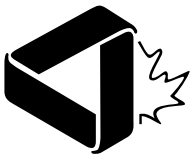
1998
Canadian Mathematical Society



Annual Report to Members

July 16, 1999

Table of Contents

A Word from the President 1

Executive Director's Report 4

Treasurer's Report 7

Committee Reports

- Education 13
- Electronic Services 15
- Finance 16
- Fund Raising 17
- Government Policy 19
- Human Rights 20
- International Affairs 21
- Mathematical Olympiads 22
- Nominating 26
- Publications 28
- Research 30
- Women in Mathematics 32

Editorial Boards 34

Contributors 35

CMS Executive Committee 36

CMS Board of Directors 36

CMS Executive Office 37

A Word From the President

The past year was certainly a very successful one for all of Canadian Mathematics. At the international level, 1998 witnessed the elevation of Canadian Mathematics to Group Five, the highest ranking, in the International Mathematical Union (IMU). At the national level, the 1998 NSERC Reallocation process recognized the effectiveness of all the mathematical sciences, including Mathematics. It also provided significant new funding for the Mathematical Institutes. As a consequence, the configuration of Mathematical Institutes continued to evolve, with the Pacific Institute joining the Centre de Recherches Mathematiques and the Fields Institute as a third permanent Institute. Most recently, the successfully funded "Mathematics of Information Technology and Complex Systems" (MITACS) project, which was organized by the Institutes, offers the opportunity for a large group of Canadian mathematicians to build research bridges with the private sector. The above successes culminate four years of effort and initiatives by Canadian mathematicians in response to their situation after the 1994 NSERC Reallocation process.

Our professional society also had a very successful year. Before summarizing some of those achievements, I want to first mention several general features about the CMS which have struck me during my first year as President. These qualities manifest themselves in almost every activity that I will mention. One very striking pattern of the CMS is the very high level of membership involvement. The CMS has an outstanding record of accomplishment in its many areas of activity. The primary reason for this success is our large group of dedicated volunteers and staff. With a membership of 950, over 200 are actively involved, helping to run CMS activities. The CMS has achieved its present position by the work of these individuals. A second quality which has considerably impressed me about the CMS is its pervasive pattern of growth and change. We have a very flexible organization with a great capacity to renew itself. This represents a real strength of our organization. One clearly emerging pattern of change is the way in which the CMS is attempting to reach out. This is happening at many levels: students, other professional societies, the private sector, the Mathematical Institutes. Such contact is strongly supported and can only be for the good of our organization and for Canadian mathematics.

When one looks at the CMS for 1998, the most striking new development was the establishment of the Endowment Grants Program. This culminates years of effort in building up the Endowment Fund and will provide roughly $60K in funding per year to partly support.a variety of mathematics projects across Canada In general, much of what happened within the CMS could be described as a continued evolution in which existing trends were reinforced and planning was also underway for future developments. Perhaps our most crucial decision of the year, the reappointment of Graham Wright as Executive Director for a further term (July 1, 1999 to June 30, 2002), is representative of both these trends. This is not a new decision in that we have done this many times (and are happy to have done it again). But we are planning to partly refocus the position of Executive Director by removing the task of Managing Editor from Graham's responsibilities and have him spend more time on fund raising and promotional activities. These changes are connected with the emerging issue of the future directions of the CMS and how we will eventually structure the Executive Director's position, notably will the CMS need to move to a full time Executive Director. The future of the CMS will certainly be a major topic in the CMS during 1999. The Strategic Planning document was approved in 1998 and resulted in four task forces being established which are scheduled to report in 1999.

Planning for the future of a different sort is also underway, as regards WMY 2000. Besides helping to celebrate the World Math Year 2000 (WMY 2000) by funding a number of projects, the CMS is also actively involved in planning a major joint meeting to be held at McMaster in June 2000. Current participating Societies, besides the CMS, are: the Canadian Applied and Industrial Mathematics Society (CAIMS), the Canadian Operational Research Society (CORS), the Canadian Symposium on Fluid Dynamics (CSFD), the Canadian Society for the History and Philosophy of Mathematics (CSHPM) and the Canadian Undergraduate Mathematics Conference (CUMC).

All the major areas of CMS activity witnessed significant accomplishments in 1998. The following is an effort to pick out several which were particularly striking or indicative of future change. Our two semi-annual meetings held in 1998 were very successful with large attendance and a very broad range of sessions. They represent models for our evolving meeting format designed to encourage participation. One particular new arrangement, which we hope will further strengthen our meetings, is one being worked out with the three Mathematical Institutes whereby each will participate in a semi-annual meeting by organizing some sessions. The Mathematical Olympiads Committee continued to expand its already impressive high school enrichment program. The core of the program is its hierarchy of competitions (Open, CMO, IMO). The Open, now in its third year, is evolving into a significant national competition, despite experiencing difficulties due to labour disruptions in various provincial high school systems. The CMS also continues to expand its high school resource material via its new ATOM book series. And the Society has begun to develop a system of regional and national math camps. The Education Committee finalized the format for its outreach activities via a program for Grants to Promote Public Appreciation of Mathematics.

The CMS has continued to expand its electronic presence. The Publications Committee and Electronic Services Committees collaborated in providing online publication of the Journal, the Bulletin, CRUX with MAYHEM, as well as the Notes. In general, the CMS website, Camel, is proving an increasingly valuable window on the world. An ad-hoc Committee established in 1998 will, hopefully, tell us how to best utilize it, and how best to utilize the ever-expanding electronic services and how best to fund them. The Notes are providing increasingly broad coverage of mathematical activity in Canada.

The organizational structure of the CMS is continuing to evolve. Fund raising has been re-organized and a new format has been developed for the pursuit of corporate sponsors. This has meet with considerable initial success. It will be another year before we can make a realistic appraisal of this initiative. This is an important initiative. It seems fair to say that the ability of the CMS to sponsor a wider range of activities is contingent on our ability to access new funding. Our current budget is fully committed. The renewal and expansion of membership also remains a goal and concern. It is hoped that our new membership reciprocity agreement with the AMS, to take effect in 2000, will be effective in this regards.

CMS financial operations, while perhaps less visible than other activities, are crucial and we continue to make significant changes. Notably, 1998 was the first year in which we used the calender year as our budget year. After extensive discussion, the Finance Committee adapted a "passive investment" policy regarding our, now extensive, segregated Investment Funds (Endowment Fund and Mathematical Olympiads Fund). The articulation of an investment policy is a considerable achievement and one which has taken a long time to evolve.

The growing involvement of students in the CMS has been a major trend of the past few years. The above mentioned CUMC, while independent of the CMS , has been developing closer links. For the next two years it will be held in conjunction with the CMS Summer Meeting, and we hope that this pattern will continue. A new student committee, in part to serve as a liaison between students and the CMS, is in the process of being organized. At the graduate level, a growing emphasis on industrial training is emerging. The first CMS ″Job Fair″ is being planned for the 1999 Winter Meeting in Montreal and it is hoped that, with the collaboration of the Institutes and MITACS, this will become a regular event.

Richard Kane (University of Western Ontario)

Executive Director's Report

Words that well describe 1998 are ***change, activity and progress***.

Change, activity and progress have certainly been part of the past and also, they will be very much an aspect of the future. A number of initiatives are currently underway: the various task forces that will be reviewing all of our activities and operations; the establishment of an Endowment Grants Selection Committee and a Student Committee; the new management for the Society's Restricted (Investment) Funds; the recently approved new reciprocal agreement between the CMS and the AMS; and the activities connected with the World Math Year 2000. Along with these initiatives, we are experiencing an expansion in our research activities (more sessions, job fairs and increased linkages with the research institutes and other societies), in our publishing activities (printed and electronic), and in our educational activities (math camps, competitions and other activities to encourage the public appreciation of mathematics). All these factors will make the future interesting, challenging and exciting.

During the past year, the change in the financial year-end to December 31, not only resulted in new time-frames for all of the financial operations but also necessitated changes to a number of related administrative operations. For example, the Annual General Meeting of members will now take place at the Summer Meeting and not the Winter Meeting.

The Operations Fund is divided into four divisions *General, Research, Education and Publishing* and every effort is made to be as accurate as possible with the many budget estimates. There are always, however, unforeseen circumstances which impact on the actual final numbers. Overall, the Operations Fund surplus for 1998 was projected to be approximately $62,500. Fortunately, the actual surplus in the Operations Fund is higher than projected at approximately $90,000.

Expenses in all divisions were well controlled and this resulted in the actual totals for expenditures being very close to projected amounts. In the Research Activities Division, due to highly successful meetings at Saint John, New Brunswick (June 1998) and at Kingston, Ontario (December 1998), a small surplus rather then a budgeted deficit was achieved. The difference between the Canadian dollar and the US dollar resulted in higher revenues from foreign exchange and, consequently, the actual surplus in Publishing Activites was about $12,000 more than projected.

On a cautionary note, the 1998 surplus must be balanced with the deficit of $10,439 for 1997 and a budgeted deficit of just under $39,000 for 1999. Clearly, the ability for the Society to support a wide array of activities will be severely limited unless additional revenue sources can be found.

During 1998, a number of administrative changes were made, including a number of changes in existing staff positions. The current Executive Office staff - *Monique Bouchard* (Operations Manager), *Caroline Baskerville* (Assitant to the Executive Director), *Chantal Stevenson* (Membership and Publications Agent), *Suzanne Lalonde* (Executive Office Clerk), *Alan Kelm* (Site Manager - Camel East), *Claire Ryan* (Financial Assitant), and *Diane Ellis* (Comptroller) -- have helped implement the many changes during 1998 and still provided the members, subscribers and others with a proper level of service.

With the help of all of those involved in our electronic services, numerous changes, re-designs and developments were made to the CMS web site (*Camel*). Major changes were made to the publications and competitions pages and also significant improvements were made to the bilingualism of each CMS page. Significant efforts were also made to make CMS documents available on the web site in a timely and efficient manner. Wherever possible, the process is automated so as to minimize the amount of additional staff time required.

In 1998, there were significant strides in the area of fund raising. Promotional and other fund raising materials were developed and an extensive campaign begun to obtain a greater level of support from both the private and public sectors. Once again, good media exposure was received for the Canadian Open Mathematics Challenge, the Canadian Mathematical Olympiad and the Canadian team to the International Mathematical Olympiad. Although a good foundation has been established and, although some successses have already been achieved, considerable work remains if the CMS is to obtain the required level of support for its educational, research and publishing activities.

The Society continues to provide an extensive range of periodicals and other publications and, in 1998, much progress took place with regard to our publishing activities.

A new format for the CMS Notes was released with the February/March issue and this new format was well received. In 1998, with the inclusion of the CMS Notes, all of the Society's periodicals were
available on-line at the CMS web site (http://cms.math.ca/). The 1998 CMS Membership Directory was published in the fall and is now also available on-line to CMS members. The on-line version is updated regulary and, therefore, provides members with more current and accurate information.

Thanks to the efforts of all of those involved, particularly the editors-in-chief and the other editors, the Canadian Journal of Mathematics (CJM), the Canadian Mathematical Bulletin (CMB), CRUX with MAYHEM and the CMS Notes were produced on or ahead of schedule. The high quality and timeliness of each of these periodicals is much appreciated by the many subscribers and others. Although there are some unavoidable delays with the mail (both nationally and internationally) that are outside the Society's control, efforts continue to try and bring about improvements in the mailing of the issues.

For many years, the CMS Series of Advanced Books in Mathematics has been published as part of the Wiley Interscience Series. Following a review of several factors pertaining to the series, the Board of Directors regretfully agreed to terminate the current publishing agreement effective July 1, 1998. The CMS has entered into a new agreement with Springer Verlag which should result in greater benefits to both authors and the CMS.

During 1998, four volumes in the CMS Conference Proceedings Series (co-published with the American Mathematical Society) were released. In the new series of booklets for high school students - ATOM (A Taste of Mathematics) - several booklets are in various stages of production and some of these should be released in 1999.

The Society's extensive programme of activities would not be possible without the tremendous help of the members, meeting organizers, volunteers, the staff in the various satellite offices across Canada, as well as those corporations, governments, foundations and others that provide such crucial support. In June 1998, Katherine Heinrich ended her term as President of the CMS and was succeeded by Richard Kane. I extend my sincere thanks to her for her leadership, guidance and assistance and I look forward to working with Richard Kane over the next two years. My gratitude and thanks go to all of those who helped make 1998 a most successful and productive year.

Graham P. Wright (University of Ottawa)

Treasurer's Report

1998 was the first full year of our new fiscal year, coinciding with the calendar year. While having the potential for a problem year, it has in fact turned out quite favourably.

The Operations Fund, consisting of the General, Publishing, Research, and Education Divisions, shows a favourable balance for the year of $89,500, and brings the cumulative total to $120,259, exclusive of $23,057 in Capital Assets. Following the approved procedure of keeping no more than $75,000 in the cumulative total of revenues over expenses, $45,259 has been transferred to the Endowment Fund.

A closer look at the actual revenue and expenditures, compared to the budgeted amounts, shows how the unexpectedly high balance was reached. The greatest single revenue increase was in Foreign Exchange; the high US Dollar (or low Canadian Dollar) works in our favour. In terms of expenses, there are a great number of relatively small (but cumulatively very important) savings in administrative and committee budgets, which have also helped. My thanks to the administrative offices and committee chairs for their sensitivity in this regard.

There are matters for concern in the Operations Fund report. Revenue from Membership fees did not come up to expectation, and although revenue from publications is up over the previous year, the number of subscriptions is down. For a variety of reasons the Education Division operated at a deficit, and we continue to struggle with the problem of adequate revenue to support the CAMEL activities. Most of these problems are agenda items for the various Task Forces which are now in operation.

On a brighter note, the Endowment Fund yielded good returns, and now has a market value in excess of $1.5 million. 1999 will be the first year in which we implement the recommendations of the Endowment Fund Task Force, and use a portion of the annual income for various approved projects.

Arthur Sherk (University of Toronto)

Canadian Mathematical Society

Balance Sheet
as at December 31, 1998

	Operations Fund	Endowment Fund	Mathematical Olympiads Fund	**1998**	1997
	$	$	$	**$**	$
ASSETS					
CURRENT					
Cash	285,752	134,983	17,088	**437,823**	191,885
Temporary investments	44,125	-	-	**44,125**	175,075
Accounts receivable and accrued interest	211,691	17,509	2,538	**231,738**	165,717
Budget advances	32,508	-	-	**32,508**	28,715
Prepaid expenses	61,514	-	-	**61,514**	26,028
Interfund receivable (payable)	(40,932)	43,177	(2,245)	**-**	-
	594,658	195,669	17,381	**807,708**	587,420
INVESTMENTS	-	1,138,615	124,369	**1,262,984**	1,138,962
CAPITAL ASSETS	23,057	-	-	**23,057**	21,106
	617,715	1,334,284	141,750	**2,093,749**	1,747,488
CURRENT LIABILITIES					
Account payable and accrued liabilities	210,284	-	-	**210,284**	170,735
Deferred revenue	309,374	-	-	**309,374**	195,113
	519,658	0	0	**519,658**	365,848
FUND BALANCES					
Investment in capital assets	23,057	-	-	**23,057**	21,106
Restricted	-	1,334,284	141,750	**1,476,034**	1,327,951
Unrestricted	75,000	-	-	**75,000**	32,583
	98,057	1,334,284	141,750	**1,574,091**	1,381,640
	617,715	1,334,284	141,750	**2,093,749**	1,747,488

Statement of Revenue and Expenditures as at December 31, 1998

Operations Fund

	General Division	Publishing Division	Research Division	Education Division	Total 1998	Total Jul-Dec 1997
	$	$	$	$	$	$
REVENUE						
Grants	-	-	31,209	6,000	**37,209**	23,358
Donations	2,571	6,237	2,087	34,120	**45,015**	32,456
Membership fees	79,585	-	-	-	**79,585**	41,041
Registration fees and other sales	-	-	83,160	25,935	**109,095**	68,151
Subscriptions and publications	-	514,545	-	257	**514,802**	272,581
Advertising and promotional sales	7,119	10,630	2,450	2,238	**22,437**	11,896
Interest and foreign exchange	17,858	232,726	13	266	**250,863**	65,938
Miscellaneous	65	14,628	-	10,000	**24,693**	8,757
	107,198	778,766	118,919	78,816	**1,083,699**	524,178
EXPENDITURES						
National projects	5,224	-	1,065	86,072	**92,361**	58,411
Speakers and prizes	-	569	49,240	16,561	**66,370**	41,518
Production	-	138,862	4,713	757	**144,332**	81,487
Promotion	14,518	6,967	952	-	**22,437**	6,348
Salaries and benefits	149,336	279,421	2,287	-	**431,044**	223,954
Board of Directors and Committees	43,212	6,122	382	4,494	**54,210**	29,473
Legal and audit	2,273	5,712	-	-	**7,985**	8,284
General administration	53,888	51,791	56,652	2,481	**164,812**	79,336
Amortization	1,898	8,623	-	-	**10,521**	5,808
	270,349	498,067	115,291	110,365	**994,072**	534,619
Excess (Deficiency) of Revenue over Expenditures	(163,151)	280,699	3,628	(31,549)	**89,627**	(10,441)

Restricted Funds

	Endowment Fund		Math Olympiads Fund		Total	
	1998 12 months	1997 6 months	1998 12 months	1997 6 months	**1998 12 months**	1997 6 months
REVENUE	$	$	$	$	$	$
Donations	1,198	1,060	3,486	360	**4,684**	1,420
Membership fees	1,000	3,000	-	-	**1,000**	3,000
Dividend, interest and other income	60,923	30,934	9,917	3,732	**70,840**	34,666
Amortization of bond discounts	-	(517)	(616)	(308)	**(616)**	(825)
Gain (loss) on sale of investments	47,656	-	-	-	**47,656**	-
Miscellaneous	-	-	285	-	**285**	-
	110,777	34,477	13,072	3,784	**123,849**	38,261
EXPENDITURES						
Lifetime membership fees annual transfer	(10,260)	4,950	-	-	**(10,260)**	4,950
Mathematical Olympiads annual transfer	-	-	6,000	3,000	**6,000**	3,000
Commissions	4,765	3,091	-	-	**4,765**	3,091
	(5,495)	8,041	6,000	3,000	**505**	11,041
Excess of revenue over expenditures	116,272	26,436	7,072	784	**123,344**	27,220
Fund balances, beginning of period	1,193,273	1,166,837	134,678	133,894	**1,327,951**	1,300,731
	1,309,545	1,193,273	141,750	134,678	**1,451,295**	1,327,951
Interfund transfer from Operations Fund	45,259	-	-	-	**45,259**	-
Fund balances, end of period	1,354,804	1,193,273	141,750	134,678	**1,496,554**	1,327,951

Budget 1999 - Operations Fund Summary

Division Grand Summaries	Audited prior yearend	Budget 1998	Budget 1999
GENERAL			
Total Revenue	54,481	100,352	105,710
Total Expenditure	137,083	280,961	194,335
NET REVENUE/EXPENDITURE	(82,602)	(180,609)	(88,625)
RESEARCH			
Total Revenue	68,332	102,480	169,050
Total Expenditure	74,043	117,740	268,170
NET REVENUE/EXPENDITURE	(5,711)	(15,260)	(99,120)
EDUCATION			
Total Revenue	48,885	119,100	134,680
Total Expenditure	66,598	131,200	248,675
NET REVENUE/EXPENDITURE	(17,713)	(12,100)	(113,995)
PUBLISHING			
Total Revenue	352,482	791,654	762,805
Total Expenditure	256,896	521,094	500,035
NET REVENUE/EXPENDITURE	95,586	270,560	262,770
OPERATIONS FUND			
Total Revenue	524,180	1,113,586	1,172,245
Total Expenditure	534,620	1,050,995	1,211,215
NET REVENUE/EXPENDITURE	(10,439)	62,591	(38,970)

NOTE: Audit numbers represent the six-month period (July to December 1997).

Budget 1999 - General and Education Divisions

GENERAL - SUMMARY

	Audited prior yearend	Budget 1998	Budget 1999
REVENUE			
Administration	13,440	15,000	22,750
Members	41,041	85,352	82,960
Projects	0	0	0
TOTAL REVENUE	**54,481**	**100,352**	**105,710**
EXPENDITURE			
Administration	137,083	274,761	186,885
Members	0	1,000	2,050
Projects	0	5,200	5,400
TOTAL EXPENDITURE	**137,083**	**280,961**	**194,335**
NET REVENUE/EXPENDITURE	**(82,603)**	**(180,609)**	**(88,625)**

SUMMARY - EDUCATION

REVENUE			
Administration	3,555	11,100	15,100
Competitions	45,330	108,000	114,580
Projects	0	0	5,000
TOTAL REVENUE	**48,885**	**119,100**	**134,680**
EXPENDITURE			
Administration	4,814	18,200	111,275
Competitions	60,632	102,300	127,350
Projects	1,152	10,700	10,050
TOTAL EXPENDITURE	**66,598**	**131,200**	**248,675**
NET REVENUE/EXPENDITURE	**(17,713)**	**(12,100)**	**(113,995)**

Budget 1999 - Research and Publications Divisions

RESEARCH - SUMMARY

	Audited prior yearend	Budget 1998	Budget 1999
REVENUE			
Administration	383	400	400
Meetings	67,949	102,080	166,650
Projects	0	0	2,000
TOTAL REVENUE	**68,332**	**102,480**	**169,050**
EXPENDITURE			
Administration	478	2,600	95,225
Meetings	73,565	112,640	171,345
Projects	0	2,500	1,600
TOTAL EXPENDITURE	**74,043**	**117,740**	**268,170**
NET REVENUE/EXPENDITURE	**(5,711)**	**(15,260)**	**(99,120)**

PUBLISHING - SUMMARY

REVENUE			
Administration	0	0	0
Journal	246,095	467,570	509,350
Bulletin	72,898	145,190	154,890
Notes	2,410	8,020	8,628
Camel	5,185	36,788	17,107
Crux	18,626	48,810	46,830
Other Publications	4,080	7,750	18,600
Projects	3,189	77,526	7,400
TOTAL REVENUE	**352,482**	**791,654**	**762,805**
EXPENDITURE			
Administration	1,585	9,460	116,825
Journal	109,938	220,040	142,809
Bulletin	52,138	107,819	71,976
Notes	29,571	34,402	24,360
Camel	27,111	86,600	87,100
Crux	21,166	49,735	38,415
Other Publications	3,235	7,100	15,250
Projects	12,151	5,938	3,300
TOTAL EXPENDITURE	**256,896**	**521,094**	**500,035**
NET REVENUE/EXPENDITURE	**95,586**	**270,560**	**262,770**

Education

Morris Orzech (Queen's) Chair

Jacques Bélair (Montréal)
Eddy Campbell (Queen's)
Harvey Gerber (Simon Fraser)
Denis Hanson (Regina)
Jacqueline Klasa (Vanier College)
Gordon MacDonald (UPEI)
Eric Muller (Brock)
Pat Rogers (York)
Bruce Shawyer (Memorial)
Maureen Tingley (UNB Fredericton)
Robert Woodrow (Calgary)

Sub-Committee for Public Lectures
Gordon MacDonald (UPEI) Chair
Harvey Gerber (Simon Fraser)
Morris Orzech (Queen's)

Sub-Committee for Provincial Competitions
Robert Woodrow (Calgary) Chair
Gordon MacDonald (UPEI)
Morris Orzech (Queen's)

Sub-Committee for Raising Public Awareness
Eric Muller (Brock) Chair
Denis Hanson (Regina)
Morris Orzech (Queen's)

Sub-Committee for Materials on Camel
Denis Hanson (Regina) Chair
Jacqueline Klasa (Vanier College)
Morris Orzech (Queen's)
Robert Woodrow (Calgary)

There are numeous activities in which the Education Committee was involved in 1998. Among these are the Education sessions at CMS Meetings. The Saint John, New Brunswick Summer Meeting featured a session on *Mathematicians Teaching Statistics; Reform Calculus.* At the Winter Meeting in Kingston, Ontario, there were sessions on *Identifying and Overcoming Barriers to Teaching Mathematics at University; Teaching Mathematics - Why We Do What We Do in the Classroom* (sponsored jointly with the Fields Institute and the Queen's Mathematics, Science and Technology Education Group).

The CMS was also involved in several other national events. Of note was the CMS/Fields Panel at Mathfest98 (Toronto, July 98) on *Concurrent Models - Teaching Mathematics While Developing Teaching Skills.* The CMS also helped sponsor the *1998 Canadian Undergraduate Mathematics Conference* at UBC. The Education Committee oversaw this support.

The CMS, working through the Education Committee, helped support six provincial or regional high school mathematics contests in 1998 (in Alberta, Manitoba, Ontario, Québec, the Maritimes, and Newfoundland).

The Education Committee was also involved in CMS sponsorship of mathematics prizes, and in the judging and presentation associated to them, at the *Canada Wide Science Fair* of the Youth Science Foundation. The 1998 event was in Timmins, Ontario.

The CMS provides modest matching grants for *public lecturers* and for *raising public awareness of mathematics.* These are adjudicated by the Education Committee. In 1998 the CMS helped fund events organized at SFU, UNBC, and at the 1998 meeting of the Ontario Association for Mathematics Education. The latter meeting, at North Bay, featured an invited reprise of an OAME'97 *workshop on web resources for teachers* organized through the CMS Education Committee.

The Education Committee acts on behalf of the CMS in selecting recipients for the *Adrien Pouliot Award*, which recognizes outstanding contributions to mathematics education. The

committee had the pleasure of choosing Bernard Hodgson as the recipient of the 1998 award.

Electronic Services

Robert Rosebrugh (Mount Allison) Chair

Francois Bergeron (UQAM)
Jonathan Borwein (Simon Fraser)
Eddy Campbell (Queen's)
Gerald Cliff (Alberta)
Robert Corless (Western)
Ian Goulden (Waterloo)
Jacqueline Klasa (Vanier College)
June Lester (UNB)
Duncan Murdoch (Queen's)
David Rodgers (Enterprise Info Sys)
Graham P. Wright (Ottawa)

The Electronic Services Committee (ESC) is charged with oversight of the burgeoning electronic activities of the CMS. These activities have critical implications for the future financial health of the Society. The ESC works closely with the Finance and Publications committees of the Society and has ex-officio members from the Research, Education and Women in Mathematics Committees. As well, a private sector member is active in the ESC.

The electronic activities of the CMS are pervasive in every area of its function: Executive Office management, information flow to and from members, Publications (traditional and electronic), Education, Outreach and Public Policy activities.

Since it creation in 1994, "Camel", the Canadian Mathematics Electronic Service - Les Services Mathematiques Electroniques Canadiens, has been the public electronic face of the CMS. It receives
hundreds of thousands of 'hits' per month. Behind the scenes a remarkable group of programmers develop new services at the Centre for Experimental and Constructive Mathematics of Simon Fraser University and at the Depertment of Mathematics and Statistics at the University of Ottawa. Over the past year, much of the routine updating and related work for Camel has moved to Ottawa and Ottawa will soon become the primary server.

Camel offers a comprehensive set of resources. These include: routine information about the Society, CMS Conference information (including on-line registration), abstracts for CMS publications, material on Mathematical Education, on Women in Mathematics, on NSERC, on electronic Journals, and links to a broad selection of other mathematical resources. Beginning in September 1996, when the Society made available an on-line version of "Crux Mathematicorum with Mathematical Mayhem", all of the Society's publications have moved to digital publication with the Journal and Bulletin going on line in January 1998 and the Notes later that year. The decision has recently been made to integrate subscriptions to the publications with the electronic versions, and, as a result, the Society's investment in digital publishing will soon begin to return a growing revenue. As well, the success of CMS Web site has resulted in a number of interesting possibilities for sponsorship.

As Camel is maturing after five years of operation, and as part of the CMS review of its activities, the CMS has mandated an external review of Electronic Services and Camel.

Finance

Gordon Mason (UNB) Chair

Timothy Appelt (Structured Analytics)
Ian Goulden (Waterloo)
Katherine Heinrich (Simon Fraser)
Richard Kane (Western)
Michael Lamoureux (Calgary)
Ben Segal (Gov. of Canada)
F. Arthur Sherk (Toronto)
Graham P. Wright (Ottawa)

Sub-Committee - Investment Advisory Group
Ben Segal (Government of Canada) Chair
Timothy Appelt (Structured Analytics)
A.W. Dencs (Wood Grundy)
Richard Kane (Western)
Graham P. Wright (Ottawa)

The Finance Committee deals with the Society's budget and its investments. For details on the former, see the Treasurer's Report.

Until December 1998, the Restricted Funds of the CMS (consisting of the Endowment Fund and the Mathematical Olympiads Fund) were managed by RBC Dominion Securities from their Ottawa office, under advice from the Investment Advisory Group (IAG), reporting to the Finance Committee.

At its October 1998 meeting, on a recommendation from the IAG, the Finance Committee agreed to seek proposals from financial institutions in Toronto for management of the investments. After receiving 4 such proposals, the Finance Committee met by conference call on December 8 1998 and voted to a) select a passive management proposal and b) choose the Toronto Dominion Bank as its manager effective as soon as possible. The CMS Board approved these motions at its December meeting. It was further recommended that the asset mix be changed from the current proportions (50% Bonds and short-term, 30% Canadian Equities and 20 % US equities) to divide the Canadian portion into 20 % Canadian equities and 10% foreign.

The change in management style necessitates a change in the terms of reference of the IAG, and this will be discussed at the next Finance Committee meeting in April.

At the Board meeting in December the report of the Endowment Task Force was also approved. This provides a means of spending some of the Endowment funds once they exceed $1.5 million. As of December 1998, the Endowment Fund had reached this level and, the other Investment Fund, the Mathematical Olympiads Fund was approximately $180,000.

Fund Raising

Katherine Heinrich (Simon Fraser) Chair (Jan-June)
Richard Kane (Western) Chair (July-Dec)

Lesya Balych (Bank of Montreal)
F.A. Baragar (Alberta)
David Borwein (Western)
Maxim Burke (UPEI)
Charles Edmunds (Mount St.Vincent)
J. Chris Fisher (Regina)
Arthur Gerhard (Manitoba)
David Leeming (Victoria)
Rosaria Morelli
Ginette Ouellette (College de Valleyfield)
Georg Schmidt (McGill)
F. Arthur Sherk (Toronto)
Jon Thompson (UNB)
J. Wick Pelletier (York)
E.R. Williams (Memorial)
Graham P. Wright (Ottawa)

A significant reorganization of the Fund Raising Committee, as well as a new framework for sponsorship, was approved by the Board in June. This change was motivated by the fact that our fund raising activities have had reasonable success at the level of provincial governments but much less success in obtaining corporate sponsors. The new format for our fund raising will be to focus it in a small group of people, notably the Executive Director, Graham Wright. The Fund Raising Committee will be chaired by the President and serve primarily as an advisory group rather than as active fundraisers. The new framework for sponsorship is designed to make sponsorship more attractive and understandable. In particular, the benefits package provides a structure for recognising levels of contribution (Title Sponsors, Major Sponsors, Supporters).

In its pursuit of corporate sponsors, the committee has been fortunate to acquire two energetic and able advisors, Lesya Balych (Bank of Montreal) and Rosaria Morelli who can provide a bridge between the CMS and the world of finance and industry. A systematic letter and phone campaign targeting 100 corporate sponsors is underway. A number of meetings involving Graham, Lesya and/or Rosaria have already taken place: Connor-Clark, Sunlife, Imperial Oil, Bank of Montreal, Xerox, Bell. Some notable successes have already been achieved. Sunlife has agreed to double their contribution to $10,000 which qualifies them to be a Major Sponsor for the Canadian Mathematical Olympiad for 1999. Imperial Oil will be a Title Sponsor of CMS regional and national math camps via a contribution of $15,000. Discussions have also taken place with Maple regarding them becoming a Major Sponsor of the math camps.

A more individualized approach to provincial agencies proved successful in 1998. Each letter sent to a ministry cited the performance of the province's students on the COMC, the CMO and the IMO, as well as in any provincial activity that we knew about. We reached a level of 8 ministries contributing a total of $28,000 during 1998. Funding was received from Alberta, Saskatchewan, Ontario, Quebec, New Brunswick, Nova Scotia, Newfoundland, and The Northwest Territories. In addition, Industry Canada provided CRUX with MAYHEM subscriptions to the schools of the gold medal winning students from the Open.

Membership recruitment continues to be an area of concern. Of 135 recruitment letters sent out in 1998, only 6 resulted in a positive response. It is hoped that a new reciprocity membership agreement which has been finalized with the AMS, and will be implemented next year, will prove a major stimulant. CMS members outside USA can get a 50% reduction in the AMS fee. With that discount, one will be able to be both a CMS and AMS member for basically the same price as a non-CMS member would pay to just be a AMS member. The agreement will be widely publicized with the goal of attracting new members, in particular those who are currently AMS but not CMS members.

As well, limited-term free membership for new faculty will be offered this year. We will write to departmental chairs to identify new faculty and then offer two years free membership to such faculty.

In the 1998 CMS membership drive, members were given the opportunity to direct their donations to specific areas of CMS operations. This proved to be very successful and members donated over
$6,200. We are very grateful and this will continue to be a feature of the membership renewal forms. A final decision was also made regarding the $1000 contributed by CMS members "to aid mathematicians in Sarajevo". It will be given to the Bosnian mathematical journal Radovi Matematicki.

In 1998, the Board approved the establishment of the CMS Endowment Grants Competition. For many years we have been steadily building up the Endowment Fund to a value of approximately $1.5 million at the end of 1998. Now we will have the opportunity to begin putting the Endowment Fund to work. We anticipate that the CMS Endowment Grants program will distribute approximately $60,000 annually (the actual amount will be determined each year by the Finance Committee). The Mathematical Olympiads Fund reached a total of just over $180,000 by the end of 1998.

Government Policy

Michel Racine (Ottawa) Chair

Kathryn Hare (Waterloo)
Jacques Hurtubise (McGill)
Kenneth Williams (Carleton)
Graham P. Wright (Ottawa)

The committee was responsible for representing the Society to the National Consortium of Scientific Societies and to PAGSE, two groups who lobby the federal government. In contacts with politicians and senior civil servants, these groups try to influence federal policy concerning research and related matters.

The 1995-96 Annual Survey of the Mathematics and Statistics Professions was analysed by the Queen's University Statistics Lab and the final version, prepared by Kathryn Hare, was published in the May 1998 issue of the CMS Notes. There have been some delays in obtaining, analysing and publishing the reports of some recent annual surveys but it is hoped to be back on schedule by the fall of 1999. In particular, the analysis of the 1996-97 Survey should be completed and the final report published in the September 1999 issue of the Notes and the 1997-98 Survey (for the period September 1, 1997 to August 31, 1998) conducted in March 1999 with the final report also published in the Notes in 1999. If this is achieved, the 1998-1999 Survey will be mailed in the fall 1999 with the results published at the beginning of 2000.

From its inception in 1991, the annual survey has been one of the activities supervised by the Government Policy Committee. It is anticipated the Board of Directors will approve that the Committee should be dissolved and the duties and responsibilities directed by the Executive Committee. The delegates to the National Consortium and to PAGSE will be appointed by the Executive and the Annual Survey conducted by the Executive Office under the supervision of an individual also appointed by the Executive. Therefore, this is probably the last report of the Government Policy Committee.

Human Rights

David Poole (Trent) Chair

Ejaz Ahmed (Regina)
Lynn Batten (Manitoba)
Karl Dilcher (Dalhousie)
Stephen Kirkland (Regina)
Anthony Thompson (Dalhousie)

The CMS Human Rights Committee has been following the case of Ahn Jae-Ku, a former professor of mathematics at Kyonghee University in the Republic of Korea. Ahn has been imprisoned since 1994 for his allegedly pro-North Korean political activities. Despite numerous and repeated pleas from many international organizations, including the CMS, there has been no information from the Korean authorities about Ahn's well-being. The Human Rights Committee has continued to press for information, most recently sending a letter of concern to South Korean President Kim Dae Jong. There has been no reply.

The Human Rights Committee was also asked by the Executive in 1998 to consider the employment situation for young mathematicians in Canada, specifically the increasing number of short-term appointments that inhibit emerging mathematicians' ability to pursue excellence in teaching and research. The Committee has drafted a statement of concern about this practice and will be forwarding it to the Executive for approval early in 1999.

International Affairs

Peter Fillmore (Dalhousie) Chair

Henri Darmon (McGill)
George Elliott (Toronto)
Mohammad Hamdan (UNB)
Katherine Heinrich (Simon Fraser)
Richard Kane (Western)
Robert Miura (UBC)
Nicole Tomczak-Jaegermann (Alberta)
Hong Wang (Memorial)

The mandate of the Committee includes providing information and recommendations on matters of an international nature which are of interest to the mathematical community, and serving as the Canadian National Committee for the International Mathematical Union (CNC/IMU). The latter responsibility is governed by a contract between NRC (International Relations) and the CMS, which means in particular that the committee includes ex-officio representatives from CAIMS, SSC and CMESG. The Committee provides annual reports to both NRC and the CMS.

Adherence to the IMU is possible at five levels, depending on the extent of mathematical activity. In 1997 the IMU encouraged us to apply for the highest level (with the US, UK, France, Germany, Russia, China and Japan). This involved preparing documentation about mathematics in Canada and
obtaining the agreement of NRC, and was ultimately successful.

The committee appointed the following delegation to the 13th General Assembly of the IMU, which met in Dresden in August: Donald Dawson, Peter Fillmore, Nassif Ghoussoub, Jacques Hurtubise, Nicole Tomczak-Jaegermann and George Elliott (alternate). We proposed to the CMS and subsequently organized, with the Canadian Embassy Office, a reception for Fields Medal recipients and distinguished guests at the International Congress in Berlin. This was very successful and should be repeated at future ICMs. Financial support was provided by Springer Verlag.

On behalf of the Committee, the Chair attended the 11th meeting of the NRC Committee on International Science, Engineering and Technology in Ottawa in October. And, finally, we recommended that the $1000 contributed by CMS members "to aid mathematicians in Sarajevo" be given to the Bosnian mathematical journal Radovi Matematicki.

Mathematical Olympiads

Patrick Stewart (Dalhousie) Co-Chair
Daryl Tingley (UNB) Co-Chair

Edward Barbeau (Toronto)
Lynn Batten (Manitoba)
Ronald Dunkley (Waterloo)
Claude Laflamme (Calgary)
Richard Nowakowski (Dalhousie)
George Sands (Calgary)
Bruce Shawyer (Memorial)
Graham P. Wright (Ottawa)

Sub-Committees:

International Mathematical Olympiad
George Sands (Calgary) Chair
Georg Gunther (Memorial)
Richard Nowakowski (Dalhousie)

Canadian Open Mathematics Challenge
Ronald Dunkley (Waterloo) Chair
Peter Crippin (Waterloo)
Gareth Griffith (Saskatchewan)
Gordon Nicholls (Waterloo)
Richard Nowakowski (Dalhousie)

Canadian Mathematical Olympiad
Daryl Tingley (UNB) Chair
Peter Booth (Memorial)
Winston Haight (Fredericton H.S.)
John Labute (McGill)
Gordon Mason (UNB)
Barry Monson (UNB)
Roman Mureika (UNB)
Robert Sealy (Mt. Allison)
François Söler (Moncton)
B. Viswanathan (UNB)
Edward Wang (Wilfrid Laurier)

Introduction

The Mathematical Olympiad Committee(MOC) of the CMS is responsible for overseeing activities associated with the Society's involvement in mathematics contests. Two contests, The Canadian Open Mathematics Challenge(COMC) and the Canadian Mathematical Olympiad(CMO) are sponsored and run by the Society. The MOC also oversees and sponsors Canada's participation in the Asian Pacific
Mathematics Olympiad(APMO) and the International Mathematical Olympiad(IMO). Other activities of MOC include the Mathematical Olympiads' Correspondence Program, Mathematics Camps and (for this report) the book series "A Taste of Mathematics"' (ATOM). Much of the work of MOC is done by it's three subcommittees, namely the Canadian Open Mathematics Challenge Committee, the Canadian Mathematical Olympiad Committee and the International Mathematical Olympiad Committee. Further information, including press releases, on most of the topics in this report can be found through the CMS Competitions web page: http://www.math.ca/CMS/Competitions/

The Canadian Open Mathematics Challenge

The Open provides a mathematical enrichment activity for a large number of students and it serves as a qualifying paper for the Canadian Mathematical Olympiad (CMO). Plaques are awarded to both the students and schools for being a provincial or regional winner and Gold Medals are awarded to up to 9 other students in each province or region.
The second COMC was held on November 26, 1997. About 3300 students from across the country participated, up from about 3000 in 1996. The third COMC was held on November 25, 1998. About 3200 students participated. We were disappointed that the number was lower than

in 1997. However, it should be noted that each of the three competitions to date has occurred during or shortly after teacher strikes or work to rules in Ontario and Alberta. For a list of the regional and provincial winners, please see the press releases and the COMC web page.

The COMC is going well. Provincial governments seem to like the opportunity to see how their top students fair on a national basis. The Society's increased interest in students is reaping various rewards. For example, in 1998 eight provinces and territories donated to the CMS, up from four in 1997. The COMC was cited as an activity in which the provinces were interested and one of the reasons they chose to support the CMS.

The Canadian Mathematical Olympiad

The 30th Canadian Mathematical Olympiad(CMO) took place on April 1, 1998. The top three students were Adrian Chan, Upper Canada College, Toronto, Ont; Adrian Birka, Lakeshore High School, Port Colborne, Ont; and Jimmy Chui Earl Haig Secondary School, Toronto, Ont. These students received prizes of $2000, $1500 and $1000 respectively. In addition, Adrian Chan was presented with the Sun Life Cup, and all winners received book prizes, donated by Wiley and Nelson.
More information about the 1998 CMO is available from the press release, the CMO web page and the September 1998 CMS Notes.

The Asian Pacific Mathematics Olympiad

The 1998 Asian Pacific Mathematics Olympiad (APMO) was written in March by 29 Canadian students, selected either because they had been been invited to the Canadian Mathematical Society's 1998 Winter IMO Training Camp in January, or because they had placed well in the 1997 Canadian Open Mathematics Challenge. The Canadian Students performed very well, receiving 6 medals and three honourable mentions. Canada placed 5th amongst the 22 participating countries. Adrian Tang
received a gold medal, Mihaela Enachescu and Adrian Chan received silver medals, while Adrian Birka, Jimmy Chui, David Arthur, and Magdalena Georgescu received bronze medals.

The International Mathematical Olympiad

The 1998 International Mathematical Olympiad(IMO) was held in Taipei, Taiwan, July 10-21. Canada's team consisted of Adrian Birka, Lakeshore Catholic High School, Port Colbourne, Ontario; Adrian Chan, Upper Canada College, Toronto, Ontario; Jimmy Chui, Earl Haig Secondary School, North York, Ontario; Mihaela Enachescu, Dawson College, Westmount, Quebec, Yin (Jessie) Lei, Vincent Massey Secondary School, Windsor, Ontario, and Adrian Tang, Albert Campbell Collegiate Institute, Scarborough, Ontario. The Team Leader was Dr. Christopher Small, Department of Statistics and Actuarial Science, University of Waterloo, and the Deputy Team Leader was Mr. J.P. Grossman, Massachusetts Institute of Technology, a Canadian gold medalist at the 1992 IMO in Moscow, Russia. This year's team was also accompanied by Dr. Arthur Baragar, University of Nevada at Las Vegas, and a member of Canada's first IMO team (Washington 1981) and Dr. Dorette Pronk, Dalhousie University.

A number of events were held prior to the team's departure to Taipei. A reception was held at Upper Canada College on June 29, 1998, where the team was introduced to the media and invited guests. Then a two week training camp was hosted by the University of Calgary. (see below).

The Canadian team increased its standing (over 1997) to 20th out of the 76 competing countries. A Gold Medal was awarded to Adrian Chan, a Silver Medal to Mihaela Enachescu and Bronze Medals to Jimmy Chui and Adrian Tang. Jessie Lei received an Honourable Mention. More information is available from the press releases and the article by Chris Small in the February 1999 CMS Notes.

IMO Training Camps

Two training camps are held each year to prepare students for the IMO. The CMS Winter IMO Training Camp, held in January, is used to begin the training for the IMO and to let the team leaders meet those students who have a good chance of making the IMO team. The CMS Summer IMO Training Camp is used for intensive training of the actual IMO team.

The 1998 Winter IMO Training camp took place in Waterloo, from January 9 to January 12. Students were selected on the basis of their performance in a variety of competitions. The camp featured a group of 15 students from across the country as well as a team of trainers and support people: Bill Sands from the University of Calgary, who was there to observe the format of the Winter Camp and to plan for the Summer Camp in Calgary, Dorette Pronk, a Postdoctoral Fellow at Dalhousie, who had agreed to act as Deputy Leader Observer for the Canadian team at the 1998 Olympiad, and Kristin Lord, who was Deputy Leader Observer in Argentina the previous year. There were also guest lectures given by David Jackson on combinatorics and by Mary Thompson on extremal problems.

The 1998 Summer IMO Training camp took place in Calgary from June 29 to July 12. The camp was organized by Bill Sands. The coaches were: Christopher Small (Team Leader), J.P. Grossman (Deputy Leader), Arthur Barager (Leader Observer), Dorette Pronk (Deputy Leader Observer), as well as Georg Gunther (Memorial University of Newfoundland). Richard Guy of the University of Calgary also served as a guest lecturer and an inspiring role model for the students. Besides the students on the IMO team, during the first week, two additional students were invited to participate in the training and, on the first Thursday, a number of local students were invited to join the training for the day. The second week of the training camp was held at the University of Calgary's Field Station in Kananaskis. There, the camp became more concentrated with several "Mock Olympiads", three-hour exams containing problems similar to those the team would encounter at the IMO itself. On July 12 the Team departed for Taiwan.

Further information can be obtained from Bill Sands' Report on the IMO Summer Training Camp and from the article by Chris Small in the February 1999 CMS Notes.

Mathematical Olympiads' Correspondence Program

The Mathematical Olympiads' Correspondence Program (MOCP) is a problems based correspondence program. It is intended for Canadian (or landed immigrant) high school students with exceptional mathematical ability who wish to pursue mathematical problem solving at a high level and/or have ambitions to compete in mathematical olympiads. The current coordinator is Ed Barbeau, University of Toronto, who has been the coordinator for many years. Professor Barbeau sends out problem sets and marks (with copious comments) the solutions returned by the students. During 1997-98, 26 students participated and 21 students are registered for the 1998-99 year.

Summer Camps (Enrichment)

The MOC has been discussing national and regional mathematics camps for several years. During June 21-25, 1998 the first CMS National Math Camp took place in Waterloo. Twenty three students from across the country attended. The camp was organized by Ravi Vakil, Peter Crippen, and Tom Griffiths. Additional help, including some lectures, was provided by some Canadian IMO Team Alumni. The purpose of the Camp was to inspire enthusiasm in high level problem solving. The camp was highly successful, and a good time was had by all. Detailed information about the camp can be found in Ravi Vakil's report, available through the CMS Competitions web page.

A Taste of Mathematics (ATOM)

The ATOM series of booklets is designed to provide enrichment material for high school students with an interest in and an aptitude for mathematics. The level of the booklets will vary from quite elementary to more specialized material for those students who are preparing for advanced competitions. The first booklet in the series, "Mathematical Olympiads' Correspondence Program (1995-96)" edited by Ed Barbeau is now available. There are 10 other booklets at various stages of preparation. Effective 1999, the responsibility for the ATOM series has been transferred to the
CMS Publications Committee.

Nominating

Kenneth Davidson (Waterloo) Chair

Edward Barbeau (Toronto)
Katherine Heinrich (Simon Fraser)
Richard Kane (Western)
François Lalonde (UQAM)
Anthony Lau (Alberta)
Wendy MacCaull (St. Francis Xavier)

Radical new terms for the Fund Raising Committee were approved and sent to the Board. The new committee structure was put in place, and the following regional representatives were nominated.
This has been approved by the Board.

David Leeming (Victoria)	12/1999	Member east
Jon Thompson (UNB)	12/2000	Member west
Joan Wick Pelletier	12/2000	Member Ontario
Georg Schmidt (McGill)	12/2001	Member Quebec

The dissolution of the Government Policy Committee has been recommended to the Board, with suggestions for distributing some of the duties. This will be considered by the Executive in April.

A new Student Committee has been proposed that will be run by and for the students, and will coordinate with other CMS activities. This will be considered by the Executive in April.

Arthur Sherk was asked to continue as Treasurer for three more years to December 2001. This has been approved by the Board.

Nominations were sought for the following committee positions which have now been approved by the Board.

Education	Jennifer Hyndman (UNBC)	1/1999-12/2001
	Andy Liu (Alberta)	1/1999-12/2001
	John Grant McLoughlin (Memorial)	1/1999-12/2001
Electronic Services	Edgar Goodaire (Memorial)	1/1999-12/2000 Chair -12/2001 Member
	Laurent Marcoux (UAlberta)	1/1999-12/2001
Finance	Michael Lamoureux (Calgary)	7/1998-12/2001.
Human Rights	Paul Gauthier (U Montreal)	1/1999-12/2001
	Zhiguo Hu (U Windsor)	1/1999-12/2001
International Affairs	Catherine Sulem (Toronto)	1/1999-12/2001
Mathematical	Daryl Tingley (UNB)	9/1998-8/2000 Chair

Olympiads		-8/2001 Member
Publications	Bradd Hart (McMaster)	1/1999-12/2001
	Christine Soteros (U Sask)	1/1999-12/2001
Research	Niky Kamran (McGill)	1/1999-12/2000 Chair
		-12/2001 Member
	Ian Putnam (Victoria)	1/1999-12/2001
Women	Shelly Wismath (Lethbridge) agreed to extend her term as chair to 12/1999.	
	June Lester (UNB)	1/1999-12/2001
	Frank Zorzitto (Waterloo)	1/1999-12/2001

The Nominating Committee welcomes Stephen Boyer (UQAM) as a new member in 1999. We thank Francois Lalonde for his useful service.

David Bates (Aetna Insurance) was asked to join the Board as a private-sector member. We thank Jack Mosevich (Harris Investment Management) for his useful service.

We have proposed a slate of Nominees for the 1999 CMS elections for the new Executive and Board positions. These names were announced in the February issue of the Notes, along with a call for other nominations.

Publications

James Mingo (Queen's) Chair

Gerald Cliff (Alberta)
Olga Kharlampovich (McGill)
Anthony Peirce (UBC)
Thomas Salisbury (York)
Richard Wood (Dalhousie)

The Publications Committee oversees the publishing activities of the Society. The publications of the Society together with their editors-in-chief are the

Canadian Journal of Mathematics	J. Carrell and N. Ghoussoub
Canadian Mathematical Bulletin	M. Min-Oo and A. Nicas
Crux Mathematicorum with Mathematical Mayhem	Bruce Shawyer
CMS Series of Advanced Books in Mathematics	J. Borwein and P. Borwein
Conference Proceedings Series	A. Geramita and N. Kamran
CMS Notes	P. Fillmore and S. Swaminathan
A Taste of Mathematics	R. Nowakowski

The G. de B. Robinson Prize

This prize is awarded each year for an outstanding article published in one of the Society's two research journals; in even numbered years the prize is awarded for an article published in the *Journal* and in odd numbered years for an article published in the *Bulletin*.

In 1998 the prize was awarded to Professor Ranee Brylinski of the Pennsylvania State University for her article *Quantization of the 4-dimensional nilpotent orbit of* $SL_4(\mathbb{R})$ published in volume 49 no. 5 (1997) of the *Journal*.

Editorial Appointments

The following appointments were made:

Canadian Journal of Mathematics and Canadian Mathematical Bulletin

F. Lalonde, Associate Editor	(1/99 - 12/03)
J. Millson, Associate Editor	(1/99 - 12/03)
C. Sulem, Associate Editor	(1/99 - 12/03)

CMS Series of Monographs and Advanced Texts

J. Borwein, Editor-in-Chief	(1/00 - 12/04)
P. Borwein, Editor-in-Chief	(1/00 - 12/04)

CMS Notes

P. Fillmore, Editor-in-Chief	(1/99 - 12/00)
S. Swaminathan, Editor-in-Chief	(1/99 - 12/00)
J. Lewis, Contributing Editor for Research	(10/98 - 12/00)
N. Yui, Contributing Editor for Research	(10/98 - 12/00)
E. Barbeau, Contributing Editor for Education	(1/99 - 12/00)

A Taste of Mathematics

R. Nowakowski, Editor-in-Chief	(1/99 - 12/03)
B. Shawyer, Associate Editor	(1/99 - 12/02)
E. Barbeau, Associate editor	(1/99 - 12/01)

Crux Mathematicorum with Mathematical Mayhem

C. Fischer, Problems Editor	(1/99 - 12/03)
R. Guy, Editor at large	(1/99 -12/03)
D. Hanson, Articles Editor	(1/99 - 12/03)
A. Law, Book Review Editor	(1/99 - 12/01)
J. Totten, Problems Editor	(1/99 - 12/03)

On-line Journals

The Committee approved free electronic access to the electronic version of the *Notes*. All CMS periodicals are now available electronically.

New Publisher for CMS of Advanced Books in Mathematics

The Society terminated its contract with John Wiley & Sons and signed a new contract with Springer-Verlag (New York). The expectation is the new contract will provide increased visibility for the series and thus better sales.

Redesign of *Journal*, *Bulletin* and *Notes*

The Committee approved a redesign of the *Journal* and the *Bulletin*. New fonts have been selected and the layout has been modified. The *Journal* and *Bulletin* should have a more open look but without a decrease in the number of papers published.

Beginning in 1998 the *Notes* were published in a new attractive and compact format.

Research

Cameron Stewart (Waterloo) Chair

Martin Barlow (UBC)
Chris Godsil (Waterloo)
Jacques Hurtubise (McGill)
Eric Jespers (Memorial)
V. Kumar Murty (Toronto)
Dana Schlomiuk (Montréal)

The 1998 Summer meeting of the CMS. was held in Saint John, New Brunswick and was hosted by the University of New Brunswick. There were the following research sessions: category theory organized by R. Wood, convex geometry organized by A.C. Thompson, operator theory organized by H. Radjavi and supported by the C.R.M., relativity and geometry organized by J. Hurtubise and N. Kamran and supported by the Fields Institute, low dimensional topology organized by J. Gegenberg, discrete mathematics organized by K. Heinrich, B. Alspach and A. Punnen, and the graduate student seminar organized by J. Mills. The Jeffrey-Williams Prize Lecturer at Saint John was George Elliott and the Krieger-Nelson Prize Lecturer was Catherine Sulem. At Saint John, the Research Committee started its planning for the Summer 2000 meeting at McMaster by selecting a list of possible core sessions for the meeting. Much work has been done since then to prepare for the meeting which is a joint venture with The Canadian Applied and Industrial Mathematics Society (CAIMS) and others.

The 1998 Winter meeting of the CMS was held in Kingston, Ontario and was hosted by Queen's University and R.M.C.. There were a large number of research sessions: algebraic geometry (Organizer: P. Millman), discrete geometry (Organizer: R. Erdahl, M. Senechal, W. Whiteley), extremal combinatorics (Organizer: D. de Caen), number theory (Organizer: R. Murty, N. Yui) supported by the C.R.M., operator algebras (Organizer: J. Mingo), probability theory (Organizer: M. Csörgo), supported by the Fields Institute, universal algebra and multiple valued logic (Organizer:
L. Haddad), the graduate student seminar (Organizer: D. Gregory) and a large session on topology organized by E. Campbell which consisted of four subsessions (differential geometry and global analysis (Organizer: M. Min-Oo and M. Wang), homotopy theory (Organizer: L. Langsetmo and J.
Shank), set theoretic topology (Organizer: J. Steprans and S. Watson), symplectic/low dimensional topology (Organizer: S. Boyer, J. Hurtubise and F. Lalonde)). The CMS usually funds four core sessions at each of its meetings. The Research Committee is very anxious to encourage members of the Society to sponsor and organize sessions at the CMS annual meetings. The success of the meetings in Saint John and Kingston was due in large measure to the many self-supported sessions which were organized at these meetings.

There were two Prize Lectures at the 1998 Winter Meeting. The Coxeter-James Prize Lecture was given by H. Darmon and the Doctoral Prize Lecture was given by Y. Berest. The Krieger-Nelson, Jeffery-Williams and Coxeter-James Prize Lecturers are selected by the Research Committee after a review of nominations. Files of nominated candidates remain open for two years for the Coxeter-James Prize and for three years for the other two prizes. The Doctoral Prize winner is selected by a jury chaired by a member of the Research Committee and including three other members. The jury in 1998 was chaired by D. Schlomiuk and included P. Fillmore, D. Jackson and R.V. Moody.

The next meetings of the CMS will be held in St. John's in the Summer of 1999, Montreal in the Winter of 1999, Hamilton in the Summer of 2000 and Vancouver in the Winter of 2000. The Research Committee approved in Kingston a slate of host sites up to the Summer of 2006 and the President is in the process of contacting the departments.

Women in Mathematics

Shelley Wismath (Lethbridge) Chair

Robert Corless (Western)
Jennifer Hyndman (UNBC)
Lisa Jeffrey (Toronto)
June Lester (UNB)
Angelo Mingarelli (Carleton)
Richard Wood (Dalhousie)

The Committee for Women in Mathematics (CWM) is charged with monitoring the status of women within the Canadian mathematical community and the Society, recommending actions to the Board which will ensure the equitable treatment of women, and encouraging the participation of women at all levels of mathematics.

The main activity of the CWM in 1998 has been on-going work on the Directory of Canadian Women in the Mathematical Sciences. This project was conceived and started up by former CWM chair Joan Geramita. Funding was obtained in 1997 by a grant from Nancy's Very Own Foundation, and Joan along with committee member June Lester got the project off to a good start. Much programming and design assistance was provided by Nathalie Sinclair at Camel, under the supervision of Loki Jörgensen; Nathalie Sinclair and more recently Fred Tessier handle the addition of new names to the Directory.

The Directory is an indexed collection of web pages of Canadian-connected women who are actively involved in some aspect of the mathematical sciences. Each web page lists name, address, contact information and research interests for the woman mathematician; she may also provide links to her home page or curriculum vitae if she wishes. With some additional advertising this year (handouts at CMS and other conferences and e-mail letters), we now have 52 women listed in the Directory. The Directory is searchable, for instance by geographical or research area, and should provide a valuable resource for those searching the Web for information about Canadian women mathematicians. Check it out at http://camel.math.ca/Women/WMpages/

Along with the Directory, we have set up an e-mail discussion list for those in the Directory. This list was set up in Summer 1998, and so far has been used for announcements of conferences and requests for information or help with projects. We hope to increase use of this list, for things such as job announcements, mentoring of graduate students by more senior women, book reviews, and so on.

An important event for Canadian women mathematicians this year was the "Celebration of Women in Mathematics" (CWIM) conference held in Waterloo in May 98. This conference, attended by approximately 120 women (and some men), featured three plenary talks, shorter talks in parallel sessions, a poster session, and three panel discussions on various aspects of careers in mathematics.
The conference received some funding from the CMS, and the CWM used the opportunity to recruit new members for our Directory project.

Looking ahead to new projects, the committee is planning a poster to celebrate the role of women in mathematics as part of the Mathematics Year 2000 events. Jennifer Hyndman is co-ordinating this project, which will feature short biographies of a number of prominent Canadian women mathematicians.

Joan Geramita of Queen's finished her term on the Committee in December 97, but continues to be involved in some of our activities. June Lester (UNB) completed her first term on the committee in December 98, but has agreed to serve another term. Angelo Mingarelli (Carleton) completed his term in December 98, and Frank Zorzitto (Waterloo) will join the committee as of January 99. Lisa Jeffrey (formerly at McGill, now at U of T) and Jennifer Hyndman (UNBC) joined the committee in January 97 and 98, respectively. Shelly Wismath (Lethbridge) has served as Chair of the Committee since July 97, and will continue as Chair until December 99.

Editorial Boards

Canadian Journal of Mathematics (CJM) and the Canadian Mathematical Bulletin (CMB)

Editors-in-Chief - CJM
James Carrell (UBC)
Nassif Ghoussoub (UBC)

Editors-in-Chief- CMB
Maug Min-Oo (McMaster)
Andrew Nicas (McMaster)

Associate Editors
Brian Alspach (Simon Fraser)
John Bland (Toronto)
Joel Feldman (UBC)
John Friedlander (Toronto)
Mark Goresky (Inst for Adv Study)
Nigel Higson (Penn State)
Jacques Hurtubise (McGill)
John Jardine (Western)
Joe Lipman (Purdue)
Louis Nirenberg (New York)
Edwin Perkins (UBC)
Nicole Tomczak-Jaegermann (Alberta)

Crux Mathematicorum with Mathematical Mayhem

Editor-in-Chief
Bruce Shawyer (Memorial)

Catharine Baker (Mt. Allison)
J. Chris Fisher (Regina)
Richard Guy (Calgary)
Clayton Halfyard (Memorial) - Associate Editor
Denis Hanson (Regina) - Articles
Cyrus Hsia (Toronto) - Mayhem Assistant Editor
Loki Jörgenson (Simon Fraser) - Digital Editor
Andy Liu (Alberta) - Book Reviews
Naoki Sato (Yale) - Mayhem Editor
Jim Totten (Cariboo College)
Edward Wang (Wilfrid Laurier)
Robert Woodrow (Calgary) - Olympiad Editor
Graham P. Wright (Ottawa) - Managing Editor

CMS Conference Proceedings Series (CPS)

Editors-in-Chief
Anthony Geramita (Queen's)
Niky Kamran (McGill)

CMS Series of Advanced Books in Mathematics (SAMB)

Editors-in-Chief
Jonathan Borwein (Simon Fraser)
Peter Borwein (Simon Fraser)

CMS Notes

Editors-in-Chief
Peter Fillmore (Dalhousie)
S. Swaminathan (Dalhousie)

Graham P. Wright (Ottawa) Managing Editor

CMS Notes Contributing Editors:
Monique Bouchard (CMS) - Meetings
Harvey Gerber (Simon Fraser) - Education
Chris Godsil (Waterloo) - Research
James Lewis (Alberta) - Research
Noriko Yui (Queen's) - Research

A Taste of Mathematics (ATOM)

Editor-in-Chief
Patrick Stewart (Dalhousie)

Associate Editors
Edward J. Barbeau (Toronto)
Richard J. Nowakowski (Dalhousie)
Bruce Shawyer (Memorial)

Graham P. Wright (Ottawa) - Managing Editor

Contributors

The Canadian Mathematical Society would like to acknowledge the following individuals, foundations and corporations for their encouragement and support.

Government of Alberta
Amex Canada Inc.
Bank of Montreal
Bell Canada
Igor Birka
Canada Life Assurance Company
Canadian Airlines International
Canadian Undergraduate Mathematics Conference
Centre de Recherches Mathématiques
Dalhousie University
Petrina Chui Ping Cheung
Stephen Chui
The Board of Education for the City of North York
Deloitte & Touche
The Fields Institute for Research in the Mathematical Sciences
Harry Ainlay High School
Hewlett-Packard (Canada) Inc.
Imperial Oil Charitable Foundation
Industry Canada
Lakeshore Catholic High School
Harry R. Love
The McLean Foundation
McMaster University
Memorial University of Newfoundland
Government of New Brunswick
Government of Newfoundland & Labrador
Niagara Catholic District School Board
Government of the Northwest Territories
Government of Nova Scotia
Government of Ontario
Pacific Institutute for the Mathematical Sciences
The Senator Norman M. Paterson Foundation
Gouvernement du Québec
Queen's University
Royal Bank of Canada
Royal Military College
Samuel Beatty Fund
Government of Saskatchewan
Simon Fraser University
Springer-Verlag
Sun Life Assurance Company of Canada
David Tang
University of British Columbia
University of Calgary
University of Manitoba
University of New Brunswick
University of Ottawa
Upper Canada College
Waterloo Maple Software
Waterloo Mathematics Foundation
Zotos Vaguelis
Ya Wu
Xerox Canada Inc.

CMS Executive Committee

President (July-Dec 98)	Richard Kane	University of Western Ontario
President (Jan-June 98)	Katherine Heinrich	Simon Fraser University
Vice Presidents	Lynn Batten	University of Manitoba
	Eddy Campbell	Queen's University
	Jacques Hurtubise	McGill University
	Richard Wood	Dalhousie University
Executive Director and Secretary	Graham P. Wright	University of Ottawa
Treasurer	F. Arthur Sherk	University of Toronto

CMS Board of Directors

Lesya Balych	Bank of Montreal
Lynn Batten	University of Manitoba
Jonathan Borwein	Simon Fraser University
Jason Brown	Dalhousie University
Jacques Bélair	Université de Montréal
Eddy Campbell	Queen's University
Andrew Carson	University of Saskatchewan
Benoit Charbonneau	UQAM
Richard Charron	Memorial Univ of Newfoundland
Robert Dawson	St-Mary's University
François Dubeau	Université de Sherbrooke
Joan Geramita	Queen's University
Penny Haxell	University of Waterloo
Katherine Heinrich	Simon Fraser University
Jacques Hurtubise	McGill University
Jennifer Hyndman	University of Northern British Columbia
Richard Kane	University of Western Ontario
Michael Lamoureux	University of Calgary
Anthony Lau	University of Alberta
Neal Madras	York University
Michael Makkai	McGill University
Julien Marcil	Université de Montréal
Rosaria Morelli	
Jack Mosevich	Harris Investment Management Inc.
V. Kumar Murty	University of Toronto
Donal O'Shea	Mount Holyoke College
Daniel Piché	University of Waterloo
Michel Racine	University of Ottawa
Georg Schmidt	McGill University
Karen Seyffarth	University of Calgary
Daryl Tingley	University of New Brunswick
Sylvia Wiegand	University of Nebraska
Gail Wolkowicz	McMaster University
Richard Wood	Dalhousie University

CMS Executive Office

Canadian Mathematical Society
577 King Edward, Suite 109
P.O. Box 450, Station A
Ottawa, ON Canada K1N 6N5

Tel: (613) 562-5702
Fax: (613) 565-1539
email: office@cms.math.ca
www.cms.math.ca

CMS Executive Office Staff

Graham P. Wright	Executive Director and Secretary
Monique L. Bouchard	Operations Manager
Caroline Baskerville	Assistant to the Executive Director
Diane J. Ellis	Comptroller
Alan Kelm	Site Manager - Camel East
Suzanne Lalonde	Executive Office Clerk
Claire Ryan	Financial Assistant
Chantal Stevenson	Membership and Publications Agent