

**REPORT OF THE 13th GENERAL ASSEMBLY OF IMU
Dresden, Germany, August 15-16, 1998**

1. Opening

The President opened the Assembly at 10 a.m. on August 15, 1998

2. Address by the President

The President welcomed the participants and briefly presented what the Executive Committee had been doing in the last 4 years, especially moves to increase the representation of applied mathematics and other mathematical sciences at the International Congresses of Mathematicians, an initiative to bring together computer scientists to consider forming an International Union of Computer Science and the formation of a committee on electronic publishing. He also emphasized that every effort had been made to send the delegates all necessary information beforehand. This information is collected in Bulletin No. 42 Special Number for the General Assembly. The Agenda was accepted.

3. Committees

The following committees were appointed:

Resolutions Committee

Friedrich Hirzebruch (Germany) Chairperson

Peter Fillmore (Canada)
Christer Kiselman (Sweden)
Sebastiá Xambó-Descamps (Spain)
Ushadevi N. Bhosle (India)
Vladimir Arnold, ex-officio, Vice-President

Committee for Finance and Dues

Ronald Graham (United States of America), Chairperson
Roberto Markarian (Uruguay)
Kun Soo Chang (Korea)
Andrei A. Gonchar (Russia)
Batmanathan D. Reddy (South Africa)
Jacob Palis, ex-officio, Secretary

Nominating Committee

David Mumford, ex-officio, Chairperson
Isabel Dotti (Argentina)
Alberto Conte (Italy)
Zbigniew J. Ciesielski (Poland)
Da-Qian Li (Chinese Math. Society)
John Ball (United Kingdom)
Olli Lehto (Finland)
Kazuo Okamoto (Japan)
Robert MacPherson (United States of America)
Ludwig Faddeev, ex-officio, Past President
Jurgen Moser, ex-officio, Past President

Besides the above, there were the Credentials and Tellers Committees, chaired by Ragni Piene (Norway) and Vera Sós (Hungary), respectively.

4. Members

4.1. New Members:

Ukraine – has been admitted to the Union in Group II as of January 1, 1999

4.3. Dues arrears:

The Secretary raised the issue that some countries are not up to date in the payments of dues: Bulgaria, Cuba, Georgia, Iran, North Korea, Nigeria and Yugoslavia.

- For Bulgaria, Cuba, Georgia and Iran the Assembly decided to ask the Executive Committee to send messages to call their attention to the necessity of payment of their previous dues.
- As for Yugoslavia, since they paid the dues for the last four consecutive years (1995-1998), the Assembly decided to waive their previous dues.
- North Korea and Nigeria, have not paid any dues since 1990. Moreover, neither North Korea or Nigeria have answered the Union messages concerning their dues arrears. The General Assembly decided to cease/suspend their membership, if they do not answer to the EC renewed efforts after a year.

5. Activities of the Union – Scientific Reports

The reports in the Bulletin covered the IMU activities in the period since the last General Assembly, especially symposia and conferences, as well as the activities of its Commissions ICMI, CDE and ICHM, and also the World Directory. They were approved.

The 11th edition of the World Directory of Mathematicians compiled and printed by the American Mathematical Society under the supervision of Professor James Arthur, will be available at the ICM in Berlin.

6. Finance and dues:

6.1. Financial reports for the years 1994-1997

The activities of the Union for the years 1994-1997, as well as the complete financial reports, including audited ones, had been reviewed in the Bulletin No. 42, Special Number, 1998.

6.2. The financial report for the years 1994-1997 were approved by the General Assembly

6.3. **Budget for the years 1999-2002** – The budget for the years 1999-2002 was accepted by the General Assembly – Appendix 3

7. Creation of a Committee on Electronic Information and Communication

The GA approved an Enabling Resolution to form an IMU Committee on Electronic Information and Communication (CEIC), based on the following proposal of the EC:

1. In the last decade, the internet has been transforming our communication and commerce. In the world of science, the internet is radically changing the modes of information transfer at all levels. Communication on hand-written and printed paper, distribution via postal mail and libraries is a system which has been stable for many centuries. We cannot foresee clearly the new system which is evolving except that it will involve electronic media and it will radically alter the economics of communication. This transformation will certainly be global and will affect mathematical research on all continents.

2. We strongly believe that the IMU can play several important roles during this transition. Among these are:
(i) it can provide a forum where all parties, i. e., all countries and all interest groups (individual researchers, professional societies, publishers, and libraries) can discuss the issues and it can publish proceedings to increase general understanding of all the issues involved,
(ii) it can recommend and promote international standards on electronic communication among mathematicians, when needed,
(iii) it can act as a liaison between regional, national and local groups, coordinating their initiatives and discussions.

3. We therefore propose that the GA establish a Committee on Electronic Information and Communication (CEIC) to accomplish its objectives whose terms of reference and initial additional membership will be decided by the ad hoc committee consisting of John Ewing, Martin Groetschel, Peter Michor, David Mumford and Jacob Palis and sent by mail ballot to all adhering organizations for approval.

The Terms of Reference for the Committee were discussed at the General Assembly and an ad hoc Committee formed by John Ewing, Marting Groetschel, Peter Michor, David Mumford and Jacob Palis, was established to complete such Terms and to suggest its initial membership. These Terms of Reference and initial membership will be sent to the Adhering Organizations for approval.

8. Elections

The Nominating Committee met in the afternoon of August 15 from 16:00 to 17:30. It adopted the slates proposed by the Executive Committee.

From the floor, three candidates for members at large of the Executive Committee of IMU were presented (M.Groetschel, D. Robinson and V. Milman), as well as a candidate for member at large of CDE (F. Mohamed) and a candidate for member at large of ICMI (C.Julie). According to the procedures for elections, as approved by all Adhering Organizations beforehand and explained by Prof. David Mumford to the Assembly, their names appear in the ballots together with the EC and Nominating Committee slates.

- The Committees elected for the years 1999-2002, consist of:

IMU Executive Committee

President:	J. Palis	(Brazil)
Vice-Presidents:	S.Donaldson	(United Kingdom)
	S. Mori	(Japan)
Secretary:	P. Griffiths	(USA)
Members:	V. Arnold	(Russia)
	J.M.Bismut	(France)
	B.Engquist	(Sweden)
	M. Groetschel	(Germany)
	M. Raghunathan	(India)
ex-officio:	D. Mumford	(Past President)

Commission on Development And Exchange - CDE

Chairman:	Rolando Rebolledo	(Chile)
Secretary:	Herb Clemens	(USA)
Members:	A.A. Ashour	(Egypt)
	K. C. Chang	(China)
	P. Cordaro	(Brazil)
	J.-P.Gossez	(Belgium)
	O. Nakoulima	(France)
	T. Sunada	(Japan)
ex-officio:	M.S.Narasimhan (Past Chairman)	
	Jacob Palis (President of IMU)	
	P. Griffiths (Secretary of IMU)	

International Commission on Mathematical Instruction - ICMI

President:	Hyman Bass	(USA)
Vice-Presidents:	M. Artigue	(France)
	N.Aguilera	(Argentina)
Secretary:	B. Hodgson	(Canada)
Members:	G. Leder	(Australia)
	Y. Namikawa	(Japan)
	I. Scharygin	(Russia)
	J.P. Wang	(China)
ex-officio:	Miguel de Guzman (Past President)	
	Jacob Palis (President of IMU)	
	P. Griffiths (Secretary of IMU)	

International Commission on the History of Mathematics - ICHM

Professors Jan P. Hogendijk (Netherlands) and Karen V.H. Parshall (USA) were elected as IMU Members to the Executive Committee of the Joint International Commission on the History of Mathematicians for the years 1999-2002.

- Professor S. Mori was elected to represent IMU at ICSU in the years 1999-2002

9 - Site of ICM - 2002

The President announced that the Site Committee for ICM 2002 recommended Beijing, China as the site for the next Congress. Oslo and Norway had presented another bid. The Assembly voted on this issue and approved Beijing as the site of ICM 2002. Prof. K.C. Chang, on behalf of the Chinese Mathematical Society, thanked the General Assembly and promised a good conference to the mathematical community. He reaffirmed that there should be no visa problems and announced the dates of the Congress as August 20-28, 2002.

10 – Change of Statutes

The proposed change of statutes was accepted by the General Assembly. It is in **Appendix 5**.

11 - Report of Committee on Finance and Dues

Professor Ronald Graham (United States of America), Chairperson of Committee for Finance and Dues reported on the work of the Committee. His report is presented as **Appendix 2**

The Committee recommended the approval of the financial reports for the years 1994-1997 and the audited accounts. The General Assembly unanimously approved them.

The budget for 1999-2002 had been prepared keeping the same dues as in 1995-1998.

The Committee recommended the acceptance of the budget proposed.

The budget was approved unanimously by the General Assembly. See **Appendix 3**.

12 - Adoption of resolutions

The Resolution Committee presented proposals of resolutions for approval of the General Assembly.

After discussion of these and some other proposals presented from the floor, the following ones were approved:

Resolutions of the IMU General Assembly 1998

Resolution 1

The General Assembly resolves that the next meeting of the General Assembly will be held at a time and place conveniently linked to the International Congress of Mathematicians in Beijing, China, in 2002.

Resolution 2

Building on the resolutions adopted at the 1986 and 1990 General Assemblies, the IMU shall continue to endeavor to attract the participation of all mathematicians. Subfields of mathematics, women and mathematicians in smaller countries should not be overlooked in IMU activities.

Resolution 3

The General Assembly expresses its gratitude to those bodies who contributed to the Special Development Fund in the past four years, which allowed 100 young mathematicians from developing countries to attend the ICM-98. The General Assembly hopes that they will continue their efforts and urges other Adhering bodies and Committees for Mathematics to work towards ensuring more contributions to the Special Development Fund. The General Assembly recognizes the additional effort of the Executive Committee and the Organizing Committee of ICM 1998 to invite and finance 40 senior mathematicians from developing countries.

Resolution 4

The General Assembly expresses its gratitude to the Organizing Committee of ICM 98 chaired by Martin Groetschel and the local organizers chaired by Volker Nollau, for the hospitable reception and excellent arrangements at the Dresden meeting.

Resolution 5

The thirteenth General Assembly gives warm thanks to the Executive Committee and to the President of IMU for their work during the period 1995-1998.

Resolution 6

The General Assembly gives especial thanks to Jacob Palis for his excellent work as Secretary to the IMU over the last eight years assisted by Mrs. Suely dos Santos Lima. It also thanks the Instituto de Matemática Pura e Aplicada (IMPA) for its generous support of the IMU secretariat over this period.

Resolution 7

The General Assembly expresses thanks to the Organizing Committee of ICM 1998 for its excellent innovations, including the use of electronic and information technology, the advance publication of volumes of the Proceedings, and the efforts to improve public perception of mathematics.

12 - Next meeting of the General Assembly

The Chinese delegation invited the General Assembly to meet at a place linked to the 2002 International Congress of Mathematicians to be held in Beijing, China.

13 - The President thanked the Assembly for its work and declared the 13th General Assembly of IMU closed at 1:30 p.m.

The report of the Credentials Committee is presented in **Appendix 1 and** the list delegates as **Appendix 4.**

**REPORT ON THE CREDENTIAL COMMITTEE TO THE
13th GENERAL ASSEMBLY OF IMU, 1998**

The Committee verified that on August 15 and 16, 1998, there were representatives from 54 countries with a total of 132 votes. Absent were 8 countries.

**REPORT OF THE FINANCE AND DUES COMMITTEE TO THE
13th GENERAL ASSEMBLY OF IMU, 1998**

The Committee consisted of:

Ronald Graham (United States of America), Chairperson
Roberto Markarian (Uruguay)
Kun Soo Chang (Korea)
Andrei A. Gonchar (Russia)
Batmanathan D. Reddy (South Africa)
Jacob Palis, ex-officio, Secretary

The Committee studied the financial report for the years 1994-1997 presented by the Secretary of the IMU, and examined the budget for the period 1998-2002 prepared by the Executive Committee.

The Committee recommended to the General Assembly the acceptance of the financial report for the years 1994-1997 and the Executive Committee budget for the 1999-2002 period.

The budget for 1999-2002 had been prepared on the basis of keeping the same dues for the different categories of IMU Members as in the term 1995-1998.

The Committee commended several scientific organizations and agencies that have made generous contributions to the Special Development Fund during the past four years. This allowed IMU to support many more young mathematicians as well as a significant number of senior mathematicians from developing countries to participate in the ICM 98.

Finally, the Committee expresses its thanks to the Executive Committee and in particular to the Secretary, Prof. Jacob Palis, for the preparation of the clearly written financial reports and proposed budget.

INTERNATIONAL MATHEMATICAL UNION
Budget for the years 1999 - 2002, in Swiss Francs

EXPENDITURE:			
Schedule A:	1991-1994	1995-1998	1999-2002
Secretarial help, IMU office	19.400	15.000	17.000
Secretarial help, President	2.000	3.000	5.000
ICMI	10.000	11.000	11.000
CDE	5.500	6.000	6.000
Office expenses (including postage)	7.500	8.400	14.400
Travel expenses of the E.C.	25.000	27.000	30.000
President's and Secretary's expenses	2.000	2.000	4.000
Contribution to ICSU	5.000	7.000	7.000
IMU Bulletin	2.000	2.000	3.000
Audit fee	2.000	2.000	4.500
General Assembly - 1998	3.500	4.000	4.000
World Directory of Mathematicians	18.000	20.000	20.000
Contingencies	2.000	2.000	2.000
Subtotal	104.500	110.000	127.900
Schedule B:			
Symposia, confer, IMU Lectures	56.000	65.000	86.000
ICMI scientific activities	18.000	22.000	22.000
CDE scientific activities	15.000	40.000	33.000
Program Committee for ICM 98	5.500	6.000	8.000
Travel grants	15.000	25.000	40.000
Subvention to ICM 1998	24.000	26.000	28.000
Subtotal	133.500	184.000	217.000
Total (Subtotal Schedule A + B)	238.000	294.000	344.900
INCOME:			
Membership dues (212x1200)	187.000	210.000	254.400
ICSU subvention	20.000	26.000	10.500
Sales of W.D.M.	12.500	10.000	12.000
Special Development Fund	15.000	25.000	45.000
Interest on bank accounts	3.500	23.000	23.000
T o t a l	238.000	294.000	344.900

Dresden, August 15-16, 1998

LIST OF DELEGATES/OBSERVERS

Code	Country	Group	Name
1 1 2	Argentina	II	Isabel Dotti Maria J. Druetta Roberto Miatello
1	Armenia	I	Norair Yengibaryan
1 1 1	Australia	III	Derek W. Robinson Alan L. Carey Alfred J. Van der Poorten
1 1	Austria	II	Peter Gruber Karl Sigmund
1 1 1	Belgium	III	Jean L. Mawhin Joseph A. Thas Freddy Dumortier
2	Bosnia and Hercegovina		Muharem Avdispahic
1 1 1	Brasil	III	Paulo Cordaro Michael Forger Marcelo Viana
1	Bulgaria	I	Georgi D. Raikov
1	Cameron	I	Henri Hogbe Nlend
1 1 1 1 1 2	Canada	V	Donald A. Dawson Peter A. Fillmore Nassif Ghoussoub Jacques C. Hurtubise Nicole Tomczak-Jaegermann George A. Elliott
1 1 2	Chile	II	Rolando Rebolledo Sergio Plaza Rafael Labarca
1 1 1 2	China, Chinese Math. Society	III	Chang Kung Ching Lo Yang Da-Qian Li Wenlin Li
1 1 2 2 2	China, Math. Society Located at Taipei	II	Tsang-Hai Kuo Fon-Che Liu Yuh-Jia Lee Ko-Wei Lih Hwai-Chiuan Wang
1	Croatia	I	Ivan Ivansic
1 1	Czech Republic	II	Miroslav Fiedler Jiri Jarnik
1 1	Denmark	II	Hans J. Munkholm Gert K. Pedersen
1	Egypt	I	Attia Ashour
1 1	Finland	II	Olli Lehto Olli Martio

1 1 1 1			Pierre Arnoux Jean Michel Bismut Paula Cohen Alain Damlamian
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1 2 2 2 2	France	V	Michele Vergne Jean-Pierre Bourguignon Paul-Jean Cahen Mireille Chaleyat-Maurel Doina Cioranescu
1 1	Georgia	II	Vakhtang M. Kokilashvili Roland Duduchava
1 1 1 1 1	Germany	V	Martin Aigner Martin Groetschel Friedrich Hirzebruch Karl-Heinz Hoffmann Reinhard Mennicken
1	Greece	I	Nicolas K. Artemiadis
1	Hong Kong	I	Roderick S.C. Wong
1 1 1	Hungary	III	Gyula O. H. Katona László Márki Vera T. Sós
1	Iceland	I	Robert Magnus
1 1 1	India	III	Ushadevi N. Bhosle Jayanta K. Ghosh Surender .K. Malik
1	Iran	II	A.R. Medghalchi
1 1	Ireland	II	Samuel K. Houston Richard O. Watson
1 1 1 1 1	Israel	V	Ariel Dvoretzky Joram Lindenstrauss Vitali Milman Gideon Schechtman Aner Shalev
1 1 1 1 1	Italy	V	Carlo Cercignani Alberto Conte Carlo Sbordone Terenzio Scapolla Aljosa Volcic
1	Ivory Coast	I	Etienne Desquith
1 1 1 1 1	Japan	V	Kazuo Okamoto Yukihiko Namikawa Toshio Sawada Tohsikazu Sunada Kenji Ueno
1	Kazakhstan	I	Umirzak M. Sultangazin
1 1 2	Korea, Republic of	II	Kun Soo Chang Yong-Seung Cho Hyoung J. Ko
1	Latvia	I	Uldis Raitums
1	Lithuania	I	Henrikas Pragarauskas
1 1	Mexico	II	Carlos Renteria Marquez Luis Manuel Tovar-Sanchez
2	Morocco		Ahmed Kerkour
1 1 1	Netherlands	III	Michiel Hazewinkel Robert Mattheij Jan C. Willems
1	New Zealand	I	Robert Goldblatt
1	Norway	I	Ragni Piene
1	Philippines	I	Polly W. Sy
1			Zbigniew J. Ciesielski

1 1	Poland	III	Michal Karónski Andrzej Skowronski
1 1 1 1 1	Russia	V	Ludwig D. Faddeev A ndrei A. Gonchar Yuri S. Osipov Viktor A. Sadovnichii Alexei B. Zizchenko
1	Saudi Arabia	I	Fawzi A. Al-Thukair
1	Singapore	I	San Ling
1	Slovak Republic	II	Lev Bukovsky
1	Slovenia	I	Peter Legisa
1 1	South Africa	II	Batmanathan D. Reddy Hendra C. Swart
1 1 1	Spain	III	Jose Luis Fernandez Juan Luis Vazquez Sebastiá Xambó-Descamps
1 1 1 1	Sweden	IV	Johan Hastad Christer Kiselman Lars-Erik Persson Peter Sjogren
1 1 1 1	Switzerland	IV	Srishti D. Chatterji Rolf Jeltsch Jurgen Moser Gerhard Wanner
1	Turkey	I	Betul Tanbay
1 1 1 1 1	United Kingdom	V	John M. Ball Terence J. Lyons Angus J. Macintyre Caroline M. Series Martin J. Taylor
1 1 1 1 1 2	United States of America	V	M. Salah Baouendi Lynne Billard Ronald L. Graham Robert D. MacPherson Margaret H. Wright Phillip A. Griffiths
1 2	Uruguay	I	Roberto Markarian Mario Wschebor
1	Venezuela	I	Eduardo Lima de Sá
1	Vietnam	I	Dinh Tri Nguyen
1 1	Yugoslavia	II	Zoran Kadelburg Veselin Peric

1 - Delegate
2 - Observer

**CHANGE IN STATUTES
of the
INTERNATIONAL MATHEMATICAL UNION**

Approved in the 63rd meeting of the Executive Committee, held in Berlin on May 15-16, 1997

III. AFFILIATION

1. For the purpose of facilitating jointly sponsored activities and jointly pursuing the objectives of the IMU, multi-national mathematical societies and professional societies can be affiliated with the Union.
2. The members of the Union shall elect the affiliate members by Postal Ballots or at meetings of the General Assembly upon recommendation of the EC. The affiliation may be terminated by the same procedure.
3. Affiliate members have the right to participate in the General Assembly but shall have no voting rights.
4. Such affiliate members have the right to submit proposals for joint activities to the General Assembly and to the President and Secretary for consideration of the Executive Committee.
5. The Executive Committee, with the support of the Adhering Organizations and National Committees, shall look for ways to keep close relations with the affiliated organizations and to enhance mathematical activities in their regions and fields of interest. They shall receive the Bulletin of the IMU and be kept informed of all activities relevant to them.