

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

**PRESIDENT**

Prof. Ziro Suzuki  
9-11-18 Hino  
Konan-ku  
Yokohama 233  
JAPAN

**FIRST VICE-PRESIDENT**

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Institut fuer Geophysik  
ETH - Hoenggerberg  
CH-8093 Zürich  
SWITZERLAND

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Institute of Physics of the Earth  
Academy of Sciences of USSR  
Bolshaya Gruzinskaya, 10  
Moscow 123 242  
U.S.S.R.

**SECRETARY-GENERAL**

Dr. R.D. Adams  
International Seismological Centre  
Pipers Lane, Thatcham  
Newbury, Berks.,  
UNITED KINGDOM RG13 4NS

Telephone: National (0635) 61022  
International +44 635 61022  
Telex: 849303 SEISMO G

## NEWSLETTER NO. 19 JULY 1987

To: National Correspondents, Officers and Representatives of the Association, and related organisations.

The time of our 24th General Assembly at Vancouver is rapidly approaching, and this Newsletter is mainly concerned with business relating to the Assembly. Please bring this copy of the Newsletter with you, if you wish to refer to matters in the Secretary-General's Report, or the Financial Report. Our General Assemblies are the focal points of the Association's activities, particularly those, such as this one, which are combined with IUGG and other Associations. These are the occasions when, in addition to the presentation of scientific results, we plan our activities for the coming four years.

I look forward to seeing as many of you as possible at Vancouver, for what shows all the indications of being a most successful Assembly.



R. D. Adams  
Secretary-General

## GENERAL ASSEMBLY 1989, ISTANBUL, TURKEY

The Association has accepted an invitation from the Turkish National Union of Geodesy and Geophysics to hold its 25th General Assembly at Istanbul in 1989. The Assembly will be either in the last two weeks of August, or the last week of August and the first week of September. Definite arrangements will be made by the time of the Vancouver Assembly.

We are grateful to the Turkish authorities for this invitation, and look forward to learning much from the seismological experience of our hosts. Unfortunately, it is not possible for IAGA to hold a joint Assembly with us, and they are likely to meet at Exeter, U.K. 23 July - 4 August 1989. We trust that on some future occasion we shall be able to arrange a joint IASPEI/IAGA Assembly.

VANCOUVER ASSEMBLY, 19-22 AUGUST 1987

Details of scientific sessions, both Union and Association have been given in previous Newsletters, and in Circulars issued by the Local Organising Committee. I remind you of the following specific activities:

IASPEI Plenary Sessions

These meetings are open to everyone, but if there is a need to vote, this is restricted to accredited national delegates. The provisional agendas are repeated below, but other matters may be discussed with the approval of the majority present.

First Plenary Session

Monday, 10 August 0930 Room Math 100

President's Welcome

Presentation of Accounts

Appointment of: Nominating Committee  
Resolutions Committee  
Audit Committee

Presidential Address. Prof. Z. Suzuki - "Seismology and Society"

This meeting will be followed at 1100 by an Association Lecture by Dr. R. D. Hyndman, Director of the Pacific Geoscience Center on "The Integrated Geoscience Lithoprobe Program across the Margin of South-western Canada".

Second Plenary Session

Wednesday 19 August 1930 Room Math 100

President's Report

Secretary-General's Report and Discharge of Accounts

Reports of Commissions and Review of Commission Structure

Relations with UN and other agencies

1989 Assembly

Future Activities

Adoption of Resolutions

Election of Officers

Appointment of Association Representatives

Other business

IASPEI Social Events

We plan two informal social events, at which everyone is welcome.

Tuesday, Aug 11, 1930 IASPEI Welcoming Party. IUGG Tent. Cash Bar.

Thursday, Aug 20, IASPEI Dinner, Faculty Club.  
1830 - Cash Bar  
1930 - Salmon Barbeque (C\$25)

IUGG Functions

The IUGG Opening Ceremony and Reception will be held in the Orpheum Theatre, Vancouver, on the afternoon of Monday, Aug 10.

The Closing Ceremony will be on the morning of Saturday, Aug 22. There will, in addition, be a General Meeting, open to all, on the evening of Monday, Aug 17.

### Elections

During the Vancouver Assembly, the Association's Officers for the next four years will be elected. Our statutes lay down a procedure for this, whereby at the First Plenary Session, a Nominating Committee is appointed, who seek to establish a group of candidates with wide coverage of national representation and scientific interest.

Those wishing to suggest candidates for particular posts should approach one of the Nominating Committee during the Assembly. The Nominating Committee make their proposals at the second Plenary Session, and a formal vote may be held if there is disagreement with their recommendations.

### SEISMOLOGY IN VIETNAM

A two year project on the Modernisation and Reinforcement of the Seismological Service in Vietnam is being undertaken by the United Nations Development Programme, with Unesco as the Executing Agency.

The project will help the Centre for Geophysical Research, Hanoi, to establish a ten-station network, with conventional short-period recording, and will also make provision for training.

The north part of Vietnam in particular has been subjected to major earthquakes and already this century three have occurred with magnitude 6.5 or more; in 1935, 1942 and most recently in 1983 (M<sub>L</sub> 6.7). These events have caused serious damage to structures and the economy. It is anticipated that the new network will greatly improve knowledge of the seismicity of the area, and result in improved estimates of seismic hazard.

### NEW FELLOWS

We congratulate the following three people who have close connections with IASPEI on their recent election as Fellows of the American Geophysical Union:-

Professor K Fuchs, Professor St. Mueller and Professor F D Stacey.

### CORRECT ADDRESS

Please ensure that mail addressed to me, or to the International Seismological Centre, always shows the words "International Seismological Centre" in full. There are other organisations with similar initials in the district, and mail addressed simply "ISC" is often delayed, or may even be lost.

## SECRETARY-GENERAL'S REPORT 1985-87

### Administration

The Association's Secretariat continues at the International Seismological Centre, which moved to new premises at Thatcham, near Newbury, Berkshire, England in October, 1986.

### Assemblies

IASPEI's 23rd General Assembly was held in Tokyo, 19-30 August, 1985. Proceedings of this Assembly have appeared in the IASPEI Newsletter, and in the IUGG Chronicle, with convenors' reports on technical sessions. The Assembly was attended by 651 delegates (297 from outside Japan) and 42 accompanying persons. Sixteen main symposia were held and many meetings of Commissions and Working Groups. Full proceedings of many sessions have been published in appropriate journals.

### Bureau

The Bureau met in Newbury in July 1986, with the main item on the agenda being the programme for the 24th General Assembly, to be held in Vancouver in August 1987.

### Finance

The Financial Report for 1983-86 is attached. A feature is the greatly increased income from Grants and Contracts, which is about 50% larger than that from regular sources. Unesco has remained the main source of this income, usually with contracts to support specific meetings or activities. The Association's expenditure is still spent mainly on supporting Assemblies, Symposia and Scientific Meetings (86%), with administrative costs being kept low. The 1983-86 period ended with a cash balance of US \$30,682.05.

In 1987, a new source of funding has been grants through ICSU from the US National Academy of Sciences to support activities related to Unesco's Natural Hazard Programme. \$32,000 has been received in 1987, to support activities associated with the Vancouver Assembly. This funding is in addition to that regularly received from ICSU, and may be continued in future years. A further source of future funding is revenue from publication of proceedings of IASPEI symposia, described under 'publication'.

For the first time in recent years, the Association has received grants from commercial organisations, to support specific activities. The Workshop on Processing Seismic Strong Motion Records before the Vancouver Assembly has been supported by Western States Clay Products Association and Kinematics Systems. Kinematics is also supporting the Working Group on Effects of Surface Geology on Seismic Motion.

### Commission Activities

The European Seismological Commission met in Kiel, FRG, in association with the European Geophysical Society in August 1986. From now on the EGS will meet each year about March or April, so future meetings of ESC will be on their own. The next is planned for Sofia, Bulgaria, in August 1988.

The International Heat Flow Commission organised its first meeting in South America with an International Meeting on Geothermics and Geothermal Energy in Brazil, 10-14 August 1986. This meeting was attended by 75 registrants from 21 countries, and was supported by ICSU, Unesco and the Commission for the Geological Map of the World, as well as South American organisations.

The Commission on Controlled Source Seismology continues to arrange specialised workshops, and in particular has held these before the Tokyo and Vancouver Assemblies.

Another pre-Assembly workshop at Vancouver is being arranged by the Commission on Strong-Motion Seismology.

An International Workshop on Seismic Anisotropy was sponsored by the Commission on Wave Propagation in Real Media, in May 1986, in the Soviet Union.

Various Sub-Commissions and Working Groups of the Commission on Practice have also met.

All commissions will hold scientific and business sessions at the Vancouver Assembly.

#### Federation of Digital Broad Band Seismograph Networks

IASPEI welcomes the establishment of this Federation, which was set up in Kiel, FRG, in August 1986, with Dr M J Berry as Chairman. The Federation has affiliation both with IASPEI and ICL and has been granted a status in IASPEI equivalent to that of a Commission.

#### Publication

It has long been a worry within IUGG that publication of proceedings of scientific meetings has brought no financial gain to the Union or its Associations. IASPEI has therefore entered into an agreement with Elsevier Science Publishers of Amsterdam, whereby they will have the first right to publish all IASPEI Symposia, as special issues of Elsevier regular journals, with convenors acting as guest editors. In return, IASPEI will receive 10% of the net sales receipts of those particular issues. The agreement is initially for the Vancouver Assembly only, but may be extended. These provisions do not apply to interdisciplinary Symposia, for which IUGG has made other arrangements.

The Sub-Commission on Algorithms, under Dr D J Doornbos is proceeding with the publication of a 'Handbook on Algorithms', with Academic Press, again with a financial advantage to IASPEI. The preparation of the Handbook, which has been supported by Unesco, is well advanced.

The preparation of a 'Manual of Seismogram Interpretation' by a Working Group under Dr. O Kulhanek, is a joint IASPEI/Unesco project, which is also well under way.

The IASPEI Newsletter, which is primarily intended to keep our officers and National Correspondents informed of Association affairs, continues to be issued as necessary, about two to three times a year.

The Association intends to establish a Publications Committee to co-ordinate IASPEI's publication policy, and to liaise with the IUGG Publication Committee. At present, Dr W H K Lee represents IASPEI on this Committee.

#### Relations with Unesco

The Association continues to work very closely with Unesco, and in particular with the Division of Earth Sciences. Between 1983 and 1986 Unesco gave us contracts worth \$71,500. As well as providing direct support to some IASPEI meetings, there is a new arrangement for funding activities as joint projects. Examples are the Manual of Seismogram Interpretation and the Working Group on African Seismology. We have also received support from Unesco Regional Offices for Science and Technology in Africa and in Latin America and the Caribbean Islands. We are grateful for this continuing support.



## IASPEI/Unesco/ICL Working Group on Seismological Recording and Earth Science Studies in Africa

This Working Group has been set up following a Resolution passed at our 1985 General Assembly. The first meeting was held in Paris in November 1986 under the Chairmanship of Dr H K Gupta. It was attended by twelve participants, including representatives of all seismological networks currently operating in Africa. As well as exploring ways of obtaining additional support for network development in Africa, the Group has improved co-operation among African seismologists. A further meeting will take place at the Vancouver Assembly.

## IASPEI/IAEE Working Group on Effects of Surface Geology on Seismic Motion

This joint group has been established following a resolution at the 1985 General Assembly, under the joint chairmanship of Dr B E Tucker and Dr W D Iwan. Its first meeting will take place at the Vancouver Assembly.

## Future Assemblies

Following the acceptance by IASPEI and IAGA to hold a joint Assembly in Oslo in 1989, both Associations were told early in 1987 that the meetings could not proceed if participants from South Africa attended. Under the ICSU rules on the Free Circulation of Scientists, there was no option but to seek an alternative site, and IASPEI has now accepted an invitation from Turkey to hold its 25th General Assembly at Istanbul in late August or early September 1989. It was impracticable for IAGA to meet with us, and they are planning an Assembly in Exeter in the United Kingdom early in August.

The 1991 General Assembly will be held with IUGG at a venue to be decided during the 1987 Vancouver Assembly. Among invitations recently received are ones from Austria and Netherlands; these are in addition to previously announced invitations from India and Turkey.

IASPEI has already received an invitation from the Royal Society of New Zealand to hold its 27th General Assembly at Wellington, early in 1994, in the southern summer. The final decision on the venue for this meeting will not be made until 1989.

## Obituary

The Association notes with sadness the deaths of the following colleagues known to have died since our 1983 Assembly, or whose death has not been reported previously.

W K Cloud	USA	24 Feb 84
H Honda	Japan	23 Aug 82
E R Lapwood	UK	11 Apr 84
E A Lubimova	USSR	22 Apr 85
K G McCann	USA	Nov 86
J Minami	Japan	17 May 84
H M Mooney	USA	Jan 87
C F Richter	USA	30 Sep 85
A Zatopek	Czechoslovakia	22 Jun 85

## Acknowledgement

The Association expresses its continuing thanks to the Director and staff of the International Seismological Centre, for providing accommodation for our secretariat, and administrative support.

## IASPEI ACCOUNTS 1983-86

The IASPEI Financial Report for 1983-86 is attached, with the following notes:

The main IASPEI account is an interest-earning dollar account operated in the UK. A small amount is also kept in an account in pounds sterling for local expenses. During Assemblies a local currency account is also operated; in this period such accounts were operated at Hamburg, Hyderabad and Tokyo.

The accounts are balanced at the end of each year, using exchange rates in force at the end of the year. Fluctuations in exchange rates during the year result in an "exchange adjustment" which is shown either as miscellaneous income or expenditure. In years when the dollar falls we have an accounting gain, and when it rises an accounting loss.

### INCOME

Grant & Contracts It is pleasing to note the increase in income from this source, which is more than twice that received in the previous period. Unesco has remained the major source of such contracts. Details are:-

#### Unesco Contracts

1983	General Assembly, Hamburg	10,000	
	Specific Workshops	24,000	
1984	Regional Assembly, Hyderabad	8,000	
	Specific Symposium	4,000	
1985	General Assembly, Tokyo	10,000	
	Specific Workshops	9,000	
1986	Meetings & publications costs	<u>6,500</u>	
Total	Unesco contracts	\$71,500	\$71,500

#### Additional sources were:

NOAA (for Historical Seismograms)	31,977.28
IUGG	11,000
ICSU	11,000
Commercial organisations	<u>1,000</u>
Total Grants and Contracts	\$126,477.28

#### Miscellaneous Income

Interest	6,388.57
Exchange adjustment	752.12
Sales and refunds	<u>639.19</u>
	<u>\$7,779.88</u>

### EXPENDITURE

The Association's administrative costs have been kept low during this period, and are only about 9% of total expenditure. More than \$170,000 or 86% of the Association's expenditure has been on Assemblies, Symposia and Scientific Meetings. Miscellaneous expenditure (\$1053.25) represents an exchange adjustment for the year 1984, during which the value of the dollar rose sharply.

The sum of \$5,359.87 shown as being transferred from the Grants Account to the IUGG Account, represents money paid in 1982, and recovered in 1983 from grant-giving agencies. The Association finished the period with a cash balance of US \$30,682.05.

INTERNATIONAL ASSOCIATION OF SEISMOLOGY AND PHYSICS OF THE EARTH'S INTERIOR

Financial Report for the Period 1983 - 1986

Amounts in US Dollars

RECEIPTS	IUGG	GRANTS & CONTRACTS	EXPENDITURE	IUGG	GRANTS & CONTRACTS
15 IUGG ALLOCATION	74 800.00		11 ADMINISTRATION		
3 OTHER GRANTS		23 000.00	11.1 Personnel	2 847.53	
4 CONTRACTS WITH UNESCO etc		103 477.28	11.3 Supplies & Equipment	1 375.05	
5 SALE OF PUBLICATIONS	178.00		11.4 Communications	3 887.63	277.05
6 MISCELLANEOUS	7 779.88		11.5 Travel	8 647.33	500.00
			11.6 Miscellaneous	1 034.88	
7 TOTAL RECEIPTS	82 757.88	126 477.28	12 PUBLICATIONS		
8 CASH IN BANK 1 Jan 1983	20 102.88		12.2 Proceedings of Symposia	7.20	6 000.00
FROM GRANTS ACCOUNT	5 359.87		12.4 Others	462.40	2 000.00
			13 ASSEMBLIES		
10 TOTAL	108 220.63	126 477.28	13.1 Organization	898.19	
			13.2 Travel	50 414.97	38 000.00
			14 SYMPOSIA & MEETINGS		
			14.1 Organization	1 870.41	5 000.00
			14.2 Travel	6 039.74	68 340.36
			18 MISCELLANEOUS	1 053.25	
			19 TOTAL EXPENDITURE	78 538.58	120 117.41
			20 CASH IN BANK 31 Dec 1986	29 682.05	1 000.00
			TO IUGG ACCOUNT		5 359.87
			22 TOTAL	108 220.63	126 477.28
		1 Jan 1983			31 Dec 1986
23 ACCOUNTS RECEIVABLE		5 359.87			
24 ACCOUNTS PAYABLE					1 038.24



# INTERNATIONAL ASSOCIATION OF SEISMOLOGY AND PHYSICS OF THE EARTH'S INTERIOR

## Estimate of Income and Expenditure for the Period 1987-1990

Amounts in US Dollars

RECEIPTS	IUGG	GRANTS & CONTRACTS	EXPENDITURES	IUGG	GRANTS & CONTRACTS
15 IUGG ALLOCATION	80 000.00		11 ADMINISTRATION	20 000.00	
3 OTHER GRANTS		90 000.00	12 PUBLICATIONS	1 000.00	
4 CONTRACTS WITH UNESCO etc		80 000.00	13 ASSEMBLIES	60 000.00	70 000.00
5 SALE OF PUBLICATIONS	6 000.00		14 SYMPOSIA & MEETINGS	17 000.00	101 000.00
6 MISCELLANEOUS (Interest etc)	10 000.00		18 MISCELLANEOUS	2 000.00	
7 TOTAL RECEIPTS	96 000.00	170 000.00	19 TOTAL EXPENDITURE	100 000.00	171 000.00
8 CASH IN BANK 1 Jan 1987	29 682 05	1 000.00	20 ESTIMATED CASH IN BANK 31 Dec 1990	25 682.05	
10 TOTAL	125 682.05	171 000.00		125 682.05	171 000.00

### FORTHCOMING MEETINGS

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

- 1987 Aug 9-22 XIX GENERAL ASSEMBLY, IUGG  
Vancouver, BC., Canada  
IUGG Assembly, C/o Venue West, 801-750 Jervis Street,  
Vancouver BC, V6E 2A9 CANADA
- 1987 Aug 24-28 FIFTH INTERNATIONAL SYMPOSIUM ON ANTARCTIC EARTH SCIENCES  
Cambridge, UK  
Dr M R A Thomson, British Antarctic Survey,  
Madingley Road, Cambridge CB3 0ET, UK
- 1987 Sep 14-16 1987 INTERNATIONAL CONFERENCE ON EARTHQUAKE PRECURSORS  
Beijing, China  
Prof. Lu Dajing, Applied Physics and Seismology Lab.,  
Chinese Academy of Sciences, Box 603, Beijing, CHINA
- 1988 Mar 14-18 INDUCED SEISMICITY AND ASSOCIATED PHENOMENA  
Liblice, Czechoslovakia  
Dr D Prochazhova, Geophysical Institute, Bocni II  
14131 Prague 4, CZECHOSLOVAKIA
- 1988 May 9-13 CAUSES AND EFFECTS OF EARTHQUAKES AT PASSIVE MARGINS AND  
IN AREAS WITH POSTGLACIAL REBOUND ON BOTH SIDES OF THE  
NORTH ATLANTIC  
Copenhagen, Denmark  
NATO Advanced Research Workshop  
Dr S Gregersen, Geodetic Institute, Gamlehave Alle 22  
Charlottenlund, DENMARK
- 1988 Jul 6-8 SEISMIC PROBING OF THE CONTINENTS AND THEIR MARGINS  
Canberra, Australia  
Dr J H Leven, BMR, Box 378, Canberra ACT 2601  
AUSTRALIA
- 1988 Aug 2-9 NINTH WORLD CONFERENCE ON EARTHQUAKE ENGINEERING  
Tokyo/Kyoto, Japan  
9WCEE, Japan Convention Services, Nippon Press Center,  
2-1, 2 chome, Uchisaiwai-cho, Chiyoda-ku, Tokyo 100,  
JAPAN
- 1988 Aug GENERAL ASSEMBLY, EUROPEAN SEISMOLOGICAL COMMISSION  
Sofia, Bulgaria
- 1989 Jul 9-19 28th INTERNATIONAL GEOLOGICAL CONGRESS  
Washington, DC, USA  
IGS, P.O. Box 1001  
Herndon, VA., 22070, USA
- 1989 Aug-Sep 25th GENERAL ASSEMBLY, IASPEI  
Istanbul, TURKEY
- 1989 Sep 4-9 4th INTERNATIONAL SYMPOSIUM ON ANALYSIS OF SEISMICITY  
AND SEISMIC RISK  
Bechyne, Czechoslovakia  
Dr Z Schenkova, Geophysical Institute, Bocni II  
14131 Prague 4, CZECHOSLOVAKIA