

**Bulletins of the  
International  
Mathematical Union**



**Bulletin of the IMU, No. 30 (1989)**

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**Bulletin of the International Mathematical Union**

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# **IMU**

**BULLETIN  
OF THE  
INTERNATIONAL MATHEMATICAL UNION**

**No. 30  
October 1989**

**SECRETARIAT**

**Department of Mathematics  
University of Helsinki  
Hallituskatu 15  
SF-00100 Helsinki  
Finland**

## List of abbreviations

IMU	International Mathematical Union
- ICMI	International Commission on Mathematical Instruction
- CDE	Commission on Development and Exchange
- ICHM	(Joint) International Commission on the History of Mathematics
IUHPS	International Union of the History and Philosophy of Science
ICSU	International Council of Scientific Unions
- COSPAR	Committee on Space Research
- COSTED	Committee on Science and Technology in Developing Countries
- CTS	Committee on the Teaching of Science

**IMU**

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**No. 30  
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**Department of Mathematics  
University of Helsinki  
Hallituskatu 15  
SF-00100 Helsinki  
Finland**

**International Mathematical Union**

**Executive Committee**

January 1, 1987–December 31, 1990

President:	Professor Ludwig D. Faddeev
Vice-Presidents:	Professor Walter Feit Professor Lars Hörmander
Secretary:	Professor Olli Lehto
Members:	Professor John Coates Professor Hikosaburo Komatsu Professor László Lovász Professor Jacob Palis Jr. Professor C.S. Seshadri
Past President:	Professor Jürgen Moser

## IMU General Assembly

The following letter has been sent to all Adhering Organizations of IMU:

1. The eleventh General Assembly of IMU will be held on August 18 to 20, 1990, at the International Conference Center in Kobe, Japan.

2. According to the Statutes of the Union, each Adhering Organization "shall appoint and certify to the Secretary of the Union a delegation which shall have the number of votes corresponding to the Group in which it adheres, as follows:

Group:	I	II	III	IV	V
Number of votes:	1	2	3	4	5

provided that the number of delegates shall not exceed the corresponding number of votes. Any Adhering Organization which desires to ensure its full quota of representatives at meetings of the General Assembly by the appointment of alternates for its regularly named delegates may do so, provided that no such alternate shall be permitted to participate in the work of the General Assembly until he has been duly certified to the Secretary of the Union as assuming the powers and duties of the delegate he has been designated to replace. No person shall be a member of the delegation of more than one country. Voting by the General Assembly shall be by delegations, provided that each delegation shall be free to cast the votes to which it is entitled either as a unit or divided in such a manner as it may determine."

3. You are hereby requested to designate the delegation of your country. Please enter on the accompanying form the names of your delegates, with alternates if any, together with their addresses and return this form to the Secretariat by March 1, 1990.

4. Enclosed you will also find a hotel form for your delegate(s) and other material from Japan which should be given to the delegates to be filled and sent to Japan, as requested.

5. As provided for in the By-Laws of the Union, Adhering Organizations may propose business to be transacted at the General Assembly. Such proposals shall reach the Secretary at least four months before the meeting, i.e., not later than March 31, preferably before March 1, 1990.

The information material from Japan will be sent upon request to members who have not received it.

**International Mathematical Union**

**General Assembly**

Kobe, Japan, August 18–20, 1989

**Appointment of Delegations**

You are hereby requested to designate the delegation of your country.

COUNTRY: ..... GROUP OF ADHERENCE: .....

ADHERING ORGANIZATION: .....

.....

**DELEGATES:**

1. Name: .....

Address: .....

.....

2. Name: .....

Address: .....

.....

3. Name: .....

Address: .....

.....

4. Name: .....

Address: .....

.....

5. Name: .....

Address: .....

.....

**ALTERNATES:**

1. Name: .....

Address: .....

.....

2. Name: .....

Address: .....

.....

This form should be filled in capital letters and should be returned, not later than  
March 1, 1990, to

IMU Secretariat  
Department of Mathematics  
University of Helsinki  
Hallituskatu 15  
SF-00100 Helsinki, Finland

## Procedure for the Election of the Executive Committee of IMU

1986

1. Not less than a year before the meeting of the G.A., the E.C. shall request proposals for the membership of the E.C. from the Committees for Mathematics, to be considered before the meeting of the E.C. in the spring before the Assembly.

The E.C. shall then draw up its own list of nominations and this shall be made known to delegates not later than two months before the General Assembly. The E.C. shall make certain that the candidate is willing to serve if elected.

2. Further nominations may be made in writing before the commencement of business on the second day of the meeting provided that they are signed by at least ten delegates and contain a statement by the candidate that he or she is willing to serve if elected.

Each nomination shall be for a specific office: President, Secretary, Vice-President or Member at large of the E.C.

3. On the first day of the meeting, the General Assembly shall appoint a Nominating Committee consisting of:
  - (a) the President (chairman),
  - (b) all Past Presidents who are present (ex-officio),
  - (c) eight further delegates.

Election to (c) shall be from names either proposed by the President or proposed and seconded from the floor; and shall be by show of hands unless the meeting decides otherwise.

4. The Nominating Committee shall propose a slate from the nominations made under (1) and (2) above and shall make it known to the meeting.

No person shall be a candidate for more than one office.

5. The General Assembly shall then elect the new Executive by written ballots. The voting slips shall contain all the names nominated under (1) and (2) (unless a candidate withdraws), but no others.

A vote shall be invalid if more names are marked in any category than the number of places to be filled (i.e., one each for President and Secretary, two for Vice-Presidents and five for Members at large).

A candidate for President or Secretary may be elected only if unopposed or if he or she obtains a majority of the votes cast. If the first ballot is indecisive, there shall be a second ballot.

In the ballots for the Vice-Presidents and Members at large, the two or five candidates respectively who obtain the largest numbers of votes shall be elected.

In the event of a tie, the President shall decide.



Note: Statute 9 provides (inter alia) that: "each delegation shall be free to cast the votes to which it is entitled either as a unit or divided in such a manner as it may determine".

### **Procedure for the Election of the Executive Committee of ICMI**

The rules for the election of the Executive Committee of ICMI are similar to those for the election of the Executive Committee of IMU with the same Nominating Committee.

The E.C. of IMU shall request proposals for the membership of the E.C. of ICMI from the Committees for Mathematics and will conduct extensive consultations with the existing Executive Committee of ICMI before proposing slates to the Nominating Committee.

No person can be a candidate for more than one office.

### **Procedure for the Election of CDE**

The rules for the election of the Commission of Development and Exchange are similar to those for the election of the Executive Committees of IMU and ICMI with the same Nominating Committee.

The E.C. of IMU shall request proposals for the membership of CDE from the Committees for Mathematics and will conduct extensive consultations with the existing CDE before proposing slates to the Nominating Committee.

No person can be a candidate for more than one office.

## **International Commission on Mathematical Instruction**

### **Terms of Reference**

1986

1. The Commission shall consist of
  - (a) the members of an Executive Committee as specified in (2) below, elected by IMU, and
  - (b) one delegate from each member nation as specified in (4) below,
2. The Executive Committee consists of four officers, namely, President, two Vice-Presidents, and Secretary, and of three further members. Furthermore, the outgoing President of ICMI, the President and the Secretary of IMU, and the representative of IMU at CTS (ICSU) are members ex-officio of the E.C.
3. In all other respects the Commission shall make its own decisions as to its internal organization and rules of procedure.
4. Any Adhering Organization wishing to support or encourage the work of the Commission may create, or recognize, in agreement with its Committee

for Mathematics, a Sub-Commission for ICMI to maintain liaison with the Commission in all matters pertinent to its affairs. The Adhering Organization in question shall designate one member of the said Sub-Commission, if created, to serve as a delegated member of ICMI as mentioned in (1).

5. The Commission shall be charged with the conduct of the activities of IMU, bearing on mathematical or scientific education and shall take the initiative in inaugurating appropriate programmes designed to further the sound development of mathematical education at all levels, and to secure public appreciation of its importance. In the pursuit of this objective, the Commission shall cooperate, to the extent it considers desirable with effective regional groups which may be formed spontaneously, within, or outside, its own structure.
6. The Commission may, with the approval of the Executive Committee of IMU, coopt, as members of ICMI, suitable chosen representatives of non-IMU countries, on an individual basis.
7. The budget of the Commission shall be submitted to the Executive Committee of IMU and the General Assembly, for approval, at such times as may be determined by agreement between the Commission and the Executive Committee of IMU.
8. The Commission shall file an annual report of its activities with the Executive Committee of IMU, and shall file a quadrennial report at each regular meeting of the General Assembly.

## Commission on Development and Exchange

### Terms of Reference

1986

1. The Commission shall consist of a Chairman and ten other members including the outgoing Chairman of CDE, the President and Secretary of IMU and the representative of IMU at COSTED (ICSU). The last four are members ex-officio of the CDE.

The rules for the election of the Commission are similar to those of the IMU E.C. and of the ICMI E.C., with the same Nominating Committee. The E.C. shall request proposals for the membership of CDE from the Committees for Mathematics and will conduct extensive consultations with the existing CDE before proposing slates to the Nominating Committee.

2. The Commission shall elect, from among its members, a Secretary who shall act also as its Treasurer, unless the Commission appoints another member for that purpose.

The Chairman, the Secretary (if any) and the Treasurer (if any) shall be designated as Officers of the Commission. The Commission may, in exceptional

circumstances, elect the Chairman as Secretary or Treasurer, as the case may be, provided that the Commission has at least two different (elected) officers. The Commission shall make its own financial arrangements, subject to By-law 10 of the IMU.

3. Acting in accordance with the Statutes and By-laws of the Union, and the administrative policies of the Union, as determined by the Executive Committee, the Commission shall
  - (a) support and encourage the growth of Mathematics in developing countries and cooperate with appropriate bodies to that end;
  - (b) support the exchange of visits with member countries of the Union in which, for one reason or another (e.g. non-convertible currencies), such exchanges are not easy to arrange;
  - (c) advise and assist existing agencies working towards the same objective with due regard to the non-governmental and non-political nature of IMU and to its administrative policies, and without duplicating or prejudicing the work of other Commissions and Committees of IMU at points of common interest.
4. The Commission may accept gifts, legacies and subventions, subject to the Statutes of IMU, Section 16. The Commission shall make its own arrangements for the utilization of such funds for the activities mentioned in (3).
5. The Commission shall report annually to the Executive Committee on its activities and provide a financial statement.
6. The Commission shall file a quadrennial report at each regular meeting of the General Assembly.

The Commission shall come into existence on January 1, 1979, and the "Commission on Exchange" shall be dissolved from that date.

### **Members of the International Mathematical Union**

The members are kindly requested to check the address list below and to send possible corrections to the Secretariat.

ADHERING ORGANIZATION (AO), COMMITTEE FOR MATHEMATICS (CM)

Argentina	II	AO	Union Matematica Argentina Casilla de Correo 3588 1000 - Correo Central Buenos Aires Argentina
-----------	----	----	--

		CM	Ing. Orlando Villamayor, Chairman Arcos 2297 1428 Buenos Aires Argentina
		Dues:	Ministerio de Educación y Justicia Secretaría de Ciencia y Técnica Consejo Nacional de Investigaciones Científicas y Técnicas Relaciones Internacionales Rivadavia 1917 1033 Buenos Aires República Argentina
Australia	III	AO	Australian Academy of Sciences P.O. Box 783 Canberra City A.C.T. 2601 Australia
		CM	Australian National Committee for Mathematics Professor R.S. Anderssen, Chairman Division of Mathematics and Statistics G.P.O. Box 1965 Canberra, A.C.T. 2601 Australia
Austria	II	AO	Austrian Academy of Sciences Dr. Ignaz-Seipel-Platz 2 A-1010 Vienna Austria
		CM	Österreichische Mathematische Gesellschaft Prof. Dr. W. Kuich, Chairman Technische Universität Wien A-1040 Wien Wiedner Hauptstr. 8-10 Austria
Belgium	III	AO	Académie Royale de Belgique Palais des Académies 1, rue Ducale B-1000 Bruxelles

			Belgium
		CM	National Committee for Mathematics Prof. Dr. Jean Mawhin, Secretary Université Catholique de Louvain Département de Mathématique Chemin de Cyclotron 2 B-1348 Louvain-la-Neuve Belgium
		Dues:	Administration of Common Affairs and Scientific Institutions of the State Att.: M.J. Decrock-Beyrus Pachecolaan 34 - 6de verdieping B-1010 Brussel Belgium
Brazil	III	AO	Instituto de Matemática Pura e Aplicada do CNPq Conselho Nacional de Desenvolvimento Científico e Tecnológico Estrada Dona Castorina 110 22460 Rio de Janeiro Brazil
		CM	Sociedade Brasileira de Matemática Professor Aron Simis, President Departamento de Matemática CCEN Universidade Federal de Pernambuco 50.000 Recife-Pernambuco Brazil
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Cameroon	I	AO	Société Mathématique Camerounaise Département de Mathématiques Université de Yaoundé

			B.P. 984 Yaoundé Cameroon
		CM	Professor H. Hogbe-Nlend Université de Bordeaux I 351, Cours de la Libération F-33405 Talence/Bordeaux France
Canada	IV	AO	National Research Council - Canada Secrétariat des Relations Internationales M.C. Gauvreau, Secrétaire Ottawa Canada K1A 0R6
		CM	Professor P.G. Rooney Chairman CC/IMU Department of Mathematics University of Toronto Toronto, Ont. Canada M5S 1A1
Chile	I	AO	Sociedad Matemática de Chile Professor R. Rodriguez Depto. de Matemática Universidad Santa Maria Casilla 110-V Valparaiso Chile
		CM	Sociedad Matemática de Chile Professor R. Rodriguez Depto. de Matemática Universidad Santa Maria Casilla 110-V Valparaiso Chile
China	V 3	CM	- Chinese Mathematical Society Professor Wang Yuan, President Academia Sinica Institute of Mathematics Beijing People's Republic of China

	2	CM	- Mathematical Society located in Taipei, China The Mathematical Society of the Republic of China Professor Hang-Chin Lai, President National Tsing Hua University Institute of Mathematics Hsinchu, Taiwan 30042 Republic of China
Cuba	I	AO	Universidad de la Habana Departamento de Matemática Habana 4 Cuba
		CM	National Committee for Mathematics Dr. Francisco Guerra, Presidente Facultad de Matemática y Cibernética Universidad de la Habana Habana 4 Cuba
		Dues:	Lic. Raúl Hernández Dpto. Colaboración MES Calle F e/21 y 23. Venado Cuba
Czechoslovakia	III	AO	Czechoslovak Academy of Sciences Institute of Mathematics Žitná ul. 25 115 67 Praha 1 Czechoslovakia
		CM	Czechoslovak National Committee for Mathematics Professor Miroslav Fiedler, Chairman Czechoslovak Academy of Sciences Žitná ul. 25 115 67 Praha 1 Czechoslovakia
Denmark	II	AO	Det Konglige Danske Videnskabernes Selskab H.C. Andersens Boulevard 35 DK-1553 Copenhagen V Denmark

		CM	National Committee for IMU Professor B. Fuglede, Chairman Matematisk Institut Universitetsparken 5 DK-2100 Copenhagen 0 Denmark
Egypt, Arab Republic of	I	AO	Academy of Scientific Research and Technology (A.S.R.T.) Professor A.M. Abou-Aziz Scientific and Cultural Affairs 101 Kasr El-Einy Street Cairo Arab Republic of Egypt
		CM	National Committee for Mathematics of IMU Professor A.A. Ashour, Chairman Faculty of Science University of Cairo Cairo Arab Republic of Egypt
Finland	II	AO	Delegation of the Finnish Academies of Science and Letters Mariankatu 5 SF-00170 Helsinki Finland
		CM	Finnish National Committee for Mathematics Professor Olli Lehto, Chairman Department of Mathematics University of Helsinki Hallituskatu 15 SF-00100 Helsinki Finland
France	V	AO	Académie des Sciences M. Mannevy, Secrétariat 23, Quai de Conti F-75006 Paris France
		CM	Comité National Français des Mathématiciens Professor J.M. Lemaire, President



			<p>CIMPA 1, Avenue Edith-Cavell F-06000 Nice France</p>
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		CM	<p>National Committee for IMU Nationale Kommission für Mathematik, Mechanik, Kybernetik und Informa- tionsverarbeitung der DDR Prof. Dr. Klaus Matthes, Chairman Institut für Mathematik der Akademie der Wissenschaften Postfach 1304 DDR 1086 Berlin</p>
Germany, Federal Republic of	V	AO	<p>Deutsche Mathematiker-Vereinigung Secretary Albertstrasse 24 D-7800 Freiburg Federal Republic of Germany</p>
		CM	<p>Deutsche Mathematiker-Vereinigung Prof. Dr. W. Törnig, President Fachbereich Mathematik Technische Universität Schloßgartenstraße 7 D-6100 Darmstadt Federal Republic of Germany</p>
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		CM	Greek National Committee for Mathematics Prof. Dr. John Xanthakis, President Academy of Athens 14 Agnostopoulou Street GR-106 73 Athens Greece
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		CM	Dr. K.Y. Chan, General Secretary Department of Mathematics Hong Kong University Pokfulam Road Hong Kong
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		CM	Hungarian National Committee for IMU Professor B. Szökefalvi-Nagy, President Bolyai Intézet Aradi vértanúk tere 1 H-6720 Szeged Hungary
Iceland	I	AO	The Iceland Mathematical Society
		CM	Raunvisindastofnun Haskolans Science Institute University of Iceland Dunhaga 3 107 Reykjavik Iceland
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Department of Mathematics  
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		CM	National Committee for Mathematics The Royal Irish Academy Professor F. Holland, Chairman 19, Dawson Street Dublin 2 Ireland
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		CM	Israel National Committee for IMU Professor Z. Ziegler, President Technion Haifa Israel
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		CM	Unione Matematica Italiana Professor A. Figà-Talamanca, President Istituto Matematico Università Piazza Porta S. Donato, 5 40127 Bologna Italy
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		CM	Société Mathématique de Cote d'Ivoire Professor S. Toure, President 08 BP 2030 Abidjan 08 Ivory Coast
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		CM	Japan National Committee for IMU Professor M. Nagata, Chairman Department of Mathematics Faculty of Science Kyoto University Kyoto 606 Japan
		Dues:	Science Council of Japan Accounts Division, Director General Affairs Department 22-34, Roppongi 7 chome Minato-ku

			Tokyo 106 Japan
Korea, Democratic Republic of	I	AO	Academy of Sciences of the D.P.R. of Korea Mathematics Section Pyongyang D.P.R. of Korea
		CM	Mathematical Research Committee of the Academy of Sciences of the D.P.R. of Korea Dr. Ho-Gon, Secretary Pyongyang D.P.R. of Korea
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		CM	<p>Wiskundig Genootschap  Dr.ir. R.W. Goldbach, Secretary  University of Technology  Department of Mathematics and  Informatics  Julianalaan 132  2628 BL Delft  The Netherlands</p>
New Zealand	I	AO	<p>The Royal Society of New Zealand  Mrs. S.M. Usher, Assistant Executive Officer  11 Turnbull Street  Private Bag  Wellington  New Zealand</p>
		CM	<p>New Zealand Committee for Mathematics  Gloria Olive, Convener  Department of Mathematics  University of Otago  P.O. Box 56  Dunedin  New Zealand</p>
Nigeria	I	AO	<p>Mathematical Association of Nigeria  Department of Mathematics  School of Science and Science Education  Abubakar Tafawa Belewa College  Ahmadu Bello University  Bauchi Campus  Bauchi  Nigeria</p>
		CM	<p>Mathematical Association of Nigeria  Dr. S.O. Ale, President  School of Science and Science Education  Abubakar Tafawa Belewa College  Ahmadu Bello University  Bauchi Campus  Bauchi  Nigeria</p>
Norway	I	AO	<p>Det Norske Videnskapsakademi  Drammensveien 78  Oslo 2  Norway</p>

		CM	Norwegian National Committee for Mathematics Professor Erik Størmer Tennisveien 3 0386 Oslo 3 Norway
Pakistan	II	AO	All Pakistan Mathematical Association Pakistan Academy of Sciences Building Constitution Avenue, G-5 Islamabad Pakistan
		CM	All Pakistan Mathematical Association Professor Q.K. Ghori, President Pakistan Academy of Sciences Building Constitution Avenue, G-5 Islamabad Pakistan
Philippines	I	AO	National Research Council of the Philippines Bicutan, Tagig Metro Manila The Philippines
		CM	The Mathematical Society of the Philippines Professor B. Nebres, Chairman Ateneo de Manila University P.O. Box 154 Manila Philippines
Poland	III	AO	Polska Akademia Nauk Institute of Mathematics ul. Sniadeckich 8 P.O. Box 137 PL-00 950 Warsaw Poland
		CM	Polish National Committee for IMU Professor Kazimierz Urbanik, Chairman Instytut Matematyczny Uniwersytet pl. Grunwaldki 2/4 PL-50 377 Wroclaw

			Poland
Portugal	I	AO	Instituto Nacional de Investigacao Cientifica Ministerio da Educacao e Ciéncia Avenida Elias Garcia 137-5 1093 Lisboa Codex Portugal
		CM	Comissao Nacional de Matemática Professor F.R. Dias Agudo, President Av. 25 de Abril, 35 2780 Oeiras Portugal
		Dues:	Ministerio da Educacao e Ciéncia Chefe da Divisao da Financas e Patrimonia Avenida Elias Garcia 137-5 1093 Lisboa Codex Portugal
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		CM	Romanian National Committee for Mathematics Acad. Prof. Caius Iacob, President Academia Republicii Socialiste Romania Calea Victoriei 125 71102 Bucharest Romania
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		CM	Singapore Mathematical Society Dr. Cheng Kai Nah, Hon. Secretary Department of Mathematics National University of Singapore Lower Kent Ridge Road Singapore 0511



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		CM	National Committee for IMU The Secretary International Relations Division CSIR P.O. Box 395 Pretoria 0001 South Africa
Spain	III	AO	Consejo Superior de Investigaciones Cientificas Serrano, 117 E-28006 Madrid Spain
		CM	Spanish Committee for IMU Professor Claudio Alsina, President Escuela Técnica Superior de Arquitectura Diagonal 649 08017 Barcelona Spain
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		CM	Swedish National Committee for Mathematics Professor Vidar Thomée, Chairman GU and CTH

			Fack S-412 96 Göteborg Sweden
Switzerland	III	AO	Swiss Mathematical Society Professor Norbert A'Campo, President Mathematical Institute University of Basel Rheinsprung 21 CH-4051 Basel Switzerland
		CM	Swiss Mathematical Society Professor Harald Holman, Secretary University of Fribourg Institute of Mathematics Pétrolles CH-1700 Fribourg Switzerland
Turkey	I	AO	Turkish Mathematical Society Doc. Dr. Hülya Senkon, General Secretary University of Istanbul Department of Mathematics Faculty of Science Vezneciler - Istanbul Turkey
		CM	Turkish Mathematical Society Assoc. Prof. Mehmet Orhon Middle East Technical University Department of Mathematics Ankara Turkey
United Kingdom	V	AO	The Royal Society Dr. P.T. Warren, Executive Secretary 6 Carlton House Terrace London SW1Y 5AG United Kingdom
		CM	U.K. National Committee for Mathematics Miss S.C. James, Secretary The Royal Society 6 Carlton House Terrace London SW1Y 5AG

			United Kingdom
U.S.A.	V	AO	National Academy of Sciences Office of International Affairs Attn.: Mrs. Kathleen Behr 2101 Constitution Avenue, N.W. Washington, D.C. 20418 U.S.A.
		CM	U.S. National Committee for Mathematics Board on Mathematical Sciences National Research Council Commission on Physical Sciences, Mathematics, and Resources 2101 Constitution Avenue, N.W. Washington, D.C. 20418 U.S.A.
U.S.S.R.	V	AO	Academy of Sciences of the U.S.S.R. Mathematics Section Leninskii Prospekt, 14 117901 GSP-1 Moscow V-71 U.S.S.R.
		CM	National Committee of Soviet Mathematicians Academician N.N. Bogolubov, Chairman Steklov Mathematical Institute Vavilov Street 42 Moscow, 117966, GSP-1 U.S.S.R.
Vietnam	I	AO	Mathematical Society of Vietnam Institute of Mathematics Science Institute of Vietnam Postal Box no. 631 Bo Ho Hanoi Vietnam
		CM	Mathematical Society of Vietnam Professor Hoàng Tuy Institute of Mathematics Science Institute of Vietnam Postal Box no. 631 Bo Ho

			Hanoi Vietnam
Yugoslavia	II	AO	Union of Societies of Mathematicians, Physicists and Astronomers of Yugoslavia Elektrotehnicki Fakultet 41001 Zagreb Unska 3, P.P. 170 Yugoslavia
		CM	National Committee for Mathematics Professor Ivan Ivansic, Chairman Elektrotehnicki Fakultet 41001 Zagreb Unska 3, P.P. 170 Yugoslavia

### Conferences supported by IMU

1989:

*International Conference on Ring Theory in Honour of Professor S. Amitsur*, Israel, January 2–5, 1989. (December 26, 1988 – January 1, 1989 a workshop.)

IMU representatives: J. Coates and N. Jacobson. IMU contribution: 5000 Swiss francs.

Contact person: Professor Moshe Jarden, School of Mathematical Sciences, Tel Aviv University, Ramat Aviv, Tel Aviv 69978, Israel. e-mail: jarden@taurus (bitnet)

*Conference Honoring Professor Richard S. Varga*, Kent, Ohio, USA, March 1989. IMU representative: C. de Boer.

Contact person: Professor Eugene C. Gartland, Department of Mathematical Sciences, Kent State University, Kent, OH 44242, USA. e-mail: egartlan@kentvm (bitnet)

*A Special Event in Honor of Professor K. Chandrasekharan*, Paris, France, April 20, 1989.

*A Workshop on Automorphic Forms and Number Theory*, Tel-Aviv University, Tel-Aviv, Israel, May 14–19, 1989.

IMU representative: J. Coates. IMU contribution: 5000 Swiss francs.

Contact person: Professor Zvi Ziegler, Technion, Computer Centre, Haifa, Israel.

*Geometry of Banach Spaces*, Linz, Austria, June, 1989.

IMU representative: J. Lindenstrauss. IMU contribution: 3000 Swiss francs.

Contact person: Doz. Dr. Walter Schachermayer, Johannes Kepler Universität Linz, Institut für Mathematik, A-4040 Linz, Austria.

*International Colloquium on Complex Analysis*, Bucharest, Romania, June 5-8, 1989.

IMU representative: O. Lehto. IMU contribution: 7000 Swiss francs.

Contact person: Professor C. Andreian Cazacu, Central Institute of Mathematics, str. Academiei 14, Bucharest, Romania

*International Symposium on Cauchy and French Mathematics*, in connection with the Bicentennial of the French Revolution, Paris, July 27-29, 1989.

IMU contribution: 1500 Swiss francs.

Contact person: Professor J. Dhombres, Institut de Mathématiques, Université de Nantes, 2 Chemin de la Houssinière, F-44027 Nantes Cédex, France.

*EQUADIFF 7*, Prague, Czechoslovakia, August 21-25, 1989.

IMU representative: L. Hörmander. IMU contribution: 7000 Swiss francs.

Contact person: Professor Jaroslav Kurzweil, Chairman, EQUADIFF 7, Institute of Mathematics, Czechoslovak Academy of Sciences, Zitna ul. 25, 115 67 Praha 1, Czechoslovakia

*International Conference on Algebra*, Novosibirsk, August 21-26, 1989, commemorating the 80th birthday of A.I. Maltsev.

IMU representative: L.D. Faddeev. IMU contribution: 5000 Swiss francs.

Contact person: Academician M.M. Lavrentjev, Director of the Institute of Mathematics, Novosibirsk, 630090, U.S.S.R.

*Third International Conference on the Theory of Groups and Related Topics*, Canberra, Australia, September 25-29, 1989.

IMU representative: W. Feit. IMU contribution: 7000 Swiss francs.

Contact person: Professor G.E. Wall, The University of Sydney, Department of Pure Mathematics FO7, NSW 2006, Australia. fax: (02) 692 4203

1990:

*Asian Mathematical Conference*, Hong Kong, August 14-18, 1990, will be endorsed by IMU.

Contact person: Dr. K.P. Shum, President, Hong Kong Mathematical Society, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong.

## International Congress of Mathematicians 1990

The next International Congress of Mathematicians will be held in Kyoto, Japan, at the Kyoto International Conference Hall from August 21 to August 29, 1990. The First Announcement has been sent out in July 1989. For further information please write to: ICM-90 Secretariat; Research Institute for Mathematical Sciences; Kyoto University; Kitashirakawa, Sakyo-ku; Kyoto 606; Japan.

### Travel Grants for Young Mathematicians

The International Mathematical Union will award travel grants to young mathematicians to help them to attend the ICM-90, Kyoto, Japan, August 21–29, 1990. The grants are intended primarily for young mathematicians from developing countries (not necessarily members of IMU), but applications from countries with strict monetary regulations will also be considered.

The age-limit for the grantees is 35 years. The candidates should present evidence of research work on post-doctoral level (such as publications in journals or preprints), and they should be able to benefit from the interaction with mathematicians from other countries attending the Congress.

In addition to the name and address of the candidate, the applications should contain a brief curriculum vitae plus a list of publications and preprints.

The International Congress of Mathematicians will provide a special allowance to the grantees to cover their registration, board and lodging.

Applications for the travel grant may be sent directly to the Secretary of the Union. Applications may also be submitted through the Committees for Mathematics, which in such a case will send all the relevant information about the candidates to the Secretary.

All applications should reach the Secretary by January 1, 1990.

### Instructions for Seeking Support for Conferences

1. The International Mathematical Union sponsors, or co-sponsors, "colloquia"; it does not sponsor or co-sponsor "institutes". A colloquium is understood to mean a closed meeting (closed in a weak sense) of experts, together with a limited number of other invited participants, convened to discuss the results of recent research. (Expository lectures are not meant to be included.) A colloquium is intended to last about a week.
2. Any colloquium sponsored or co-sponsored by the Union is to be designated "an international colloquium".
3. The co-sponsorship of the Union usually (though not always) implies a financial contribution by the Union of a few thousand Swiss francs. It is understood

that such a contribution will be matched by at least an equal contribution from the organizers themselves.

4. The Union's contribution is to be utilized for meeting the travel expenses of the invitees. The living expenses are to be met from other sources.
5. If the Union co-sponsors a colloquium, it has the right to nominate two members to the Organizing Committee of the Colloquium. It does not make any stipulation regarding the rest of the membership of the Organizing Committee. The Union's nominees should have a share in the preparation of the scientific program and in the selection of speakers. It is customary that one of the nominees of the Union is a member of the Executive Committee of the Union, while the other is usually a mathematician of eminence conversant with the needs of the Colloquium.
6. Immediately after the Colloquium is over, a financial statement giving the full budget of the Colloquium (showing the income from all sources, and the expenditure on all accounts) and a report on the scientific activities are to be sent by the Chairman of the Organizing Committee to the Secretary of the Union.
7. The Union's deadline for receiving applications for colloquia is March 1 of the year preceding the Colloquium. Even if the full picture of the Colloquium is not clear by that date, an application giving the topic, the names of the officers of the Organizing Committee, if possible the names of the invited speakers, the probable size of the Colloquium, and the probable size of the budget, together with the place where the Colloquium will be held, should be sent in.
8. The ICSU resolution on the free circulation of scientists should be observed. Before the Symposia or meetings are arranged, an assurance in writing should be obtained from the organizers in the country concerned that visas will be granted to bona fide scientists if proper applications are made.

### **Special Development Fund**

The Special Development Fund aids IMU to fulfill the important obligation of helping developing countries within the framework of mathematical research. The means of the Fund, which go un-reduced to mathematicians from developing countries, are used primarily for travel grants to young mathematicians, to make it possible for them to participate in International Congresses of Mathematicians. The Executive Committee of IMU elects an international committee to distribute the grants.

Means to the Special Development Fund come from donations. Donations can be sent, at any time and in any convertible currency, to the following accounts:

Account no. 0862-656208-21

Schweizerische Kreditanstalt  
 Stadtfiliale Zürich-Rigiplatz  
 Universitätstraße 105  
 CH-8033 Zürich  
 Switzerland  
 Account no. 100020-411-CHF-5706 FR  
 Kansallis-Osake-Pankki  
 Aleksanterinkatu 42  
 SF-00100 Helsinki  
 Finland.

The goal right now is to collect money for travel grants for the 1990 International Congress of Mathematicians in Kyoto.

The following contributions have been received in the years 1983–1987:

	Swiss francs
1983:	
Wiskundig Genootschap, The Netherlands	2403
London Mathematical Society, United Kingdom	1595
1985:	
London Mathematical Society, United Kingdom	3050
Danish Mathematical Society, Denmark	421
1986:	
Wiskundig Genootschap, The Netherlands	1878
Australian Mathematical Society, Australia	973
Swedish Mathematical Society, Sweden	76
Finnish Mathematical Society, Finland	323
1987:	
Norwegian Mathematical Society, Norway	1079
London Mathematical Society, United Kingdom	2245
1988:	
American Mathematical Society, USA	6917
Instit. Mat. Pura e Apl., Brazil	7500
Royal Society, United Kingdom	11476
1989:	
American Mathematical Society, USA	17265
London Mathematical Society, United Kingdom	2750
Wiskundig Genootschap, The Netherlands	1700
Anonymous	201

On behalf of IMU, the Executive Committee of IMU expresses its deep gratitude for these donations.



### **IMU Fellowship Fund**

The IMU Fellowship Fund is intended to provide help to advanced level graduate students, especially to those coming from less well-off countries, to take benefit from a long-period stay abroad at a well-known university or institute. The fellowship grants are intended mainly for travel expenses with the understanding that the host institution will cover the local expenses of the student. Suggestions for possible candidates from the Committees for Mathematics should reach the Secretary before March 1, 1990.

### **IMU Lectures**

In 1971, the Executive Committee of IMU decided to invite, from time to time, a distinguished and active mathematician, of international standing, to give a set of four to six lectures, on important new developments in mathematics to which the lecturer, directly or indirectly, has made a contribution, and which deserve to be 'surveyed' at some length, for the benefit of younger mathematicians as well as others.

The lectures should be given at mathematical centers and they will be published in the *L'Enseignement Mathématique*.

Suggestions for IMU lecturers should reach the Secretary by March 1, 1990.

### **World Directory of Mathematicians**

The editor of the 9th World Directory of Mathematicians, Professor Walter Feit, has asked the Committees for Mathematics to send their lists of mathematicians to be included in the Directory to the American Mathematical Society, P.O. Box 6248, Providence, RI 02940, U.S.A. by October 15, 1989.

### **IMU-UNESCO Visiting Mathematicians Program**

Thanks to special UNESCO support, CDE will provide for the biennium 1988-1989 a limited number of grants aiming in particular to partially cover travel expenses of mathematicians wishing to visit academic institutions abroad.

They may either come from developing countries to spend a research period in well qualified mathematical centers, or come from developed countries, to spend reasonably long teaching/research periods in universities or research centers in developing countries.

Applications containing a curriculum vitae and detailed information on the applicant's scientific achievements and interests as well as a description of the program related to the request should be sent to the Secretariat of CDE; c/o Professor Jean Pierre Bourguignon; Centre de Mathématiques; Ecole Polytechnique; F-91128 Palaiseau Cedex; France.

### **CDE Regional Libraries**

CDE aims at creating regional libraries in developing countries. CDE has had some contacts with commercial editors to get discounted prices for books and journals for developing countries. It is also possible to donate individual collections of books to developing countries through CDE. Efforts should be made to induce publishers to save copies of books prior to destructing them and send them to developing countries through CDE. The Commission will work in close cooperation with the Third World Academy of Sciences.

## World Directory of Mathematicians, VIIIth Edition

The 8th edition of the World Directory of Mathematicians, 976 pages, contains the names and addresses of approximately 40 000 individual mathematicians from 83 countries.

The price of the Directory is \$ 30, plus shipping and handling, and no discounts are allowed. Shipping and handling charges are: for surface delivery—\$ 2 for the first copy, \$ 1 for each additional copy; for air delivery—\$ 5 for the first copy, \$ 3 for each additional copy. Orders should be sent to:

American Mathematical Society  
Sales Department  
P.O. Box 6248  
Providence, RI 02940  
U.S.A.

All orders must be prepaid; proforma invoices will be sent for any unpaid orders that are received. Orders from Europe, the Middle East, and Africa should be addressed to:

Mr. Barry Emms, Managing Director  
Clarke Associates—Europe Limited  
Unit 2, Pool Road Trading Estate  
West Molesey  
Surrey KT8 0HE  
England