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

PRESIDENT Prof. Stephan Mueller Institut fuer Geophysik ETH - Hoenggerberg CH-8093 Zürich SWITZERLAND FIRST VICE-PRESIDENT Prof. A. V. Nikolaev Institute of Physics of the Earth Academy of Sciences of USSR Bolshaya Gruzinskaya, 10 Moscow 123242 U.S.S.R. SECOND VICE-PRESIDENT Dr. E.R. Engdahl U.S. Geological Survey Denver Federal Center P.O. Box 25046, Mail Stop 967 Denver, CO. 80225 U.S.A SECRETARY-GENERAL

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NEWSLETTER No. 22 AUGUST 1988

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

You will see from this Newsletter that arrangements are progressing well for our General Assembly in Istanbul next year, and that there is also the exciting possibility of an additional Regional Assembly jointly sponsored by IASPEI, Unesco and ICL, being held in Africa in 1990.

Various meetings of interest to IASPEI are taking place about now, including the World Conference on Earthquake Engineering in Japan, and the General Assembly of the European Seismological Commission in Bulgaria. I hope to have reports of these meetings in the next Newsletter.

Robin Dolams

R. D. Adams Secretary-General

IUGG REVIEW

IASPEI was asked at short notice to take part in a review by the IUGG Bureau at Copenhagen in May. This is part of a programme whereby all Associations of the Union discuss their activities with the IUGG Bureau, to improve the Union's knowledge of the activities and needs of the Associations, and to give the Associations an opportunity to discuss scientific policy with the Union's Bureau.

Our President and Secretary-General spent an afternoon with the Bureau, explaining IASPEI's history, structure, recent activities and plans for the future. The Bureau had no major comments or criticism and seemed well satisfied with IASPEI affairs. We discussed IASPEI's interest in the International Decade for Natural Disaster Reduction, and the suggestion came from the Bureau that IASPEI could take a major responsibility for IUGG involvement in the Decade. Another area of discussion concerned the position of Geochemistry in the Union, following the disbanding of the Union Committee on Geochemistry some years ago. The chemistry of the outer parts of the Earth, and in particular the chemistry of volcanic rocks are well catered for by IAVCEI, but it seems that those interested in the chemistry of the deeper parts of the Earth may have more in common with IASPEI interests.

25th GENERAL ASSEMBLY OF IASPEI, ISTANBUL, TURKEY 21 AUGUST - 1 SEPTEMBER 1989

The First Circular has now been issued, and those who wish to receive it together with further information should contact:

IASPEI Conference Organization Committee Bayindirlik ve Iskan Bakanligi Necatibey Caddesi 63 Ankara, Turkey Telex: 44041 DAE TR

The Second Circular to be issued later this year, will include the final call for papers, and full details of the scientific sessions. We expect that abstracts will have to be submitted to convenors by mid-March 1989. This and all other details given here, are subject to confirmation in the Second Circular.

Registration fee:

Delegates US \$150 before 30 April 1989 \$200 later Accompanying persons \$75 before 30 April 1989 \$125 later Students \$75

The programme of main scientific sessions has now been decided, with dates and convenors. The principal convenors are named first, and their addresses given. Sessions S3, S5 and W2 are jointly sponsored by ICL.

Symposia

21(pm) Aug **S1** Scientific Horizons in IASPEI St. Mueller (Switzerland) **S2** Detailed Structure and Processes of Active Margins 25 Aug H. Shimamura (Japan), A. Hirn (France). J. Makris (FRG) **S**3 The Earth's Deep Interior and Dynamics of 31 Aug, 1 Sep Subducting Slabs - (Joint with ICL) S. Karato (USA), D.J. Doornbos (Norway), T.H. Jordan (USA), W.R. Peltier (Canada) **S**4 Geodynamical Processes: Quantitative Models and 22, 23 (am) Aug New Geophysical Constraints U.R. Christensen (FRG), L. Fleitout (France), K.P. Furlong (USA) 28, 29(am) Aug **S**5 Physical & Petrological Nature of Discontinuities in the Lithosphere - (Joint with ICL) W. D. Mooney, (USA), D.J. Blundell (UK), J. Hall (Canada), N.V. Pavlenkova (USSR), S.V. Sobolev (USS) **S6** Seismotectonics of the Alpine Himalayan Belt and 23(pm), 24 Aug Other Major Orogenies A.M.C. Sengor (Turkey), V. Babuska (Czechoslovakia), M. Barazangi (USA), N. Pavoni

(Switzerland)

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|-----------|---|-------------------|--|--|--|--|
| S7 | Modelling the Earthquake Source C.H. Scholz (USA), T. Mikumo (Japan), R. Teisseyre (Poland) | 24 Aug | | | | |
| S8 | Determination of Source Parameters Using Digital Seismograms S.A. Sipkin (USA), D. Seidl (FRG) | 22, 23 Aūĝ | | | | |
| S9 | Earthquake Prediction & Premonitory Phenomena M. Wyss (USA), S. Crampin (UK), A.M. Isikara (Turkey), S-x Xu (China) | 28, 29 Aug | | | | |
| S10 | Earthquake Hazard Assessment in the Interplate Setting R.K. McGuire (USA), P. Gulkan (Turkey), V. Schenk (Czechoslovakia) | 30 Aug | | | | |
| S11 | Estimation of Site Specific Ground Motion for Large Earthquakes B. A. Bolt (USA), M. Erdik (Turkey), L-1 Xie (China) | 25 Aug | | | | |
| S12 | Computation and Interpretation of Seismic Wavefields in 2-D and 3-D Structures B.L.N. Kennett (Australia), N. Canitez (Turkey), L.P. Vinnik (USSR) | 30, 31(am) Aug | | | | |
| S13 | Scattering & Attenuation of Seismic Waves K. Aki (USA), E.S. Husebye (Norway), A.V. Nikolaev (USSR), H. Sato (Japan), R.S. Wu (USA) | 31(pm) Aug, 1 Sep | | | | |
| S14 | Forward and Inverse Techniques in Geothermal Modelling V. Cermak (Czechoslovakia), H.J. Sass (USA) | 25, 28(am) Aug | | | | |
| S15 | Correlation of Geothermal and Other Parameters D.S. Chapman (USA), G. Ranalli (Canada), S. Sacks (USA) | 28(pm), 29 Aug | | | | |
| Workshops | | | | | | |
| W1 | Travel Time Tables & Earthquake Location Problems E.R. Engdahl (USA), B.L.N. Kennett (Australia), N.V. Kondorskaya (USSR) | 28 Aug | | | | |
| W2 | Regional Data Centres: State of the Art - (Joint with ICL) J. Bonnin (France), A. Gvishiani (USSR) E.S. Husebye (Norway) | 24(pm) Aug | | | | |
| W3 | Instrumentation and Data Analysis in Developing Countries S.E. Pirhonen (Finland), R.D. Adams (UK) R. Ates (Turkey) | 25 Aug | | | | |
| W4 | Comprehensive Mapping of the Lithosphere V.V. Beloussov (USSR), E. Hurtig (GDR) | 30(am) Aug | | | | |
| | In addition IASPEI Commissions are expected to mee | t and may be | | | | |

In addition, IASPEI Commissions are expected to meet and may be arranging additional workshops and working group meetings. Other groups such as the International Seismological Centre Governing Council and Executive Committee, and the Federation of Digital Broadband Seismograph Networks will also take advantage of the Assembly to hold meetings.

| | Principal Convenors, Istanbul Ass |
|----|---|
| 1. | Prof St Mueller Institut fuer Geophysik |
| | ETH Hoenggerberg |
| | CH 8093 Zurich |
| | Switzerland |
| 2. | Prof H Shimamura |
| | Laboratories for Ocean Bottom Seismology |
| | Hokkaido University |
| | Sapporo 060 |
| | Japan |
| | ······ |
| 3. | |
| | Ocean Research Institute |
| | University of Tokyo |
| | 1-15-1 Minamidai |
| | Tokyo 164 |
| | Japan |
| 4. | Dr U R Christensen |
| | Max Planck Inst. fuer Chemie |
| | Staarstr. 23, Abt. Geochemie |
| | D 6500 Mainz |
| | Federal Republic of Germany |
| | |
| 5. | Dr W D Mooney |
| | U S Geological Survey |
| | 345 Middlefield Road |
| | Menlo Park, CA 94075 |
| | USA |

- 6. Dr A M C Sengor Istanbul Technical University Faculty of Mines, Dept. of Geology Tesvikiye 80394 Istanbul Turkey
- 7. Prof C H Scholz Lamont-Doherty Geological Observatory Palisades, NY 10964 U S A
- 8. Dr S A Sipkin
 U S Geological Survey
 Denver Federal Center
 P O Box 25046, Mail stop 967
 Denver, CO 80225
 U S A
- 9. Dr M Wyss CIRES University of Colorado Campus Box 449 Boulder, CO 80309 U S A

10. Dr R K McGuire Risk Engineering Inc 5255 Pine Ridge Road Golden CO 80403 U S A

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- 11. Prof B A Bolt Dept of Geology & Geophysics University of California Berkeley, CA 94720 U S A
- 12. Prof B L N Kennett Res. School of Earth Sciences Australian National University GPO Box 4 Canberra ACT 2601 Australia
- 13. Prof K Aki Dept of Geological Sciences Univ. of Southern California Los Angeles, CA 90089 U S A
- 14. Dr V Cermak Geophysical Institute Bocni II, cp 1401 14131 Prague 4 - Sporilov Czechoslovakia
- 15. Dr D S Chapman Dept of Geology & Geophysics University of Utah Salt Lake City, UT 84112 U S A
- W1. Dr E R Engdahl U S Geological Survey Denver Federal Center PO Box 25046, Mail Stop 967 Denver, CO 80225 U S A
- W2. Prof J Bonnin CSEM 5 rue Rene Descartes F 67084 Strasbourg France
- W3. Dr S Pirhonen Institute of Seismology University of Helsinki Et. Hesperianku 4 SF 00100 Helsinki Finland
- W4. Prof V V Beloussov Soviet Geophysical Committee Molodezhnaya 3 Moscow 117 296 U S S R

IASPEI COMMISSIONS

Membership of the following IASPEI Commissions has now been established by their respective Chairmen:

Commission on Controlled Source Seismology

H Shimamura (Japan) Chairman, N Pavlenkova (USSR) Vice-Chairman, W D Mooney (USA) Secretary, J Ansorge (Switzerland), S Asano (Japan), E Banda (Spain), D J Blundell (UK), L W Braile (USA), D M Finlayson (Australia), A Ginzburg (Israel), S Gregersen (Denmark), A Guterch (Poland), A Hirn (France), E Hurtig (GDR), A W B Jacob (Ireland), K L Kaila (India), C E Lund (Sweden), U Luosto (Finland), R F Mereu (Canada), F A Nava (Mexico), R. Nicolich (Italy), L C Ocola (Peru), K Posgay (Hungary), C Prodehl (FRG), I Psencik (Czechoslovakia), M A Sellevoll (Norway), S V Sobolev (USSR), R-S Zeng (China).

Commission on Geodynamics and Tectonics

C. Froidevaux (France) Chairman, V. Babuska (Czechoslovakia), M Barazangi (USA), U Christensen (FRG), L Cserepes (Hungary), L Fleitout (France), K Furlong (USA), L-S Gao (China), D Giardini (Italy), G T Jarvis (Canada), K Khattri (India), M Kogan (USSR), K Lambeck (Australia), I Nakanishi (Japan), P Olson (USA), R N Singh (India), R Wang (China), M Wortel (Netherlands), Y Zorin (USSR).

International Heat Flow Commission

S Uyeda (Japan) Chairman, H N Pollack (USA) Vice-Chairman, A E Beck (Canada) Past Chairman, V Cermak (Czechoslovakia) Secretary, V M Hamza (Brazil) Vice-Secretary, R G Allis (New Zealand), N Balling (Denmark), G Buntebarth (FRG), C Clauser (FRG), F Horvath (Hungary), E Hurtig (GDR), T Lewis (Canada), F Lucazeau (France), J H Sass (USA), E A Suetnova (USSR), T-x Tan (China), I M Thamrin (Indonesia), J-y Wang (China), Y Yamand (Japan), V I Zui (USSR).

Commission on Physical Properties of Materials of the Earth's Interior

T Yagi (Japan) Chairman, Y Gueguen (France) Co-Chairman, V Babuska (Czechoslovakia), R Boehler (FRG), S Franck (GDR), A Kadik (USSR), S Karato (Japan), J Leliwa-Kopystyaski (Poland), F Mulargia (Italy), W R Peltier (Canada), H A Spetzler (USA), D J Weidner (USA), G Zhou (China)

Commission on Practice

E R Engdahl (USA) Chairman, N V Kondorskaya (USSR) Vice=Chairman, J Vanek (Czechoslovakia) Secretary, S S Alexander (USA), P W Basham (Canada), J Bonnin (France), Y Chen (China), M A Chinnery (USA), L V Christoskov (Bulgaria), D Denham (Australia), V Gusiakov (USSR), E G Kausel (Chile), R M Kebeasy (Egypt), O Kulhanek (Sweden), W H K Lee (USA), S E Pirhonen (Finland), D Seidl (FRG), W D Smith (New Zealand), H N Srivastava (India), K Tsumura (Japan).

Commission on Seismological Theory

B L N Kennett (Australia) Chairman, F Bonafede (Italy), V Cerveny (Czechoslovakia), C H Chapman (UK), V Cormier (USA), F A Dahlen (USA), D J Doornbos (Norway), A Gabrielov (USSR), R Madariaga (France), A G Marchuk (USSR), G Nolet (Netherlands), M Vishik (USSR), J H Woodhouse (USA).

Commission on Strong Motion Seismology

B A Bolt (USA) Chairman, N N Ambraseys (UK), D M Boore (USA), M Erkik (Turkey), V M Graizer (USSR), C S Oliveira (Portugal), G F Panza (Italy), V Schenk (Czechoslovakia), E Shima (Japan), D Weichert (Canada) L-I Xie (China)

Commission on Earthquake Hazard and Prediction

M J Berry (Canada) Chairman, S-x Xu (China) Vice-Chairman, K Hamada (Japan), W D Iwan (USA), J Lomnitz-Adler (Mexico), R K McGuire (USA), V Schenk (Czechoslovakia), C H Scholz (USA), G A Sobolev (USSR), K V Steinbrugge (USA), B E Tucker (USA), M Wyss (USA), C Yong (China), J Zschau (FRG) - 6 -

VANCOUVER PROCEEDINGS

The Comptes Rendus of the Vancouver General Assembly of IUGG have now been published in a very comprehensive volume, which gives details of all Union and Association activities, with full reports of business meetings, lists of scientific sessions and resolutions. In addition, there are sections giving the statutes of Union and Associations, together with lists of participants at the Assembly.

The local organisers, under the lead of Professor R.D. Russell, are to be congratulated on producing this full report so quickly.

EFFECTS OF SURFACE GEOLOGY ON SEISMIC MOTION

The preliminary proceedings of this Workshop, held at the Vancouver Assembly on 12-13 August 1987, have been produced as Technical Report 88-1, of the Earthquake Shaking Assessment Unit of the California Division of Mines and Geology, Sacramento. The report is prepared by Charles R. Real, and describes the workshop arranged jointly for IASPEI and the International Association of Earthquake Engineers (IAEE) by B.E. Tucker and W.D. Iwan.

The volume contains seven extensive papers from contributors in the United States, Canada, China, Japan and Taiwan. The group is holding a further workshop in conjunction with the World Earthquake Engineering Conference in Japan in August 1988.

REGIONAL SEISMOLOGICAL ASSEMBLY, 1990

It now seems increasingly likely that there will be a joint IASPEI/ Unesco/ICL Regional Seismological Assembly, held in Nairobi in mid-September 1990. Details will be discussed at a meeting of the Working Group on Seismological Recording and Earth Science Studies in the African Continent, which will be held in Lusaka in September 1988, and the Assembly will then have to be formally approved by the three sponsoring bodies. We hope the programme will be able to include all aspects of seismological, tectonic and related studies relevant to Africa, and will attract many participants both from within and outside Africa.

HONOURS

Among Fellows of the American Geophysical Union elected this year are our Executive Committee Member, Professor B.L.N. Kennet of the Australian National University, and Professor J.R. Rice of Harvard University, who has also been active in IASPEI affairs.

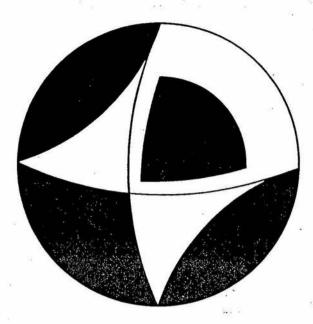
We congratulate Professor V.I. Keilis-Borok, former Vice- President of IASPEI, and now President of IUGG, on his election to the Academy of Sciences of USSR.

IASPEI SYMBOL

The Bureau has been considering a suitable symbol or 'logo' for IASPEI, particularly in order to have some identifying symbol on publications and reprints of our Assembly proceedings.

At present we favour this design which is closely modelled on the IUGG symbol. In the coloured version, the upper part would be green and the lower blue, but the symbol may also be used in black and white as here.

Although it would be nice to include more seismological detail, we have deliberately kept the symbol simple, so that it may be reduced in size for letterheads and other purposes.



INTERNATIONAL DECADE FOR NATURAL DISASTER REDUCTION

The United Nations has appointed an International Ad Hoc Group of Experts for the IDNDR, which held its first meeting in Geneva, early in July. The Group has broad representation geographically, and by discipline, and includes among its 24 members the following earth scientists and earthquake engineers: C Allegre (France), A S Arya (India), D Bensari (Morocco), J C I Dooge (Ireland), A A Giesecke (Peru), V. Karnik (Czechoslovakia), V I Keilis-Borok (USSR), R L Kintinar (Philippines), J Petrovski (Yugoslavia), E Rosenbleuth (Mexico) and L-1 Xie (China).

The first meeting was chaired by Professor Frank Press, on whose initiative the decade was established. The Group's task is to prepare recommendations for the Secretary-General of UN on the operation of the Decade. Further meetings of the Group will be open to interested observers, and we hope that IASPEI will be represented, either directly or through IUGG.

A NOTABLE CENTENARY

On 13 May 1988, Miss Inge Lehmann celebrated her 100th birthday. She was present at a small gathering in Copenhagen where an address was given by Professor V. I. Keilis-Borok, not only in his capacity as an eminent seismologist, but as President of IUGG. Our Association was represented by our President, Professor St. Mueller, who also attended a small dinner party for Miss Lehmann that evening. Formal greetings from IASPEI were conveyed to Miss Lehmann, and we have received a letter of thanks from her. From all reports, it seems that Miss Lehmann enjoyed the occasion, and still takes a lively interest in seismological matters, as befits the discoverer of the Earth's inner core.

FORTHCOMING MEETINGS

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| | distantial international distantial distantia | Contraction of the local division of the loc | and the second se | |
|-----------|---|--|---|---|
| | | | | s a selection of forthcoming meetings in the field of Association: |
| | 1988 | 0ct | 3-8 | WORKSHOP ON VOLCANIC SEISMOLOGY Capri, Italy Prof. Paolo Gasparino, Dipartimento di Geofisica and Vulcanologia, Universita di Napoli, 80138 Naples, ITALY |
| €4." ≪ | 1988 | Nov | 14 | EXPLORATION AND DEVELOPMENT OF GEOTHERMAL RESOURCES Kumamotu and Beppu, Japan Geothermal Research Society, c/o Geological Survey of Japan, 1-1-3 Higashi, Yatabe, Tsukuba, Ibaraki 305, JAPAN |
| | 1988 | Nov | 14-18 | SEMINAR ON THE PREDICTION OF EARTHQUAKES Lisbon, Portugal Economic Commission for Europe Laboratorio Nacional de Engenharia Civil, Av. do Brasil, 101, 1799 Lisbon Codex, PORTUGAL |
| | 1989 | Feb | 1-3 | STRUCTURE AND DYNAMICS OF THE INDIAN LITHOSPHERE Hyderabad, India Dr. R.N. Singh, NGRI, Hyderabad 500007, INDIA |
| | 1989 | Mar Apr | 27 - 2 | STRESS, STRENGTH AND VISCOSITY IN THE LITHOSPHERE Potsdam, German Democratic Republic Prof. E. Hurtig, ZIPE, Potsdam, DDR 1561, GDR |
| | 1989 | Apr | 13-14 | SEISMICITY, SEISMOTECTONIC AND SEISMIC RISK OF THE IBERO-MAGHREBIAN REGION Madrid, Spain Catedra de Geofisica, Universidad Complutense, 28040 Madrid SPAIN |
| 1 | 1989 | Ju1 | 9-19 | 28th INTERNATIONAL GEOLOGICAL CONGRESS Washington, DC, USA IGC, P.O. Box 1001, Herndon, Va., 22070, USA |
| | 1989 | Aug | 2-4 | PREPAREDNESS, MITIGATION AND MANAGMENT OF NATURAL DISASTERS Roorkee, India Dr R C Agrawal, Dept. of Earthquake Engineering, University of Roorkee, Roorkee 247 667, INDIA |
| | 1989 | Aug Sep | 21 - 1 | 25th GENERAL ASSEMBLY, IASPEI Istanbul, Turkey IASPEI Conference Organization Committee, Bayindirlik ve Iskan Bakanligi, Necatibey Caddesi 63, Ankara, TURKEY |
| 10 | 1989 | Sep | 4-9 | <pre>4th INTERNATIONAL SYMPOSIUM ON ANALYSIS OF SEISMICITY AND SEISMIC RISK Bechyne, Czechoslovakia Dr. Z. Schenkova, Geophysical Institute, Bocni II, 14131 Prague 4, CZECHOSLOVAKIA</pre> |
| | 1991 | Aug | 11-24 | XX GENERAL ASSEMBLY, IUGG Vienna, Austria |
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