg in 1983. These include:

Mr W K Cloud (USA) Dr E R Lapwood (UK)
Prof E A Lubimova (USSR) Prof J Minami (Japan)
Prof A Zatopek (Czechoslovakia)

The Secretary-General then tabled a brief written report, which would be discussed more fully at the final plenary session. Among items to be decided were the scientific programme for the 1987 Vancouver Assembly, and the venue for the 1989 General Assembly.

The President them announced the following Resolutions Committee, to whom prospective resolutions should be submitted by 26 August:

Prof A E Beck (Chairman), Prof A V Nikolaev, Dr S Suyehiro

There being no further business, the President closed the meeting at 1100.

SCIENTIFIC SESSIONS

The following scientific sessions were held during the Assembly. Business sessions were also held by most Commissions.

H J Zwart (Netherlands)

20-21 August	Reports on Recent Earthquakes. Convenors: N V Shebalin (USSR), N Yamakawa (Japan)
20-21 August	Seismic Studies of the Continental Lithosphere (with ICL). Convenors: S Asano (Japan), W D Mooney (USA), N I Pavlenkova (USSR)
20, 22-23,	Seismological Theory and Practice. Convenors: H Aoki (Japan),
26 August	D J Doornbos (Norway), E R Engdahl (USA), N V Kondorskaya (USSR) J H Woodhouse (USA)
21 August	Polar Geophysics (with ICL), Convenors: G L Johnson (USA), K Kaminuma (Japan)
21 August	Prediction and Computation of Synthetic Strong Ground Motions. Convenors: B A Bolt (USA), Y Osawa (Japan), E Shima (Japan)
22-23 August	Thermal Aspects of Tectonics, Magmatism and Metamorphism (with ICL). Convenors: D.S. Chapman (USA), S. Uyeda (Japan)

22-23, 26	Mechanics of Earthquake Faulting (with ICL). Convenors:
August	Y T Chen (China), J H Dieterich (USA), K Kasahara (Japan),
	T Mikumo (Japan)
26-27 August	Wave Propagation in Real Media. Convenors: M Ando (Japan),
	E M Chesnokov (USSR), S Crampin (UK)
26, 28-30	Earthquake Hazard Assessment and Prediction (with ICL).
August	Convenors: M J Berry (Canada), F F Evison (New Zealand),
	K Mogi (Japan), T Rikitake (Japan)
27 August	Transport Phenomena in Relation to Structure and State
	of the Earth (with ICL). Convenors: C Froidevaux (France),
	Y Ida (Japan), H J Neugebauer (FRG)
27 August	Seismological Instrumentation and Data Analysis in Developing
	Countries (with ICL). Convenors: D E Ajakaiye (Nigeria),
	D W Simpson (USA), A Takagi (Japan)
2 7- 28 August	Historical Seismograms and Earthquakes. Convenors: W H K Lee
	(USA), H Meyers (USA), K Shimazaki (Japan)
27-29 August	Structure and Composition of Active Margins in the Northwestern
	Pacific and Far East (with ICL). Convenors: H S Gnibidenko
	(USSR), K Kobayashi (Japan), T Yoshii (Japan)
28, 30 August	Discontinuities in the Earth's Structure: Seismic Evidence
	and Interpretation in terms of Material Properties (with ICL).
	Convenors: K Fuchs (FRG), E Hurtig (GDR), M Kumazawa (Japan),
	I S Sacks (USA)
29 August	Deep Structure of the Oceanic Lithosphere (with ICL).
	Convenors: J Francheteau (France), H Shimamura (Japan),
	R B Whitmarsh (UK)

Summary reports of these sessions will be published in IUGG Chronicle.

ASSOCIATION LECTURES

Two Association Lectures were given, as follows:-

20 August Prof T V McEvilly "IRIS: A Universities Consortium for Major Seismological Research Activities"

26 August Prof I Kushiro "A Petrological Model of the Lower Crust and the Upper Mantle in Japanese Islands"

The texts of these will be published in IUGG Chronicle.

ASSOCIATED ACTIVITIES

During the Assembly, business meetings were held of the IASPEI Bureau and Executive Committee, the ICL Bureau and selected Working Groups.

Joint IASPEI/Unesco Working Groups met on "Revision of Manual of Seismogram Interpretation" and "Unification of International Seismograph Networks".

The Governing Council and Executive Committee of the International Seismological Centre also held meetings.

SOCIAL EVENTS

The Local Organizing Committee gave a welcoming reception on 20 August, and arranged a banquet on 27 August. On 21 August, foreign participants were invited to a reception by the Governor of Tokyo.

CLOSING PLENARY SESSION, 30 AUGUST 1985

Present: Professor Z Suzuki (President) in the Chair and about 200 delegates and guests.

The President opened the meeting at 1045, and thanked those present for attending. He mentioned that the Executive Committee had met several times during the Assembly and had taken important decisions, particularly concerning the programme for the 1987 Assembly and the venue for the 1989 Assembly. These items would be discussed more fully later in the meeting. He mentioned the great assistance that the Association was receiving from Unesco, and also thanked the International Seismological Centre for its great help in housing the Association's secretariat.

The Secretary-General then spoke briefly about his written report, which had been circulated. He too stressed the help of Unesco to the Association. Dr Adams reported the two main items of business at the recent IUGG Executive Committee meeting, that IUGG wishes to carry out full reviews of all Association activities, and also wishes to amend the publication policy of the Union and Associations to obtain more income from royalties. He also mentioned that ICSU had given a grant to the Association in 1984 towards a meeting to discuss Improvement of Seismological Recording and Cooperation in South-East Asia. Two requests, pertaining to Heat Flow studies in South America, and Digital Data Exchange had been submitted for 1986.

FINANCE Dr Adams stated that the holding of Assemblies in three consecutive years had placed a severe strain on the Association's finances, but reserves remain at about \$20,000. He noted that more than \$40,000 had been paid in travel grants to Tokyo, and that thanks to low administration costs, about 90% of the Association's expenditure was devoted to assemblies and scientific meetings.

ASSOCIATION ACTIVITIES During 1986 the European Seismological Commission would hold a meeting in Kiel, FRG, and the International Heat Flow Commission was planning a meeting in Brazil. The Commission on Wave Propagation in Real Media was involved in the Second International Workshop on Seismic Anisotropy to be held in the Soviet Union in May, 1986. Various other meetings were being sponsored by IASPEI, and these would be documented in the Newsletter.

It was also the intention of IASPEI to continue to have joint Working Groups with Unesco, and a resolution to be put to the meeting later, concerned the setting up of such a group to consider problems relating to seismic hazard in Africa.

1987 ASSEMBLY, VANCOUVER IUGG had already chosen topics for 20 symposia. IASPEI was the lead Association for three, and was associated with 11 more. These symposia covered many of IASPEI's broader interests, but in addition a IASPEI programme of 10 topics had been proposed by the Executive.

Prof D J Blundell asked that in view of the large number of sessions the use of poster sessions be encouraged.

1989 ASSEMBLY Prof Suzuki said that IASPEI had received invitations from the German Democratic Republic, Turkey and Norway to hold the 1989 General Assembly. The Executive Committee had met representatives from all three countries, who had presented very attractive invitations. The invitation from Norway, however, was to hold a joint Assembly with the International Association of Geomagnetism and Aeronomy. Because of the scientific advantages of this, the meeting followed the Executive Committee's recommendation, and accepted the invitation of Norway to hold a joint IASPEI/IAGA Assembly in August 1989.

ICL The President noted with gratitude the recent cooperation between IASPEI and the Inter-Union Commission on the Lithosphere and noted that as this was the mid-point of the International Lithosphere Programme,

Prof R Price was retiring as President, and being replaced by Prof K Fuchs. Prof Suzuki expressed thanks to Prof Price for all his efforts and wished Prof Fuchs well in his new appointment. It was also noted that from February 1986 Dr H J Zwenk would replace Dr E A Flinn as Secretary-General.

Prof Fuchs then spoke, stressing that the essence of success of ICL was the cooperation between the two unions, the International Union of Geodesy and Geophysics, and the International Union of Geological Sciences. Prof Fuchs mentioned some new activities of ICL, and described some new structuring of Working Groups. Finally he emphasised ICL's continuing interest in having joint meetings with IASPEI.

RESOLUTIONS In the absence of Prof A E Beck, chairman of the Resolutions Committee, the President called on Dr S Suyehiro to present the resolutions given below, which were all adopted. Speaking on resolution seven, Prof Fuchs said that ICL also wished to be associated with this proposed activity in Africa. Resolution eight was proposed by Prof St Mueller, who warmly extended the thanks of all participants to all involved in the organization of this most successful assembly.

There being no further business, the President closed the meeting and the Assembly at 1140.

IASPEI RESOLUTIONS ADOPTED AT PLENARY SESSION

TOKYO, JAPAN, 30 AUGUST 1985

1. PRACTICE

IASPEI, Noting that there have been improvements in the quality of the data available from many seismic observatories, and Recognizing that the benefits of these improvements would be enhanced if these data were received in regional and global centres in a more appropriate form, Urges the World Meteorological Organization to adopt and publish the new format for a seismic telegraphic transmission code.

2. PRACTICE

IASPEI, Recognizing the continuing efforts to improve the quality of seismological data available to the global seismological community, Recommends that national and international organizations develop a plan to accomplish long term standardization and unification in the practice and operation of seismic networks.

3, PRACTICE

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IASPEI, Noting that significant progress has been made in identifying, reporting and preserving historical seismic data, including calibration details and instrumental responses,

Thanks Unesco for continuing support, and World Data Centre A for coordinating the work,

Commends those nations and organizations who have participated in this work and have made the results available internationally, and

Recognizing the importance of historical data in re-evaluating earthquake parameters and risk,

Encourages other nations to compile and publish such records as they have, and Recommends that the project be enhanced by development of national and regional earthquake catalogues, both for instrumental and for pre-instrumental periods,

Requests that organizations make these catalogues available internationally through world data centres, and

Urges that standards be developed for interpreting the data in these catalogues.

4. THEORY

IASPEI, <u>Recognizing</u> the advantages of full interaction between observational seismology and current and future advances in theoretical seismology, and
Noting that these advantages can best be obtained from networks capable

Noting that these advantages can best be obtained from networks capable of broadband recording of both natural and artificial sources, Draws to the attention of all organizations planning to deploy large portable arrays the advantages of recording with as broad a bandwidth as possible.

5. HAZARDS

IASPEI, Recognizing that small differences in near-surface geology may lead to large differences in seismic ground motion and estimates of hazard, and Noting that for estimating these effects there are several different methods which have not been systematically compared,

Invites the International Association of Earthquake Engineering to consider establishing a joint Working Group with IASPEI, to compare and develop

establishing a joint Working Group with IASPEI, to compare and develop theoretical and experimental methods for predicting the influence of near-surface geology on the degree of hazard to be expected in any given area, and Recommends that the experimental activities include the establishment of test areas in regions of different near-surface geology.

6. STRONG MOTION

IASPEI, Noting that there is at present no global catalogue of strong motion seismic records obtained in various countries, and Recognizing that strong motion records are essential to both basic seismological research and to design of earthquake resistant buildings, Requests the Governing Council of the International Seismological Centre to examine the feasibility of extending its collection and cataloguing of global seismological data to include lists of strong motion records and key summary parameters.

7. SEISMOLOGY IN AFRICA

IASPEI, Recognizing the lack of seismological research and recording networks in Africa, and Conscious of the social and economic implications of recent earthquakes in that continent,

Resolves to seek the cooperation of Unesco in investigating the possibility of establishing a joint IASPEI/Unesco Working Group to study the organizational and technical problems of developing a programme to assess seismic hazard in Africa.

8. THANKS

IASPEI, Recognizing the success of its 23rd General Assembly, and Appreciating the time and effort that many people have spent in organizing the social as well as the scientific activities, Thanks, on behalf of every participant, all those who have in anyway contributed to that success, and in particular the Local Organizing Committee.

IUGG ASSEMBLY, VANCOUVER, 9-22 AUGUST 1987

Preliminary information is now available from the organizers, and those interested in receiving further circulars should contact:

IUGG XIX General Assembly c/o Venue West, 801-750 Jervis Street Vancouver, BC, CANADA V6E 2A9

Scientific Programme

IUGG The main scientific programme consists of 20 inter-association symposia, arranged by IUGG. These were decided at the recent meeting of the IUGG Executive Committee. IASPEI is to be lead Association in three symposia and will be associated with eleven others. The exact titles are subject to official confirmation from IUGG and the conference organizers. Convenors will be announced later.

IASPEI-led Symposia

Large-Scale Three-Dimensional Earth Structure Lower Crustal Properties and Processes-Hydrogeological Regimes and Subsurface Thermal Effects.

IASPEI-Associated Symposia, and lead organizations

Quo Vadimus ? (Where are we going?) (IUGG)
Instability within the Earth and Core Dynamics (IUGG)
Impact of Global Positioning System on Geophysics (IAG)
Variations in Earth Rotation (IAG)
Slow Deformation and Transmission of Stress within the Earth (IAG)
Evolution of Mid-Oceanic Ridges (IAVCEI)
Comparative Planetology (IAVCEI)
Displaced Terranes and Continental Accretion (IAGA)
Results of the EMSLAB Project (IAGA)
Origin and Evolution of Sedimentary Basins and their Energy and Mineral Resources (ICL)
Geochemistry and Geophysics of Transport in the Lithosphere-Asthenosphere System (ICL)

IASPEI Programme

In addition to taking part in the above Union-sponsored activities, IASPEI proposes to arrange about ten sessions covering topics of interest to the Association not included in the above symposia. Some preliminary themes were suggested at the Tokyo Assembly and these will be confirmed in a later Newsletter.

OBITUARY - PROF E A LUBIMOVA

We learn with great sorrow of the recent death of Prof E A Lubimova of the Soviet Union. She is known principally to IASPEI members for her very active work in the International Heat Flow Commission with which she was involved since its foundation. She will be sadly missed.

FORTHCOMING MEETINGS

The following is a selection of forthcoming meetings in the field of interest of the Association.

- 1986 Feb 1-9 INTERNATIONAL VOLCANOLOGICAL CONGRESS

 Auckland, Hamilton, Rotorua, New Zealand
 IAVCEI, Royal Society of New Zealand
 Royal Society of N.Z., Box 12249, Wellington, NEW ZEALAND
- 1986 May 20-27 SECOND INTERNATIONAL WORKSHOP ON SEISMIC ANISOTROPY
 Puschyno, USSR
 Dr A G Bugayevsky, Soviet Geophysical Committee,
 Molodezhnaya 3, Moscow, USSR
- 1986 Jul 15-17 DEEP SEISMIC REFLECTION PROFILING OF THE CONTINENTAL LITHOSPHERE Cambridge, UK
 BIRPS, Bullard Lab., Madingley Road, Cambridge, CB3 OE2, UK
- 1986 Aug 10-14 HEAT FLOW STUDIES IN SOUTH AMERICA
 Sao Paulo, Brazil
 International Heat Flow Commission
 Dr V Hamza, Inst. Astronomico e Geofisico, Univ. de Sao Paulo,
 CP 30.627, Sao Paulo, BRAZIL
- 1986 Aug 21-27 EUROPEAN SEISMOLOGICAL COMMISSION Kiel, FRG
- 1986 Sep 8-13 7TH INTERNATIONAL SYMPOSIUM ON RECENT CRUSTAL MOVEMENTS
 OF THE EARTH
 Tallinn, Estonian SSR, USSR
 IAG, CRCM
 Dr V A Sidorov, Soviet Geophysical Committee,
 Molodezhnaya 3, Moscow, USSR
- 1986 Sep 8-13 ANISOTROPY AND INHOMOGENEITY OF THE LITHOSPHERE AND ASTHENOSOPHERE Bechyne, Czechoslovakia

 Dr V Babuska, Geophysical Institute, Bocni II,

 14131 Prague 4, CZECHOSLOVAKIA
- 1987 May 28-30 CENTENNIAL ANNIVERSARY SYMPOSIUM ON PERMANENT SEISMOGRAPHIC OBSERVATORIES AND NETWORKS
 University of California, Berkeley, California, USA
 Prof B A Bolt, Seismographic Stations, University of California, Berkeley, CA 97420, USA.
- 1987 Aug 9-22 XIX GENERAL ASSEMBLY, IUGG
 Vancouver, B.C Canada
 IUGG Assembly, 801-750 Jervis Street, Vancouver B.C.
 V6E 2A9, CANADA
- 1988 Jun 30- SEISMIC PROBING OF THE CONTINENTS AND THEIR MARGINS

 Jul 9 Canberra, Australia

 Dr J H Leven, BMR, Box 378, Canberra, ACT 2601, AUSTRALIA
- 1989 Aug 6-18 IASPEI/IAGA JOINT ASSEMBLY Oslo, Norway

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