

**Bulletins of the  
International  
Mathematical Union**



**Bulletin of the IMU, No. 13 (1978)**

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**Bulletin of the International Mathematical Union**

*Bulletins of the International Mathematical Union, No. 13, 21 pp. (1978)*

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DOI: [The DOI will be assigned later]

# IMU

BULLETIN  
OF THE  
INTERNATIONAL MATHEMATICAL UNION

No. 13  
July 1977

SECRETARIAT :

COLLEGE DE FRANCE  
11, Place Marcelin Berthelot  
75231 PARIS CEDEX 05 FRANCE

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INTERNATIONAL MATHEMATICAL UNION

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EXECUTIVE COMMITTEE

(1 January 1975 - 31 December 1978)

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President :                    Professor Deane Montgomery

Vice-Presidents :            Professor J.W.S. Cassels  
                                 Professor G. Vranceanu

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Members :                    Professor E. Bombieri  
                                 Professor M. Kneser  
                                 Professor O. Lehto  
                                 Professor M. Nagata  
                                 Professor L.S. Pontrjagin

Past President :              Professor K. Chandrasekharan

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*Professor FROSTMAN passed away.*

Professor Otto Frostman died on December 29th, 1977.

He contributed several classical results in Mathematical Analysis, and in particular in Potential Theory.

He has been Secretary of IMU since January 1967 until the end of 1974.

As it was agreed by the General Assembly of IMU in Vancouver, Professor Frostman kept, after 1974, and until his death, the very heavy responsibility of the World Directory of Mathematicians.

He was indeed working on the preparation of the new edition of the W.D.M. at the time of his death.

We present to Mrs. L. Frostman and to Professor and Mrs. Frostman's family our most sincere condolences.

*The Executive Committee  
of I.M.U.*

WORLD DIRECTORY OF MATHEMATICIANS

After Professor Frostman's death, Mrs. Lisa Frostman and her son, Mr. Lars Frostman, were extremely helpful in organizing all data in order to pursue the work on the new edition of the W.D.M. We deeply thank them for their precious help.

Professor M. Nagata very kindly accepted the responsibility of organizing, at the Kyoto University, the preparation of the next edition.

Details about this preparation will be given in the next Bulletin.

We have already sent letters to National Adhering Organizations. We repeat here the most important point :

*All new information concerning the W.D.M. should be sent to :*

Professor M. NAGATA  
Bureau of the World Directory of Mathematicians  
Mathematics Department  
Kyoto University  
KYOTO 606, JAPAN

All the information already collected by Professor Frostman has been sent to Professor Nagata through the kind help of Mrs. Frostman.

## SCIENTIFIC ACTIVITIES OF THE UNION

We summarize below the scientific activities of the Union since July 1976 :

COLLOQUIUM ON MODULAR FORMS : held at Bonn University, July 2-14, 1976, on the topic :

Arithmetic properties of modular forms and modular curves, with emphasis on the case of one variable. This is a very active field to-day.

The main subjects were :

- . rational points on modular curves,
- . relations between forms in 1 and 2 variables,
- . Galois representations attached to modular forms,
- . p-adic functions.

The Organizing Committee consisted in Professors F. Hirzebruch and D. Zagier, from Bonn University and Professor J.P. Serre, from the Collège de France, Paris.

The main lecturers were : A. Ogg (Berkeley, U.S.A.), B. Mazur, J. Tate (Harvard, U.S.A.), N. Katz (Princeton, U.S.A.), O. Atkin (Chicago, U.S.A), A. Brumer (Columbia University, U.S.A.), together with the Organizers.

FOURTH INTERNATIONAL SYMPOSIUM ON TOPOLOGY : held in Prague from August 23 to 27, 1976.

Professor J. Novák was the chairman of the Organizing Committee which consisted of Professors Z. Frólik, J. Hejčman, M. Hušek, M. Katesov, V. Koutnik, V. Pták, M. Sekanina, S. Schwarz, V. Tenkova.

The total number of participants was of 217 (164 from abroad and 53 from Czechoslovakia), representing 16 countries.

The Proceedings of this Conference are going to be published in two volumes, one by ACADEMIA, Publishing House of the Czechoslovak Academy of Sciences, and another one by Springer-Verlag.

INTERNATIONAL SYMPOSIUM ON ALGEBRAIC GEOMETRY : this Symposium took place at the Research Institute for Mathematical Sciences of the Kyoto University, Kyoto, Japan, from January 10 to 14, 1977.

Professor M. Nagata was the chairman of the Organizing Committee. The support for this important meeting was decided at the 1975 meeting of the Executive Committee granting a sum of US Dollars 5,000- for travel expenses to foreign participants. The Union representatives were Professors E. Bombieri and C.S. Seshadri.



INTERNATIONAL COLLOQUIUM ON TOPOLOGY AND ALGEBRA : was held at the Eidgenössische Technische Hochschule, Zürich, from April 12 to 16, 1977.

The Organizer was Professor E. Specker, chairman of the Program Committee, and the Colloquium was dedicated to Professor B. Eckmann.

The total number of invited participants was about 40 and the main invited speakers were Professors Adams, Borel, Bott, Dold, Hirzebruch, Hilton, James, Kodaira, McLane, Milnor, Serre, Stallings, Swan.

The Union granted a sum of US Dollars 1,000- for travel expenses to foreign participants.

THE UPPSALA 1977 INTERNATIONAL CONFERENCE ON DIFFERENTIAL EQUATIONS, held from April 18 to 23, 1977, in connection with the 500th Anniversary of the University of Uppsala, and supported by this University, the Swedish Government and I.M.U. and sponsored by the Swedish Academy of Sciences and its National Committee for Mathematics. Professor Åke Pleijel was responsible for the Organizing Committee.

The particular aim of the Conference was to feature recent advances in the fields of Weyl's theory and its generalizations and the spectral problem for linear differential equations. This subject was broadened by taking up the related questions and other problems of general interest. Part of the Conference was devoted to applications in different fields.

The main speakers were Professors F.V. Atkinson, R. Conti, W.A. Coppel, A. Devinatz, M.S.P. Eastham, W.N. Everitt, A. Friedman, J.K. Hale, H. Langer, B.M. Levitan, V.A. Marcenko, C. Olech, L. Pontrjagin, F.S. Rofe-Beketov, B. Szökefalvi-Nagy, J. Weidman, L. Lorch, R. Nevanlinna. The Proceedings of this Conference will be published in the Lecture Notes Series by Springer-Verlag.

INTERNATIONAL CONFERENCE ON THE MATHEMATICAL PROBLEMS OF THEORETICAL PHYSICS : was held from June 6 to 15, 1977 at the University of Rome (Italy). The Organizing Committee consisted in Professors G.F. Dell'Antonio, S. Doplicher, G. Gallavotti, G. Jona-Lasinio and one of the features of the Conference was to have comprehensive and advanced review talks, of about one hour to provide orientation and perspectives to younger workers in the wider interdisciplinary context of Mathematics and Physics.

Thus the following subjects were discussed :

Classical Mechanics and Field Theory, Quantum Field Theory, Dynamical Systems, Equilibrium Statistical Mechanics and Stochastic Processes, Non-Equilibrium Statistical Mechanics, Scattering Theory, Operator Algebras, Functional Integration.

The Conference was co-sponsored by IMU and the Istituto Nazionale di Fisica Nucleare.

INTERNATIONAL SYMPOSIUM ON ANALYSIS AND ITS APPLICATIONS, held at Ibadan, Nigeria, from June 25 to July 2nd, 1977.

The purpose of this Symposium was to bring together research workers in the West African countries working in the field of Functional Analysis and its Applications in order to identify areas of application of Functional Analysis and encourage cooperation among research workers.

The meeting had Instructional Lecture Series on the following topics :

- . Some Mathematical Models of Population Genetics, by Professor T. Poulsen,
  - . Topological Vector Spaces, by Professor S.O. Iyahan,
  - . Semi-groups of non linear contractions in Banach spaces, by Prof. I.Miyadera,
  - . Indefinite Inner Product Spaces and their linear Operators, by Prof. J. Bogner.
- and

Invited Lectures, by :

Professor M. De Wilde, Dr. M. Ajtai, Prof. F. Cardoso, Prof. D. Ruelle, Professor A. Maduemezia, Prof. G.R. Allan, Prof. Pelczynski, Dr. T. Owusu-Ansah, Dr.M.Akkar, Dr. C.O.A. Sowunmi, Prof. G.E. Tanyi, Dr. T. West, Prof. A. Vignoli, Professor J.A. Donaldson, Prof. W. Zelazko.

INTERNATIONAL SYMPOSIUM ON APPROXIMATION THEORY, held at Campinas, Brazil, from August 1st to 6th, 1977.

The Organizing Committee was formed by S. Machado, L. Nachbin, J.B. Prolla, G.I. Zapata. There were 36 participants from Africa, America and Europe. Nineteen lectures were given by the following lecturers :

R. Aron (Ireland), J. Barros-Neto (U.S.A.), K.D. Bierstedt (R.F.A.), P. Boland (Ireland), B. Brosowski (R.F.A.), J.P. Carneiro (Brazil), S. Machado (Brazil), P. Malliavin (France), R. Meise (R.F.A.), L. Nachbin (Brazil), L. Narici (U.S.A.), P. Noverraz (France), O. Paques (Brazil), D. Pisanelli (Brazil), J.B. Prolla (Brazil), M. Valdivia (Spain), D. Wulbert (U.S.A.), G.I. Zapata (Brazil).

The Proceedings of this Symposium will appear late 1978 under the title "Approximation Theory and Functional Analysis", North-Holland Publishing Cy, Amsterdam.



INTERNATIONAL COLLOQUIUM ON UNIVERSAL ALGEBRA, held at Esztergöm, Hungary, from June 27 to July 1st, 1977.

This Colloquium was organized by the Janos Bolyai Mathematical Society ; the members of the Organizing Committee were : Pr. E. Tamas Schmidt, chairman, Béla Csákány, vice-chairman, Ervin Fried, Ferenc Gécseg, Andrãa Huhn, Lãszlõ Lovãsz, Istvãn Nãmeti, L.A. Skornjakov, Rudolf Wille.

110 participants gathered, 83 coming from abroad. 87 lectures were held and 8 invited speakers delivered plenary talks of one-hour each. They were : Professors Garrett Birkhoff (U.S.A.), Trevor Evans (U.S.A.), Ernest G. Manes (U.S.A.), Jurgen Schmidt (U.S.A.), Alden F. Pixley (U.S.A.), Dimitri Matveevic Smirnov (U.S.S.R.), Lev Anatolievic Skornjakov (U.S.S.R.).

The rest of the lectures was divided into three sections :

1) pure universal algebra ; 2) special classes of structures ; 3) lattice theory. Applications to the theory of computing were included in Section 2.

INTERNATIONAL CONFERENCE ON DIFFERENTIAL EQUATIONS AND THEIR APPLICATIONS :  
"EQUADIFF IV", Prague, Czechoslovakia, August 22-26, 1977.

This Conference was the fourth in this series of EQUADIFF Conferences.

The chairman of the Organizing Committee was Professor Jiri Fãbera, President of the Czechoslovak National Committee for Mathematics.

Five invited lectures were given in plenary sessions by Professors O. Boruvka (Czechoslovakia), W.N. Everitt (U.K.), I. Marek (Poland), J. Necãs (Czechoslovakia) O. Oleinik (U.S.R.).

58 invited lectures and 157 communications were given in the following sessions :

- 1) - Ordinary Differential Equations,
- 2) - Partial Differential Equations,
- 3) - Numerical Methods and Applications.

The Conference gathered 354 mathematicians, coming from 23 different countries. The Proceedings of the IVth EQUADIFF CONFERENCE are published in two parts :

Part A : invited papers, by Springer-Verlag, Inc.

Part B : contributed papers, by the Society of Czechoslovak Mathematicians and Physicists.

INTERNATIONAL CONFERENCE ON COMBINATORIAL THEORY, Canberra, Australia, August 16-28, 1977.

The Organizing Committee was composed of : Dr. Jennifer Seberry, chairman, Dr. D.A. Holton (Deputy Chairman), Prof. B. Neumann, Mr. J.P. O'Halloran, Dr. C.H. Praeger, Dr. N.F. Smythe, Prof. P. Erdős.

Professors P. Erdős and E. Bombieri were IMU representatives.

This Conference attracted 89 participants, 26 coming from overseas. The invited speakers were : Professors J.A. Bondy (Canada), P. Erdős (Hungary), M. Hall Jr. (U.S.A), H. Hanani (Israël), F. Harary (U.S.A) D.R. Hughes (U.K.), R.C. Mullin (Canada), T.V. Narayana (Canada), J.N. Srivastava (U.S.A.), R.G. Stanton (Canada), W.T. Tutte (Canada), M.E. Watkins (U.S.A.).

The Proceedings of the Conference (invited lectures and instructional lectures) will be published by the Academy of Science presumably in conjunction with Springer-Verlag, Inc.

INTERNATIONAL COLLOQUIUM ON THEORY OF SETS, FOUNDATION OF MATHEMATICS was held in Beograd, Yugoslavia, from August 29th to September 2nd, 1977.

This Symposium was co-sponsored by the Matematički Institut, Beograd, and I.M.U. The Organizing Committee was composed of Prof. D. Kurepa, chairman, V. Devidé, M. Stojaković, S. Presic, M. Durić, secretary, and the Program Committee was : Professors G. Kreisel, P.J. Cohen, A. Hajnal, I.L. Ershov, P. Vopenka, and the members of the Organizing Committee.

The aim of the Symposium was to get an insight into the present situation of the set theory and foundations of Mathematics and to point at the new directions of investigations in these fields. Within this framework, the areas of interest of the Symposium were various and divided into plenary and section plenary sessions with invited and contributed papers. Problem sessions, panel discussions and seminars were included in the program of this Symposium.

INTERNATIONAL CONFERENCE ON OPERATORS ALGEBRAS, IDEALS AND THEIR APPLICATIONS : Leipzig, D.D.R., September 25-28, 1977.

This Conference was organized by the Akademie der Wissenschaften der D.D.R. with the following Organizing Committee : Drs. H. Baumbärtel (Berlin), G. Lassner (Leipzig), A. Pietsch (Iena), and A. Uhlmann (Leipzig), K. Maurin and A. Pelczynski (Warszaw), M.K. Poliwanow (Moscow), L. Schwartz (Paris).



The I.M.U. representatives were Professors D. Kastler (Marseille, France) and B. Sz.-Nagy (Szeged, Hungary).

253 participants attended this Conference, coming from 22 different countries, and there were 107 participants from D.D.R.

Nineteen one-hour lectures were given in plenary sessions and 110 short 20-minutes lectures in the three sections, in an intensive and friendly working atmosphere.

The International Mathematical Union made a special effort in 1977 : world-wide spreading conferences as well as covering a large range of mathematical subjects, pure, applied and interdisciplinary. Following UNESCO's rules, the amount granted by I.M.U. for support to these conferences has been spent on travel expenses to foreign participants. Out of the above list, ICSU supplementary grant under UNESCO contracts helped in supporting the Ibadan Conference (Nigeria), the Rome Conference in June and the Conference "Equadiff IV", in Prague.

#### I.M.U. LECTURES :

I.M.U. sponsored a series of lectures given at UCLA, Mathematics Department, by Professor A.G. Vitushkin, on the invitation of Professor H.A.Dye, chairman, from April 14 to June 11.

Professor Vitushkin's manuscript will be published in "L'Enseignement Mathématique" under the title "Representation of functions by means of superpositions".

#### EXCHANGE COMMISSION :

Professor Dr. Z. Semadeni, from the Polish Academy of Sciences, was able to visit different places in the South-East Asia under a grant of the Exchange Commission of I.M.U. on the occasion of his lectures at the S.E.A Conference in Manila, in May-June 1978.

Dr. Balasubramanian, from the Tata Institute of Fundamental Research, Bombay, spent a three-months period at the Mittag-Leffler Institute, from March to May, 1978, under an I.M.U. Fellowship grant.

ACTIVITIES OF I.C.M.I. (INTERNATIONAL COMMISSION ON MATHEMATICAL INSTRUCTION)

Two main meetings were held in 1977, after decision was made at the General Assembly of I.C.M.I. at Karlsruhe :

INTERNATIONAL CONFERENCE ON THE PROBLEMS OF TRAINING OF TEACHERS OF MATHEMATICS, held in Pècs (Hungary), August 23-27, 1977,

and

INFORMATICS AND MATHEMATICS IN SECONDARY SCHOOLS, IMPACTS AND RELATIONSHIPS , Varna (Bulgaria), September 13-18, 1977.

I.M.U. BULLETIN :

The following issues of the IMU Bulletin were published covering the period June 1976 to June 1978 :

Number 11, July 1977 : gives an up-to-date recapitulation of National Adhering Organizations and National Committees for I.M.U.

Number 12, December 1977 and I.M.U. Special Number for the Eighth General Assembly present the Agenda and the reports for the forthcoming General Assembly in Otaniemi, Finland, August 11 and 12, 1978.

EXECUTIVE COMMITTEE OF I.M.U.

The Executive Committee of I.M.U. met in Paris on April 17 and 18, 1978, at the Collège de France.

After having examined the administrative and financial reports of the Union and the scheduled scientific activities, the main topics that were discussed were :

- (i) the preparation of the next International Congress of Mathematicians, Helsinki, August 15-23, 1978, and of the General Assembly, just before,
- (ii) the reinforcement of the activities of the Union in favour of the Developing countries,
- (iii) the strengthening of joint activities with IUTAM.

FINANCIAL REPORT :

for the period January 1st, 1977 to December 31st, 1977.

1. I N C O M E .

The Union had the following sources of income during the year :

- A) - Dues from the member nations,
- B) - UNESCO/ICSU contribution,
- C) - World Directory of Mathematicians,
- D) - Grants,
- E) - Interests on Bank Accounts,
- F) - Exchange difference.

A). During the financial year 1977, dues were paid at the :

i)- CHASE MANHATTAN BANK, by :

Argentina	I	1976 (remaining part) 1977
India	III	1975 (remaining part) 1976
Iran	II	1976 (remaining part)
Israël	II	1977
U.S.A.	V	1977
Total : US \$ : ..... <u>5,100,45</u>		

ii)- SWISS CREDIT BANK, by :

Arab Rep. of Egypt	I	1977
Australia	III	1977
Austria	II	1977
Belgium	III	1976
Bulgaria	II	1976 1977
Canada	III	1976 1977(*)
China-Taiwan	I	1976 1977



SWISS CREDIT BANK (continued) :		Brought forward : US \$	5,100,45
Cuba	I	1977	
Czechoslovakia	III	1977	
Denmark	II	1977	
Finland	II	1977	
Fed. Republic of Germany	V	1976	
"		1977	
Dem. Republic of Germany	III	1977	
Greece	I	1977	
Hungary	III	1977	
Iceland	I	1976	
"		1977	
Ireland	II	1977	
Italy	IV	1977	
Japan	V	1977	
Dem. Republic of Korea	I	1976	
"		1977	
The Netherlands	III	1977	
New-Zealand	I	1977	
Nigeria	I	1977(*)	
Norway	I	1977	
Poland	IV	1978	
Portugal	I	1975 (remaining part)	
"		1976	
Singapore	I	1977	
South-Africa	II	1977	
Spain	II	1977	
Sweden	III	1977	
Switzerland	III	1977	
Turkey	I	1976	
United Kingdom	V	1977	
U.S.S.R.	V	1977	
Yugoslavia	II	1977	
		Total Sw.Frs. :	79,500-
		US \$ :	32,160--
		To bring forward: US\$	37,260.45



Brought forward : US\$. : 37,260.45

iii) - SOCIETE GENERALE, by :

Cameroon	I	1977
France	V	1977
Turkey	I	1977

Total Frs.Frs. :

US\$. : 3,064.--

TOTAL INCOME FROM MEMBERSHIP DUES US\$.: 40,324.--  
=====

(\*) The following subscriptions were paid in 1977, but cashed in 1978:  
Canada (III), Iran (II), Nigeria (I), Portugal (I).

NB.: Exchange rates at the date of bank statements using UNESCO's  
standard rates of exchange.

Subscriptions were due from the following countries at the end of 1977:

1974: Brazil (I),  
 1975: Brazil (I)  
 1976 : Brazil (I), Mexico (I),  
 1977 : Belgium (III), Brazil (I), India (III), Mexico (I), Rumania (II).

B). UNESCO/ICSU contribution 1977 :

US\$ 12,000- in two instalments US\$.: 12,000.-  
=====

C). WORLD DIRECTORY OF MATHEMATICIANS :

Sales : US\$.: 756.-  
=====

D). GRANTS

St. Pounds 200-  
Frs.frs. 10,000-- US\$.: 2,411.-  
=====

E-. INTERESTS on Bank accounts :

a) Swiss Credit Bank (private account)  
 SW.Frs : 2261- = US\$ 1,041-  
 b) Svenska Handelsbanken (private acc.)  
 Kr.S. : 1484- = US\$ 311-  
 c) Bank Degroof  
 B. Frs.: 33- = US\$ 1  
US\$.1,353-



2. E X P E N D I T U R E

A. Actual expenditure in 1977 compared with the amounts authorized by the Seventh General Assembly.

The authorized figures are shown in Swiss Frs. and in US Dollars (exchange rate at December 31, 1977: Sw.Frs. 2,17 = US \$ 1.).

The real expenditure is only shown in US Dollars (exchange rates at the date of payment).

E X P E N D I T U R E

SCHEDULE A	A u t h o r i z e d		A c t u a l	D i f f e r e n c e	
	Sw. Frs	US \$	US \$	- US \$	+ US \$
1.a) Secretarial help (IMU office)	9.000	4,147	3,418	723	
2) Secretarial help (President)	1.000	461	--	461	
3) I.C.M.I.	900	415	300	115	
4) C.T.S.	600	276	300		24
2. Office expenses	4.000	1,843	15	1,828	
3. Travel expenses E.C.	14.000	6,452	3,895	2,557	
4. President's and Secretary's expenses	1.500	691	100	591	
5. Contribution to ICSU (2,5% of annual dues)	2.300	1,060	795	265	
6. Publication and dissemination of the IMU Bulletin	2.000	922	1,168		246
7. Audit fee	450	207	1,175		968
8. General Assembly	2.000	922	---	922	
9. World Directory of Mathematicians	10.000	4,608	289	4,319	
10. Contingencies	2.520	1.152	---	1,152	
	50.250	23,156	<u>11,455</u>	12,939	1,238

SCHEDULE B

	A u t h o r i z e d		. A c t u a l	D i f f e r e n c e	
	Sw. Frs	US \$	US \$	- US \$	+ US \$
1. Scientific activities Symposia, conferences IMU Lectures, Exchange Commission, I.C.M.I	48.000	22,120	17,473	4,647	
2. IMU Fellowship Fund	6.000	2,765	---	2,765	
3. Consultative Committee for I.C.M. '78	3.000	1,382	4,792		3,410
4. Subvention to the ICM '78 (including Travel grants to young ma- thematicians from de- veloping countries).	18.750	8,641	7,500	1,141	
	75.750	34,908	<u>29,765</u>	8,553	3,410

S U M M A R Y

TOTAL OF INCOME .....	US \$	63,956
TOTAL OF EXPENDITURE		
under SCHEDULE A ....	US \$	11,455
under SCHEDULE B ....	"	29,765
EXCESS OF INCOME OVER EXPENDITURE .....	US \$	22,736
	=====	

B. Details of expenditure under UNESCO/ICSU grant and IMU grant  
(Schedule B of the budget).

1. a) <u>Symposia and Conferences</u> :	Allocated	Paid	
	US \$	Sw.Frs	US \$
KYOTO, January 10-14, 1977	5,000		5,000
ZURICH, April 10-12, 1977	1,000	2,440	957
UPPSALA, April 18-23, 1977	2,000	4,880	1,914
ROME, June 6-15, 1977	2,000		2,000
ESZTERGOM, June 27-July 1	1,000		1,000
IBADAN, June 25-July 2	1,000		1,000
PRAGUE, August 22-26, 1977	1,000		1,000
CAMPINAS, Aug. 1-6	1,000		1,000
BEOGRAD, Aug. 29-Sept 2	1,000		1,000
LEIPZIG, Sept.20-30, 1977	<u>1,000</u>		<u>1,002</u>
	<u>16,000</u>		<u>15,873</u>
CANBERRA, Aug. 16-28, 1977	3,000	already paid in 1976	
b) <u>IMU Lectures</u> :			
Professor A.G. Vitushkin (UCLA)	<u>1,000</u>		<u>1,000</u>
c) <u>EXCHANGE COMMISSION</u>			
Professor Z. Semadeni c/o SEAMS	<u>600</u>		<u>600</u>
2. - <u>CONSULTATIVE COMMITTEE</u> (Oct. 1977)			
Travel and "per diem" expenses			<u>4,792</u>
3. - <u>I.C.M. '78</u>			
Budgeted provision			<u>7,500</u>
TOTAL OF EXPENDITURE :			<u>US \$ 29,765</u> =====

TOTAL OF EXPENDITURE :

a) Under IMU Budget :

<u>SCHEDULE A</u> .....	US\$. 11,455	
	Scientific Activities :	US\$. 2,600
<u>SCHEDULE B</u> .....	Consultative Committee :	" 4,792
	Contribution to ICM '78 :	" 7,500
		<u>US\$. 26,347</u>

b) Under UNESCO/ICSU grant :

UNESCO grant for 1977	US\$. 12,000	
Brought forward from 76	" 2,873	
		<u>US\$. 14,873</u>

TOTAL EXPENDITURE FOR THE YEAR : US\$ 41,220

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WORLD DIRECTORY ACCOUNT  
as per December 31, 1977

NOTE FROM THE AUDIT :

Due to Professor Frostman's death, the Union was not able to receive in due time the relevant vouchers concerning the income and expenditure related to the sales of the W.D.M. The funds received or spent on this matter were said to be all taken in and out of one bank account at the SVENSKA HANDELSBANKEN.

For this reason, it was decided by the Union to consider the surplus of income over expenditure for 1977 as being the increase of cash at the bank between January 1, 1977 and December 31, 1977.

Although we were able to verify the bank balance at year end, we were not able to express an opinion on the movements which took place during the year on this account.



FINANCIAL STATEMENT FOR THE PERIOD JANUARY 1, 1977 TO DECEMBER 31, 1977.

1)	US \$.	Sw.Frs.	Frs.frs	Sw.Frs	B.Frs	S.Krs	S.Krs	Frs.Frs
				Sté Gle				Cash
a) Bank Balance in Current a/c on 1/1/1977	4,385	58.537	9.669	600	13.763	516		00
b) Bank Balance in Private a/c on 1/1/1977		<u>75.354</u>					17.579	
<u>Add: Receipts during 1975</u>								
1. Membership dues	5,100	79.500	13.825	600	--	--	--	--
2. ICSU/UNESCO	12,000							
3. Sales of WDM						1.616	2.000	
4. Grants		758	10.000					
5. Exchange differ. interests/bank charges		<u>2.261</u>			33		1.484	
6. Inter-bank transfers	1,694		45.756					37.731
7. Reimbursement travel exp.EC			350					
	<u>23,129</u>	<u>138.795</u>	<u>79.600</u>	<u>1,200</u>	<u>13.796</u>	<u>2.132</u>	<u>21.063</u>	<u>37.731</u>
		<u>77.615</u>						
2) <u>Expenditure</u>								
<u>SCHEDULE :</u>								
1. a) Secret.help								16.800
b) -d°- Pres.t	--	--	--	--	--	--	--	--
c) ICMI	300							
d) CTS	300							
2. Office expenses								77
3. Travel exp. EC	300	5.356	4.470					2.015
4. Pt's/Secretary expenses			1.515					
5. Contrib.ICSU	795							
6. Public.bulletin			5.880					
7. Audit fee (provisioned in '76 budget)			5.500					
8. General Assembly (reserved for 78)								
9. W.D.M.						1.380		
10. Contingencies								
11. Bank charges	19	118	10					
" " P.K.		803						
12. Inter bank transf.		26.549	37.731					
<u>SCHEDULE B.</u>								
1. Scient. activit.	8,600	9.825						
2. Consult. Commit.	972							18.717
3. Subvent. to ICM		18.750						
	<u>11,286</u>	<u>60.598</u>	<u>55.106</u>	<u>---</u>	<u>---</u>	<u>1.380</u>	<u>---</u>	<u>37.609</u>
		<u>803</u>						
BALANCE	11,843	78.197	24.494	1.200	13.796	752	21.063	122
BALANCE P.K		<u>76.812</u>						

SUMMARY OF ASSETS AS ON 31.12.1977 :

	US\$	Sw. Frs	Sw. Frs (Sté.Glé)	Frs.frs.	B.Frs	S.Krs	Cash F.frs
In current accounts	11,843	78.197	1.200	24.494	13.796	752	122
In private accounts	-	76.812	-	-	-	21.063	
 NET ASSETS : -----	 11,843 =====	 155.009 =====	 1.200 =====	 24.494 =====	 13.796 =====	 21.815 =====	 122 =====

Prepared by :

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