IMU

B U L L E T I N

OF THE

INTERNATIONAL MATHEMATICAL UNION

SPECIAL NUMBER

NINTH GENERAL ASSEMBLY 1982

SECRETARIAT :

COLLEGE DE FRANCE

11, Place Marcelin Berthelot
75231 PARIS CEDEX 05 -FRANCE

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INTERNATIONAL MATHEMATICAL UNION

EXECUTIVE COMMITTEE

(1.1.1979 - 31.12.1982)

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President :   Professor L. Carleson

Vice-Presidents :   Professor M. Nagata
                       Professor J.V. Prokhorov

Secretary :   Professor J.L. Lions

Members :   Professor E. Bombieri
                       Professor J.W.S. Cassels
                       Professor M. Kneser
                       Professor O. Lehto
                       Professor C. Olech

Past President :   Professor D. Montgomery

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F O R E W O R D
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TO ALL THE NATIONAL COMMITTEES FOR IMU

At a meeting in Paris, April 1 and 2, 1982, the E.C. of IMU considered the situation for the session of the General Assembly and for the International Congress of Mathematicians, ICM '82 in Warsaw in August 1982.

It was decided that the General Assembly should be held as planned : Warsaw, in August this year.

For the ICM '82, the E.C., after considering the scientific prospects for a Congress at the present time, decided to postpone the Congress to the later part of August 1983, with the following understanding : a discussion of the situation will take place at the meeting of the General Assembly in Warsaw in August 1982. On the basis of this discussion and in light of the scientific outlook for a congress in August 1983, the E.C. will reconfirm or cancel the Congress in November 1982. No alternative site will be considered.

This procedure has been accepted by the Polish Organizing Committee.

The names of the recipients of the Fields Medals and of the new Nevanlinna prize in Information Science, will be announced at the General Assembly. The medals will be awarded at the Congress in 1983.

J.L. LIONS
Secretary of IMU

Ninth General Assembly
of   the
International Mathematican Union

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Warsaw, Poland
August 8 & 9, 1982
(Opening session : 10.00 a.m)

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AGENDA

1. Opening of the Assembly.

2. Address by the President, including Annoucement of prizes and Report of the Site Committee.

3. Appointment of Committees :

   (i)   Credential Committee, (ii) Resolutions Committee, (iii) Tellers, (iv) Committee on Finance and Dues, (v) Nominating Committee.

4. Rules of Procedure for the election of the ICMI Executive Committee.

5. New Members.

6. Review of the activities of the Union :

   A -   (i) Symposia, Conferences,   (ii) IMU Lectures, (iii) IMU Fellowship, (iv) ICMI,   (v) Commission on Development and Exchange.

   B -   (i) IMU Bulletin,   (ii) World Directory of Mathematicians.

7. Finance and Dues :

   A -   Financial reports for the years 1978 - 1981.

   B -   Proposals for 1979 - 1982 :
         The Executive Committee proposes an increase in dues.

   C -   Budget estimates for 1983 - 1986.

8. Elections :

   (i)   Executive Committee, (ii) I.C.M.I., (iii) C.D.E.

9. Approval of the Budget 1983-1986.

10. International Congress of Mathematicians, ICM '82.
    Program Committee for ICM 1986.

11. Adoption of Resolutions.

12. Next Meeting of the General Assembly.

13. Any other item with the permission of the President.

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REPORT OF THE EXECUTIVE COMMITTEE
TO THE NINTH GENERAL ASSEMBLY
OF THE INTERNATIONAL MATHEMATICAL UNION

WARSAW, POLAND
AUGUST 8 & 9, 1982

This report covers the period from June 1, 1978 to June 30, 1982.

A. - MEMBERSHIP OF THE UNION.

The Union has now 50 members, 3 more than in 1978.

New Members :

During the period 1979-1982, the following members were admitted by postal ballot among the members of the Union, upon recommendation of the Executive Committee :

        HONG-KONG,   admitted in Group I,   starting 1.1.1982 ;
        KOREA (REPUBLIC OF)   Group I,   starting 1.1.1981 ;
        VIET-NAM   admitted in Group I,   starting 1.1.1981.

Changes in group of adherence :

The following changes were asked for during the period 1979-1982 and met with a favourable vote from the members of the Union, upon recommendation of the E.C. :

        ARGENTINA   from Group I to II,   effective 1.1.1979,
        BRAZIL   from Group II to III,   effective 1.1.1981.

IRAN asked for a decrease in its group of adherence to the Union, from Group II to I. Due to circumstances, the E.C. gave a positive recommendation and no vote was against among member countries. This change is effective from 1.1. 1980.

Thus, the members of the Union are distributed as follows :

        GROUP I : Cameroon, Cuba, Arab Republic of Egypt, Greece, Hong-Kong,
                   Iceland, Iran, D.P.R. of Korea, Korea (South), Mexico,
                   New Zealand, Nigeria, Norway, Philippines, Portugal,
                   Singapore, Taïwan-China, Turkey, Viet-Nam.

GROUP II : Argentina, Austria, Bulgaria, Denmark, Finland, Ireland,
Israël, Romania, South Africa, Spain, Pakistan, Yugoslavia.

GROUP III : Australia, Belgium, Brazil, Canada, Czechoslovakia, Democratic
Republic of Germany, Hungary, India, Netherlands, Sweden,
Switzerland.

GROUP IV : Italy, Poland.

GROUP V : France, Federal Republic of Germany, Japan, United Kingdom,
U.S.A., U.S.S.R.

The following tables can show the evolution of adherence inside the Union :

1975 - 1978		1979 - 1982	
Group	*Countries*	*Group*	*Countries*
Group I - vote 1 :	16 = 16 votes	Group I - vote 1 :	19 = 19 votes
Group II - vote 2 :	13 = 26 "	Group II - vote 2 :	12 = 24 "
Group III - vote 3 :	10 = 30 "	Group III - vote 3 :	11 = 33 "
Group IV - vote 4 :	2 = 8 "	Group IV - vote 4 :	2 = 8 "
Group V - vote 5 :	6 = 30 "	Group V - vote 5 :	6 = 30 "
	Voting strength 110 votes		*Voting strength* 114

This corresponds for the period 79-82 to 156 units of contribution.

Contacts with the People's Republic of China (cf.Resolution Nb. 7 of the GA.1978):

Some very active contacts have been taken with Chinese mathematicians, during the
years 1980 and 1981 especially, by members of the Union on the occasion of exchan-
ge cooperation programs or visits to Mainland China. Many links have thus been
stressed and it seems that China could be willing to enter the Union and take a
good position among the mathematical community.

B. - REPORT ON THE SCIENTIFIC ACTIVITIES OF THE UNION :

Symposia, Conferences :

Below are listed the meetings that have been sponsored by IMU during the period
1979-1982.
Detailed reports have already been presented in Bulletins Nbs. 15, 16 and 18.
Owing to a difference in sources of financial support, and following the last
General Assembly recommendations to reinforce help towards developing countries,
and ICSU's new projects policy, two series of manifestations have thus been spon-
sored by the Union : General meetings, directly sponsored by IMU and Regional
meetings under the CDE/IMU sponsorship.

General Meetings :

<u>1979</u> : 1. *Colloquium on Automorphic Forms, Representation Theory and Arithmetic.*
   Bombay (India), January 8-15, 1979.

    2. *International Conference on Mathematical Physics.*
   Lausanne, (Switzerland), August 20-25, 1979.

    3. *Symposium on Trends in Applications of Pure Mathematics to Mechanics*
   Edinburgh, September 9-13, 1979.

    4. *International Conference on Topology and its Applications.*
   Moscow, June 25-29, 1979.

<u>1980</u> : 1. *Symposium on Logic and Algorithmics.*
   Zürich (Switzerland), February 5-11, 1980.

    2. *International Conference on Functions, Series, Operators.*
   Budapest (Hungary), August 21-25, 1980.

    3. *International Conference on Generalized Functions and their Applications in Mathematical Physics.*
   Moscow, November 24-28, 1980.

    4. *I.C.M.E. IV. (International Congress on Mathematical Education)*
   Berkeley (California), August 10-16, 1980.

<u>1981</u> : 1. *Colloquium on Algebraic Geometry.*
   La Rabida, Huelva (Spain), January 7-15, 1981.

    2. *International Mathematical Conference on Algebra.*
   Singapore, June 1-13, 1981.

    3. *International Conference on Combinatorics.*
   Marseille-Luminy (France), June 15-20, 1981.

    4. *VIth. International Conference on Mathematical Physics.*
   Berlin, (F.R.G.), August 11-20, 1981.

    5. *Vth. Symposium on General Topology and its Relations to Modern Analysis and Algebra.*
   Prague (Czechoslovakia), August 24-29, 1981.

    6. *Symposium on Dynamical Systems.*
   Rio-de-Janeiro, July 27-August 7, 1981.

    7. *International Conference on Analytical Methods in Number Theory.*
   Moscow, September 14-19, 1981.

<u>1982</u> : 1. *IInd. SEAMS Mathematical Conference*
   Manila (Rep. of the Philippines),(postponed from November 1981) :
   Workshop May 17-29, 1982 - Conference May 31-June 5, 1982.

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C. PUBLICATIONS OF THE UNION.

1. *Commission on Development and Exchange (C.D.E.) publications with the help of ICSU/UNESCO* :

AFRIKA MATEMATICA and the SEAMS *Newsletter* have been regularly published during the period 1979-1982, owing to ICSU-UNESCO contract and IMU contribution for the same period. It is to be noticed that 1981 is the last yearly contribution of IMU to these publications ; as mentioned at the 1981 E.C. meeting, the Union has not to be involved in publications.

2. *IMU Bulletins*.

The following issues were printed and distributed gratis to all the National Committees and National Adhering Organizations of IMU and its Commissions, to other mathematical societies, not yet members of the Union, ICSU and other Unions, and some libraries, upon request :

. *Bulletin Nb. 14, October 1978,* giving reports of the General Assembly and of ICM '78 ;

. *Bulletin Nb. 15, July 1979,* report on the scientific activities and financial report for 1978 ;

. *Bulletin Nb. 16, October 1979,* news from IMU, scientific activities and financial report for 1979 ;

. *Bulletin Nb. 17, July 1981,* list of addresses of NC and NAO ; preparation of the General Assembly and ICM '82 ;

. *Bulletin Nb. 18, Décember 1981,* report on the scientific activities and financial matters ; second announcements for General Assembly and ICM.

. *Special Number issue, May 1982* information required for the Ninth General Assembly.

Other issues of the IMU Bulletin are scheduled as follows : July 1982, giving the yearly report on scientific and financial matters, and another one, in the Fall, giving a report of the General Assembly and its Resolutions.

3. *WORLD DIRECTORY OF MATHEMATICIANS*.

Sixth Edition (1979), has been completed and distributed under Professor Nagata's direction in Kyoto. 2,000 copies were printed and more than a half already suscribed.

Seventh Edition (1982), is prepared with the help of the American Mathematical Society and North-Holland, for distribution, always under Professor Nagata's direction.

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Fellowships :

Three Fellowships grants have been extended in 1979 and 1980 to, respectively, Drs. Ramada, Musili and Rao from India, to help paying their travel expenses, the first one to Orsay (France), the second to the Cargèse Summer School (Corsica, France), and the third one to attend the Conference on Generalized Functions and their Applications in Mathematical Physics, (Moscow, 1980).

The funds granted during the period 1979-1982 (totalling US $. 1,500) are far below the budgeted previsions (about $ 3,500 per year). This is due to the fact that very few applications were received by the E.C.

IMU Lectures.

Since 1979, the following lectures have been given :

. *Pr. H. Furstenberg (University of Jerusalem)*, at IHES, France, early 1980. *Title* : *"Les frontières de groupes et leurs applications"*.

. *Pr. W. Jaco (Rice University, U.S.A.)* at the Institut de Mathématiques, Lausanne, Switzerland, in 1981. *Title* : *"Variétés de dimension 3"*.

. *Pr. S.T. Yau (Institute of Advanced Study, Princeton)*, at E.T.H., Zürich, Switzerland, Fall 1981. *Title* : *"Non-linear Partial Differential Equations in Geometry"*.

It is to be noticed that invitations from IMU to, respectively, Professors V. Arnold and L. Faddeev, are still valid.

The three above series of conferences are not yet published in the Revue "L'Enseignement Mathématique" in Lausanne, the authors wanting to re-write their manuscripts. In accordance, no stipend has been paid.

Free circulation of Scientists : (Resolution 10 of the 8th General Assembly of IMU).

Concerning the attendance to scientific meetings and international conferences, when giving support, the IMU Secretariat systematically drew the attention of the Organizing Committees on the Resolution of the 15th General Assembly of ICSU and on behalf of the EC, following the recommendation of the 8th G.A. of IMU, requested its application.
During this period, no complaint has been heard of non-attendance to these meetings for these reasons.

I. - INTERNATIONAL COMMISSION ON MATHEMATICAL INSTRUCTION (I.C.M.I.).

Report for the period January 1st 1979 to June 30, 1982
by Professor Peter HILTON, secretary ICMI.

The present Executive Committee of I.C.M.I. (EC-ICMI) was formed after the General Assembly of IMU at Otaniemi, in August 1978, under Professor H. Whitney, chairmanship. It consisted of :

H. Whitney,	President	S. Erlwanger,	Member,
B. Christiansen,	Vice-President	B.H. Neumann,	Member,
U. d'Ambrosio,	Vice-President	Z. Semadeni,	Member,
P. Hilton,	Secretary,		
S. Iyanaga,	Past-President and	J.L. Lions, secretary of IMU are	
	ex-officio members.		

Professor B. Christiansen agreed to be IMU representative on C.T.S. (Commission on Teaching of Science).

I.C.M.E. - IV.

The main event of the period under review was, of course, the Fourth International Congress on Mathematics Education held at the University of California, Berkeley, from August 10 to 16, 1980. The following is extracted from the report of Dr.Henry Pollak, chairman of the International Program Committee :

"Attendance at Berkeley was about 1800 full and 500 associate members, from about 80 countries : at least half of these came from outside of North America. About 450 persons participated in the program either as speakers or as presiders ; approximately 40 per cent of these came from the U.S.A or from Canada.

"There were four plenary addresses ; they were delivered by : Hans Freudenthal, on major problems of mathematics education, Hermina Sinclair, on the relationship between the learning of language and of mathematics, Seymour Papert, on the computer as carrier of mathematical culture, and Hua Loo-Keng, on popularizing and applying mathematical methods. George Pólya was the honorary president of the Congress : illness prevented his planned attendance, but he sent a brief presentation entitled : "Mathematics Improves the Mind".

"There was a very full program of speakers, panelists, debates, miniconferences, and meetings of working and study groups. In addition, 18 major projects from around the world were invited to make presentations, and various groups representing

special areas of concern had the opportunity to meet and to plan their future
activities.

"Innovations relative to previous Congresses included the following :

1) - A series of miniconferences, in memory of Edward G. Begle, devoted to criti-
cal variables in mathematical education ;

2) - A series of miniconferences on topics in the mathematical sciences which de-
serve serious consideration, in all countries, for inclusion in the curricu-
lum : algorithms, operations research, combinatorics, data analysis, algebraic
coding theory, extrema without calculus ;

3) - Simultaneous translation, among English, French, and Spanish, of one session
at all times ;

4) - Daily informal gatherings with coffee and pastry in the morning, wine and
cheese in the late afternoon ,

5) - A serious attempt to evaluate the Congress. Results from the latter should be
available this year.

"When one considers the richness of the program, the attendance was smaller than
had been hoped. Reasons for this which were most often heard involved the state of
the American economy, and the fact that the full program was not available until
the Congress itself. May the next Congress, scheduled for Adelaïde, Australia, in
1984, build on the success and avoid the weaknesses, of Berkeley !"

Proceedings of the Congress will shortly be available.

2. _Bulletin of ICMI_.

A number of reasons account for the late appearance of the 12th issue of the Bull-
etin, and the Secretary wishes to take this opportunity to apologize for those
shortcomings in the publication process for which he must take responsibility.
However, a continuing problem is the paucity of material for the Bulletin, so
that it is extremely important that the President's appeal for suitable material
be heeded. The EC of ICMI of especially anxious to receive information about ini-
tiatives being taken to hold regional conferences devoted to particular aspects
of mathematics education. However, relevant personal items would also be welcome.

3. _Future activities_.

Certainly the most important future activities which should be brought to the at-
tention of those interested in mathematics education are :

(i) ICMI Symposium on *"What Mathematics should be taught in General Education"*, to be held concurrently with the ICM Congress in Warsaw in August(*) 1982. This symposium is being organized by Professor Z. Semadeni, of the Mathematics Institute, PAN, Warsaw, and the joint chairmen of the Programme Committee are Professor Z. Krygowska of Krakow, Poland, and H.-G. Steiner, of Bielefeld, West Germany. Considerable attention will be given to the problems of developing countries.

(ii) ICME - V, the Fifth International Congress on Mathematics Education, to be held in Adelaide, South Australia, in August 1984. The chairman of the International Program Committee is Dr. M.F. Newman, of the Department of Mathematics of the Australian National University in Canberra.

4. *Financial Report.*

INCOME :	Received from Professor Kawada, (1.1.1979)	$	5,125.36
	Income (from IMU, UNESCO, Royalties, refund from Don Hill ICME-IV)	$	14,155.19
		$	19,280.55
EXPENDITURE :	ICME-IV, Bulletin, ICMI EC	$	14,693.45
	Balance (at 26/4/82)	$	4,587.10
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(*) Now postponed to August 16-24, 1983.

II. - <u>COMMISSION ON DEVELOPMENT AND EXCHANGE</u> (C.D.E.)

   Report on the period January 1st 1979 to June 30, 1982,
   by Professor H. HOGBE-NLEND, chairman.

The present Commission has been established at the 8th General Assembly of IMU, Otaniemi, Finland, in August 1978. The following members were elected and their term of office expires on December 31, 1982.

H. Hogbe-Nlend (chairman)	G.D. Mostow,
M.F. Atiyah,	N.S. Narasimhan,
A.J. Coleman,	B. Szökefalvi-Nagy
D. Guedes de Figueiredo,	A.D. Pogorelov,
K. Ito,	Secretary of IMU (ex-officio).

Following the "Terms of Reference", a detailed annual report of the activities of the Commission has been presented to the Executive Committee and printed in the IMU Bulletins Nbs.14, 15, 16, 17 and 18. These activities can be summarized as follows :

A. - Scientific and financial support of mathematical meetings in developing countries : Africa, Asia, Latin America.

B. - Support provided to regular regional publications : Afrika Matematica and the SEAMS Bulletin, (at least one issue/year).

C. - Help to mathematical librairies over an extensive program in developing countries. More than one thousand books and publications have been sent to these countries.

D. - Active cooperation with International Mathematical Centers : ICPAM/CIMPA (International Centre for Pure and Applied Mathematics) in Nice, France and ICTP (International Centre for Theoretical Physics) in Trieste, Italy.

E. - Preparation for ICM '82, especially through the "Travel Grants Committee" to enable young mathematicians to attend the next International Congress of Mathematicians in Warsaw.

Regional Meetings : *sponsored in Developing Countries under CDE/IMU support.*

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ASIA : *Symposium on Operational Research and Graph Theory.*
Singapore, May 14 - June 2, 1979.

AFRICA : *Colloquium on Functional Analysis and Applications*
Kumasi, Ghana, August 15-22, 1979.

LATIN AMERICA : *The XIIth Brasilian Colloquium of Mathematics.*
Poços de Caldas, Brasil, August 1979.

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ASIA : *Workshop on Recent Advances in Mathematics and its Applications.*
Hong-Kong, June 16-21, 1980.

Regional Workshop on Recent Advances in Finite Element Methods.
Applications in Mechanics and Engineering.
Penang, Malaysia, November 10-17, 1980.

AFRIKA : *First African School on Mathematics and Economics.*
Dakar, Senegal, April 28 - May 7, 1980.

LATIN AMERICA : *Vth. Latin-American School of Methematics, ELAM Vth.*
Mar-del-Plata, Argentina, July 26 - August 8, 1980.

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ASIA : *IInd SEAMS Mathematical Workshop.*
Manila, Philippinas, May - June 1982 (as beforesaid, this Workshop was
scheduled for November 1981 and postponed till 1982).

AFRICA : *Summer School on Group Representations and its Applications.*
Ibadan, Nigeria, August 17 - September 11, 1981.

First East African Symposium on Analysis and Topology.
Naïrobi, Kenya, June 1981.

LATIN AMERICA : *First Latin American School on Differential Equations.*
Poços de Caldas, Brasil, July 1981.

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. Travel Grants Program for ICM '82.

. Cooperation with UNESCO for the following mathematical activities in
developing countries :

AFRICA : *Symposium on Mathematics for Development*, Khartoum, Sudan, February 1982.
Seminar on Harmonic Analysis and Applications, Tunis, Oct.-November 1982.
Seminar on Numerical Methods in P.D.E., Abidjan, Ivory Coast, April 1982.

ASIA : *VIth SEAMS Biennal General Meeting*, Manila, Philippinas.

Some further activity proposals for the C.D.E. :

1. - A follow-up of the scientific and financial support to mathematical activities in developing countries.

2. - A follow-up and development of the support provided to mathematical libraries in Developing countries
In particular, realization of a "selective bibliography" in cooperation with the ICPAM Centre.

3. - Realization, publication and up-dating a "Mathematical Directory on Third World Countries" (in cooperation with ICPAM).

4. - To publish a "Newsletter" on "Mathematics and Development" (in cooperation with ICPAM).

March 1982.

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E. - MEETINGS OF THE EXECUTIVE COMMITTEE OF IMU.

The E.C. of IMU met in Paris, at the Collège de France, at the following dates :
- 40th meeting, April 4 and 5, 1979.
- 41st meeting, April 8 and 9, 1980,
- 42nd meeting, April 27 and 28, 1981,
- 43rd meeting, April 1st and 2nd, 1982.

Due to circumstances an informal meeting, after extensive consultations, was held in Warsaw, on February 9th, between Professors Carleson, President, Lions, secretary, Lehto and the Organizing Committee for ICM '82, under Professor Olech's chairmanship.

An informal meeting of ICMI was held in Princeton on February 18-20, 1982 by Professors H. Whitney, President of ICMI, B. Christiansen, Vice-President, B. Erlwanger, B. Neumann, S. Iyanaga, J.L. Lions and D. Montgomery, to deal with ICMI business.

A meeting of the E.C. of IMU is scheduled on August 7, just before the beginning of the General Assembly.

The following business of the Union was conducted by postal ballot during the same period :   among the members of the E.C., see Appendix I , and among the N.A.O, see Appendix II . Report of these meetings and business are printed in IMU Bulletins Nbs. 15, 16, 18 and 19 (to appear).

F. - RELATIONS WITH ICSU-UNESCO.

During this period, Professors Carleson, Kneser, Lions, Lehto, successively atten-
ded the ICSU General Committee meetings and General Assembly.

The main item under discussion was the new repartition of UNESCO subvention among
Unions of the ICSU family. This first conducted to Special Development Projects
that could be taken care of under ICSU/UNESCO contracts. The IMU Commission on
Development and Exchange benefited from this new kind of support.

Since the Resolution passed at the 18th General Assembly of ICSU, beginning in
1982, the distribution of the ICSU yearly grants will be divided into two parts :

- *a basic allocation* (part of the UNESCO subvention) ;

- *special grants* (based on the proposals submitted for specific
  projects to the Standing Finance Committee of ICSU, from ICSU Fund
  and UNESCO subvention).

The annual ICSU-UNESCO subvention, that have been of great help to the Union,
stood as follows for the period 1979-1982 :

1979 : US $. 16,000 (13,000 allocation +
                        3,000 contract for CDE) ;

1980 : US $. 16,000 (8,000 basic allocation +
                        8,000 contracts for CDE) ;

1981 : US.$. 12,600 (9,600 basic allocation +
                        3,000 contract for CDE) ;

1982 : US $. 13,808 (10,808 basic allocation +
                        3,000 contract for CDE).

Moreover, two special UNESCO contracts have been directly granted to CDE for the
years 1979 and 1980, thus helping promoting two meetings in South America. See
Appendix III, recapitulation of scientific activities for the 1979-1982 period .

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G. SPECIAL DEVELOPMENT FUND.

This Fund has been established at the last General Assembly in Otaniemi, its pur-
pose being to enable the Union to promote scientific activities in Developing
countries in a significant manner withour having to impose an extra burden via an
increase in the dues to these countries.

The following sums have been collected :

1979 : total US $. 2,498- (United Kingdom Sw.Frs. 730-
                         Yugoslavia   "   100-
                         Fed.Rep.Germany   "   4.282-)

1980 : total US $. 6,756- (United Kingdom Sw.Frs. 768-
                         Denmark   "   111-
                         Yugoslavia   "   100-
                         Sweden . . . . US $ 200-
                         Finland . . . . "   5,012-
                         Netherlands . . . . "   955-)

1981 : total US $. 3,636- (United Kingdom Sw.Frs. 378-
                         New Zealand . . . . F.Frs. 208-
                         Italy   Sw.Frs. 5,800-
                         (received January 1982).

The budgeted previsions were of S.Frs. 25.000/year. Though these sums have not been attained, very generous donations have been given and from the modest sums to the more significant ones, great efforts have been made. It is a pleasant duty for the Executive Committee to thank very warmly each donator.

This amount will be used for Travel Grants to young mathematicians for the forth-coming ICM, to which the E.C. would like to enable a large participation of young people.

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APPENDIX I

E.C. BUSINESS CONDUCTED BY POSTAL BALLOTS DURING THE PERIOD 1979 - 1982 :

Ballot Nb.			Decision :
Oct. 1978	1	Nomination of IMU representatives to CIMPA	agreement
Nov. 1978	2	Support of 1st meeting of CDE in Bordeaux	yes
Jan. 1978	3	Support of Conference on Topology Moscow 79	yes
June 1980	4	Agreement for support of the Int. Mathematical Conference in Singapore 1981	yes
July 1980	5	Agreement for nominating Pr. Jaco as IMU lecturer for 1981	yes
July 1980	6	Agreement for support of the Int. Colloquium on Combinatorics, Marseille 1981	yes
July 1980	7	Agreement for change in group of adherence of IRAN, decreasing II to I, subject to no objection from NAO	yes
July 1980	8	Fields Medals Committee. Nomination of a member ...agreement	
Oct. 1980	9	Modification concerning the election of the E.C. Proposal for new procedure ....agreement	
Oct. 1980	10	Agreement for support of the 1st Latin-American School of Differential Equations	no
Nov. 1980	11	Agreement for support of the Int. Colloquium on Algebraic Geometry, Huelva, Spain	yes
Nov. 1980	12	Recommendation for the admission of the Republic of KOREA to IMU	yes
Nov. 1980	13	Recommendation on the application from BRAZIL to move from Group II to III	yes
Nov. 1980	14	Recommendation on the admission of CHILE to IMU	yes (subject to more informat.)
Dec. 1980	15	ICSU project of creating an ICSU Publishing House	letter to ICSU 21/81
June 1981	16	Recommendation for the admission of HONG-KONG to IMU	yes
Dec. 1981	17	Application for Scientific Associate Status of World Organization of General Systems and Cybernetics to ICSU	no
Jan. 1982	18	Agreement on circular letter to be sent to NC about next GA and ICM	yes
Feb. 1982	19	Proposal for funding a prize in the field of Mathematical aspects of Information Science	yes

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APPENDIX II

INTERNATIONAL BALLOTS AMONG N.A.O. FOR THE PERIOD 1979 - 1982.

Ballot Nb.   *Results*
(*followed from period*
1975-1978)

Nb. 12 - July 1980   International consultation for
                        Fields Medals Committee .... answers to
                                                                Pr. Carleson

"   13 - July 1980   No objection on change in group of adherence
                        of IRAN (decreasing from II to I) .... no objection

"   14 - Apr. 1981   Approval in procedure of election of the   approval
                        E.C. of IMU ....

"   15 - May 1981   Approval of new Terms of Reference for CDE. approval

"   16 - May 1981   Admission of VIET-NAM to IMU in Group I ...   yes

"   17 - May 1981   Admission of REP. OF KOREA to IMU in Gr. I.   yes

"   18   May 1981   Change in the group of adherence of BRAZIL
                        (from II to III) ....   yes

"   19   Aug. 1981   Admission of HONG-KONG in Group I ....   yes

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APPENDIX III

SCIENTIFIC ACTIVITIES

Conferences & Symposia	1979	1980	1981	1982
IMU support (in US $)	Bombay 5,000 Lausanne 1,500 Edinburgh 1,500 Moscow 2,500	Zürich 1,500 Budapest 2,500 Moscow 2,000 ICMI IV 6,000	Huelva 3,000 Singapore 2,000 Marseille 1,000 Berlin 3,000 Prague 2,000 Moscow 3,000 Rio/Janeiro 6,000	No meeting supported in the year of I.C.M.
Total :	10,500	12,000	20,000	
ICSU allocat.	13,000	8,000	9,600	10,808 (ICM)
CDE/IMU :				
Regional Meetings	Singapore 1,500 Kumasi 1,500 Poços de Caldas 4,000	Dakar 3,500 Mar-del 2,000 Plata 5,000 Penang 2,500 Hong-K. 2,000	Poços de 3,000 Caldas Ibadan 3,000	Manila : 3,000
Fellowships	Drs. Ramadas 500 Musili 300	Dr. Rao 700	--	
Publications Afrika Matematica Bull. SEAMS	2,000	2,000	2,000	--
Administr. help :	1,000	1,000	1,000	1,000
Total :	10,800	18,700	12,000	4,000 + I.C.M. (Travel Grants)
ICSU/UNESCO contracts	3,000	8,000	3,000	3,000
Special UNESCO/IMU/ CDE contracts	5,000	5,000	--	
IMU Lectures	Pr. Furstenberg 1,000	---	Pr.Jaco 1,000 Pr. Yau 2,000	(for 1982)
I.C.M.I.	ICME-V 5,000 (advance payment)			

Ninth General Assembly of I.M.U.

WARSAW, August 8 & 9, 1982

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SOME PRACTICAL DETAILS :

The Ninth GENERAL ASSEMBLY of IMU will be held at Warsaw, on Sunday and Monday August 8 and 9, 1982, at HOTEL INTERCONTINENTAL where a large room is reserved for meetings.

Accommodation will also be available at the same Hotel, for 3 nights, at the following "package rate" : US.$. 142--.
This includes : single room with bath, breakfast and 2 lunches.
A longer stay can be envisioned upon request, under the same special conditions.

Each delegate (alternate) will receive *directly rom Professor C. OLECH*, a registration form to be filled and sent back as soon as possible to him (*).
Procedure for visas will be asked under the code *"IMU GENERAL ASSEMBLY 82, WARSAW"*.

The IMU secretariat is at your disposal for any information or help you may need :

Telephone : France (3) 954.90.20, extension 404 or 405,
Telex : Collège de France or INRIA 697 033 F.

(*) with a copy to the IMU secretariat, address as above.

THE NEW PRIZE ON "MATHEMATICAL ASPECTS OF INFORMATION SCIENCE"

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The E.C. of IMU has received the following letter from the University of Helsinki

International Mathematical Union

"We are pleased to inform you that on December 9, 1981, the
"University of Helsinki decided to grant the International
"Mathematical Union the funds for the prize "Mathematical
"Aspects of Information Science", to be awarded at Interna-
"tional Congresses of Mathematicians".

signed :   Vice-Rector   Reino Ryhänen

Secretary of the
Consistorium   Jukka Petänen

The E.C. of IMU expresses its warmest thanks to the University of Helsinki for
this generous offer.

The E.C. is particularly happy to have the opportunity, in awarding this prize
every four years, on the occasion of ICM, to express the great interest that the
E.C. of IMU sees in the development of Mathematical activities in Information
Sciences.

The E.C. decided to name this prize the   "NEVANLINNA PRIZE"

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Next International Congress of Mathematicians

DATES :

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       AUGUST  16  to  24,  1983

            WARSAW,    POLAND
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WORLD DIRECTORY OF MATHEMATICIANS

7th Edition

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April, 1982.

The Seventh Edition of the WORLD DIRECTORY OF MATHEMATICIANS is being prepared and published by the American Mathematical Society. Copies will be available in August, 1982. The distributors for the WDM are the American Mathematical Society (AMS), North-Holland Publishing Company, Kinokuniya Company and the Bureau of the World Directory. Kinokuniya Company and the Bureau of the World Directory will fill all orders from customers in Japan.

The American Mathematical Society will accept orders only after payment is received. The AMS list price for the 7th edition of the WDM is $ 23.00 per copy. For AMS members, ordering directly from AMS, the price is $ 21.00. Checks should be made payable to AMS and sent to :

> American Mathematical Society
> P.O. Box 1571
> Annex Station, Providence, R.I. 02901, USA.

If a proforma invoice is being requested, the order should be sent to :

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> Mathematics Department
> Kyoto University
> Kyoto 606, Japan.

Kinokuniya Company will accept unpaid orders for the WDM. The price is ¥ 5,000 per copy. Orders to Kinokuniya should be sent to :

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