_2000_

Canadian Mathematical Society

Annual Report

to Members

December 19, 2001

Table of Contents

A Word From the President

A General Reprise

The year 2000 was a very busy -- and for the most part very successful -- year for the Society: organizationally, intellectually and even financially. As President, I have been forcibly but pleasantly reminded at how hard and effectively our Executive Office works and at how many activities the Society is engaged in.

I cannot overstate how well served we are by the voluntary effort of so many of our members, as with the recent review process. Whether we choose the comparison with other Canadian academic societies or with foreign mathematical societies, we take some considerable pleasure in both the scale and level of function we provide. Through our annual meetings and prizes, active publication programme, sponsored high school competitions and Math Camps (there were eight this year (2000) in six provinces), the Endowment Fund Grants Competition, which has just completed its second set of awards, funding worthy mathematical projects ... and much else. Information on the Grants Competition can be found via Camel (www.cms.math.ca/Grants/).

Central to last year's activities was the highly successful *Math 2000* joint summer meeting (www.cms.math.ca/CMS/Events/math2000/), held at McMaster University. Hosted by McMaster and the University of Waterloo, the largest `made in Canada' conference yet run with more than 500 participants and a dozen varied plenary lectures. A profusion of other successful events made for an unparalleled week in Canadian Mathematics.

The list of participating societies and diverse talks at the meeting (and our other meetings) --- from genomics (we heard a speaker from Celera describe the Drysophila genome), control theory, imaging, bio-statistics and encryption to logic, sympletic geometry, and history of mathematics --- emphasizes our ability to play a key part in the life of the mathematical sciences generally. *Math 2000* was followed by an equally varied and stimulating CMS Winter Meeting (www.cms.math.ca/Events/winter00/) that formed a fitting conclusion to our many activities in World Math Year 2000. It was hosted by the University of British Columbia, which has a long and distinguished record of hosting CMS and other mathematical conferences. As with all our activities, our meetings rely on a great deal of local effort for which I express the Society's gratitude.

I wish also to acknowledge the generous support of the National Programme Committee of the three Canadian Research Institutes (Fields, CRM and PIMS) and the Mathematics of Information Technology and Complex Systems Network (MITACS NCE) at both of our annual meetings.

Some Specifics

Let me highlight some of the Society's recent activities, for the most part avoiding things described in other Reports.

Olympiad and Putnam

In June, I had the good fortune to attend the twentieth anniversary reunion of Canadian participation in the International Mathematical Olympiad. The reunion was held in Toronto during our Summer Meeting. More than 60 of our 86 former team members were present, which certainly evidences how significant an event participation in the IMO is for most team members. On July 4, I was also present at the annual team send-off at Simon Fraser. The six students who represented Canada in Seoul, South Korea from July 16-25 collected one gold, two silver, and one bronze medals and finished 17th out of 82 competing nations. David Arthur from Upper Canada College, the gold medalist, was 7th out of 461 contestants.

Similarly, let me record our spectacular national performance on the 1999 *Putnam Competition* in which three of the top ten teams and three of the top six individuals (7 of 25) were Canadian. A recent MAA Monthly notes that in the past decade there have been 8 Canadian Putnam Fellows and only two from US public universities. As I write, we eagerly await the 2000 results. Perhaps, not surprisingly, former Olympiad team members did very well. At the SFU send-off, I emphasized, for the media and administrators present, what a strong endorsement of Canadian undergraduate mathematics education the entire suite of results represented.

Publications and Electronic Information

Our publications continue to do well in an uncertain and increasingly digital world. All the Society's journals are now “fully online.” We have to make very significant decisions, *this coming year*, such as how best to integrate our electronic and paper publishing; and whether to scale up or down our present spectrum of publishing activities.

An ad-hoc subcommittee was struck in October (chaired by Tom Salisbury) to consider these matters further. We shall return to these questions and others throughout 2001. I record that a small technological step was taken when, on November 30, 2000, the Executive held a very productive two hour phone meeting for the first time -- as a precursor to a much briefer than usual meeting at the CMS Winter Meeting. We shall try to do this more frequently.

In the publishing context, we are exploring ways of assisting or collaborating with the new European Mathematics Press in the process of co-development, producing, of hosting and distributing their electronic journals. We have also been engaged in various discussions with the Euclid Project (based at Cornell, which has significant Sloane Foundation funding to assist mathematics journals in going digital), and with CISTI-NRC Press about prospective joint ventures.

The CMS has now completed the move of its *CMS Books in Mathematics* series to Springer New York, and the first ten volumes are now published or in press. There were four titles on sale at the Winter Meeting where Springer hosted a reception. Reviews will I am sure, continue to appear in the *CMS Notes*.

In June 2000, the CMS launched a parallel series of shorter books *CMS Tracts in Mathematics* to be published by the American Mathematical Society, edited by Ken Davidson and Cam Stewart from the University of Waterloo. Each of these series hopes to publish broadly and we invite members of other Canadian mathematical science societies to consider publishing their work through these vehicles. Guidelines for authors are nearing completion in the TeX Office. Early adherence to these guidelines by authors dramatically reduces the pain of producing a book for the author and publisher.

Our many other publications continue to prosper but all need vigorous marketing and distribution -- perhaps by third parties. This is clearly true of our "A Taste of Mathematics" (*ATOM*) work booklets for high school students. This is an excellent series that has a large market potential outside our usual audience.

Combined Membership List

The Board in December agreed to having our membership list integrated with or appended to the *Combined Membership List* of the AMS/MAA/SIAM. This could start in 2002 if all technical issues are resolved. We shall of course maintain our own CMS list. I note in passing, that as CMS President, I sit as an observer on AMS Council. As such, I am invited to a number of meetings, but have found that attendance at the January Joint Meetings is usually adequate.

Women in Math

At the Winter Meeting, we were able to release a very well received *Women in Mathematics* poster. Co-sponsored by Waterloo Maple, the poster celebrates the achievements of Canadian women mathematicians. It is being mailed to all Canadian high schools.

Advancement of Mathematics

One of the task-force recommendations, in the review brought to completion by my predecessors, was to establish a Promotion of Mathematics Committee. We are now thinking of building a Committee for the Advancement of Mathematics, with fund raising overseen by a sub-committee of this new committee. This would seem to appropriately reflect the constant need to raise funds with the primary goal of working to advance mathematics. In this setting, CMS has just received $68,100 over three years from NSERC's new *PromoScience* program to assist with its outreach and public awareness activities.

National Science Organization

The Secretary of State for Science convened a two day meeting in Aylmer, Quebec (Oct 4-5, 2000) to discuss the desirability of establishing a free standing Canadian Academy. Keith Taylor, who represented the CMS at this meeting, and I jointly responded to an online questionnaire prior to the meeting. The initiative seems serious and fairly advanced. Given the recent election results, we might well see the emergence of such an organization and of significant funding for a more vigorous Royal Society of Canada.

IMU - CEIC

The elaborate process of preparing for next International Mathematics Congress in Beijing in 2002 is underway and we are intent to arrange a Canadian reception at the Congress, hopefully at the Embassy. This will be jointly sponsored by the MITACS research network and the three institutes.

More substantively, I sit, as deputy chair on the IMU's *Committee on Electronic Information and Communication.* The CEIC (www.math.ceic.ca) continues to make slow, but hopefully steady, progress on its charter, on issues of metadata, digital publishing, copyright and intellectual property. We met in Vienna from October 5-7. The CMS co-sponsored the previous meeting in Berkeley in December 1999. In addition to writing a detailed report for the IMU Executive in Beijing, the principal goal is the development of a world-wide *MathNet* that allows one to obtain information about mathematicians and mathematics. The two primary steps are the installation of “secondary home pages” (institutional, departmental, and individual) and the integration of preprint services.

In Conclusion

As will be clear from my report, the Executive Director's and all the committee reports, the Society is for the most part thriving. In addition to the activities mentioned above, I finish by observing that 2001 will see an increased emphasis on fund raising, on membership recruitment, and on joint initiatives with other societies and groups. Finally I should add my personal thanks to my predecessor, Richard Kane, who completes four years of truly distinguished service to the CMS in June of 2001.

Jonathan Borwein (Simon Fraser University)

Executive Director's Report

In March 1998, under the direction of the then president Katherine Heinrich, the Society began an extensive review of all its activities and operations. Richard Kane, CMS President 1998 - 2000, and Jonathan Borwein, the current President, have overseen this important strategic planning exercise. The final reports of seven Task Forces (Budget and Policy, Board Representation, CMS Endowment Fund, Publications, Finances and Fundraising, Support of the Mathematics Committee and Office Strategies) and one ad-hoc committee (Electronic Services and Camel) are available on Camel (www.cms.math.ca/Projects/).

The Executive Committee has been charged with reviewing all of the reports and recommendations and developing an overall structure and strategy for the CMS for the next several years. During 2000, each standing committee, as well as members of the Society, were given an opportunity to comment upon the reports and recommendations. The Executive has already begun the process of reviewing all the submissions and will present its conclusions to the Board of Directors in June 2001. A great deal of effort has gone into the present strategic planning approach and, although the final stages of the work are not yet completed, numerous changes have already been implemented. When the process is completed, the CMS will have taken the necessary steps to ensure our activities and services are delivered in the most effective, efficient and cost-effective manner.

The 2000 Annual Reports from each standing committee chair indicate the extensive range of research, publications and educational activities supported by the Society. All of these activities are possible because of the invaluable assistance received from both members and others.

Over the past few years the number of sessions at our semi-annual meetings have increased markedly, as has the number of delegates attending these meetings. Although the Executive Office staff provides much of the administrative support, the success of the meetings in Hamilton (June 2000) and Vancouver (December 2000) was also due to the extensive help received from the meeting directors, the local organizers and the numerous session organizers. The CMS is always indebted to the host university, to other participating universities and, through the National Program Committee, to the three research institutes for their indispensable support.

A highly successful meeting program together with on-going expansion of our publications and educational programs contributed to a very productive year. The Society also organized and supported, via a grant from the CMS Endowment Fund, a number of special activities to help celebrate World Math Year 2000. These activities ranged from posters in the Montreal Transit System to museum exhibits in Sherbrooke and Regina, and from special lectures at provincial math association meetings to regional Math Camps. The CMS is grateful to all of those who helped make these activities a reality and who contributed largely to their success.

Our publishing activities continue to be of a high standard and, in 2000, all periodicals were shipped on-time with issues available to subscribers on Camel approximately one week before the shipping date. With all CMS periodicals available online for both individual and institutional subscribers, more work is required of the Executive Office to ensure the necessary access information is provided to Camel in a timely and accurate manner. The Executive Office, in conjunction with those responsible for our web site, are continually trying to streamline the process, to provide subscribers with improved ways to update their information, and to improve the accounting system that provides electronic access to each subscriber.

The new *CMS Book Series* with Springer-Verlag is progressing well and the first four books in the Series appeared in 2000. The new agreement with the American Mathematical Society to publish the *CMS Tracts in Mathematics* has been signed and work commenced to attract and publish books to this new series. *"A Taste of Mathematics" (ATOM)* a series of work booklets for high school students continues to be well received and is a series that has a large market potential. All of the Society's book and periodicals must be promoted more extensively so that each receives the necessary exposure and market potential.

Through the Canadian International Mathematical Olympiad team, the 2000 Canadian Mathematical Olympiad, the 2000 Canadian Open Mathematics Challenge, the CMS problem solving journal (*CRUX with MAYHEM*), special education sessions at our semi-annual meetings, public lectures, regional and national and Math Camps, and other activities, the CMS provides a wide array of educational enrichment activities. These activities are only possible because of the significant support received from provincial governments, corporations, foundations and CMS members. The 2000 Esso Math Camps program was extremely successful. Many of the students who participated have written to express their enthusiasm for the program and indicated how much they valued the opportunity to participate in this unique program. In 2001, the program will be expanded to include Math Camps at Simon Fraser University and Memorial University of Newfoundland. It is extremely encouraging that, in only three years, the program will have grown to provide a Math Camp in almost every province.

In June 2000, Richard Kane (Western) ended his term as CMS President and Jonathan Borwein (SFU) assumed the position. Richard's leadership and direction contributed significantly to the development of the Society during his term. The continual growth of the Society impacts considerably on the work required by committee members, editors, organizers, directors, and particularly the President. The Society's enviable national and international reputation would not be possible without the efforts and guidance of all of these individuals. Many thanks to all those who helped make 2000 a most successful year.

Graham P. Wright (University of Ottawa)

Treasurer's Report

Fiscally speaking, the year 2000 was successful without being spectacularly so. The Operations Fund showed total revenue of $1,317,939 against expenditures of $1,288,953, for a positive balance of $28,986. There was a decrease relative to 1999 in donations and miscellaneous income, but all other revenue sources were up over the previous year. Publishing continues to show a large excess of revenue over expenses, and thus subsidizes the other three divisions: General, Research, and Education.

In principle, the three subsidized divisions should each not exceed a deficit of $110,000. The General and Research Divisions managed to keep within that guideline. This was particularly gratifying in the case of the Research Division, as it reflected the success of Math 2000, the joint meeting with our Canadian mathematical societies that attracted a large number of delegates.

The Education Division exceeded the guidelines for a variety of reasons, some of which could not have been anticipated. More activities than ever were administered by the Education Division, and they were all successful. These activities also had the advantage of raising the profile of the CMS in the general public; the only loss was a monetary one. Some special funds have already been secured for education-related activities in 2001 and the program is anticipated to be larger than ever before. Hopefully, there will be revenues to cover the activities. If not, and if an excessive deficit materializes in 2001, the 2002 activities will probably have to be scaled down.

As an addendum to this report, we have included a comparison of the budgets for 2000 and 2001. We take some pleasure in noting that, for year 2000, the difference between projected and actual excess of revenue over expenses is less than $2,400. This gives us some reason to hope that the same precision will result in 2001. To reach this end, however, we will need to meet our fund-raising goals.

The investment income funds all grew satisfactorily last year, in spite of a volatile money market. The combined Restricted Investment Funds are now almost at the two million mark.

Arthur Sherk (University of Toronto)

Canadian Mathematical Society
Balance Sheet
as at December 31, 2000

	Operations Fund $	Designated Activities Fund $	Endowment Fund $	Mathematical Olympiads Fund $	**2000 $**	1999 $
ASSETS						
CURRENT						
Cash	240,513	-	25,287	-	**265,800**	164,521
Temporary investments	145,740	-	-	-	**145,740**	72,955
Accounts receivable and accrued interest	213,587	-	3,000	-	**216,587**	226,817
Budget advances	33,025	-	-	-	**33,025**	35,025
Prepaid expenses	25,827	-	-	-	**25,827**	86,428
Interfund receivable (payable)	(20,294)	4,353	28,977	(13,036)	**-**	-
	638,398	4,353	57,264	(13,036)	**686,979**	585,746
INVESTMENTS	-	-	1,678,223	207,755	**1,885,978**	1,766,454
CAPITAL ASSETS	18,005	-	-	-	**18,005**	21,288
	656,403	4,353	1,735,487	194,719	**2,590,962**	2,373,488
CURRENT LIABILITIES						
Account payable and accrued liabilities	257,564	-	-	-	**257,564**	122,578
Deferred revenue	305,834	-	-	-	**305,834**	322,029
	563,398	0	0	0	**563,398**	444,607
FUND BALANCES						
Investment in capital assets	18,005	-	-	-	**18,005**	21,288
Restricted	-	4,353	1,735,487	194,719	**1,934,559**	1,832,593
Unrestricted	75,000	-	-	-	**75,000**	75,000
	93,005	4,353	1,735,487	194,719	**2,027,564**	1,928,881
	656,403	4,353	1,735,487	194,719	**2,590,962**	2,373,488

Statement of Revenue and Expenditures as at December 31, 2000

Operations Fund

	General Division	Publishing Division	Research Division	Education Division	Total 2000	Total 1999
	$	$	$	$	$	$
REVENUE						
Grants	-	500	71,497	51,066	**123,063**	72,214
Donations	9,706	1,220	572	45,980	**57,478**	65,300
Membership fees	84,588	-	-	-	**84,588**	83,626
Registration fees and other sales	156	-	113,278	36,330	**149,764**	131,667
Subscriptions and publications	-	617,606	-	-	**617,606**	523,784
Advertising and promotional sales	6,512	24,715	6,530	-	**37,757**	23,514
Interest and foreign exchange	19,154	224,097	2,435	1,997	**247,683**	232,470
	120,116	868,138	194,312	135,373	**1,317,939**	1,132,575
EXPENDITURES						
National projects	10,806	-	-	125,053	**135,859**	97,245
Speakers and prizes	76	286	78,103	21,357	**99,822**	107,334
Production	-	112,558	322	-	**112,880**	118,021
Promotion	9,742	3,895	5,914	7,020	**26,571**	19,905
Salaries and benefits	73,636	239,526	74,989	73,636	**461,787**	413,673
Board and Committees	37,293	53,428	411	7,501	**98,633**	92,167
Legal and audit	2,942	2,942	2,942	2,942	**11,768**	7,582
General administration	38,870	122,428	139,911	28,372	**329,581**	214,701
Amortization	3,013	3,013	3,013	3,013	**12,052**	11,178
	176,378	538,076	305,605	268,894	**1,288,953**	1,081,806
Excess (Deficiency) of Revenue over Expenditures	(56,262)	330,062	(111,293)	(133,521)	**28,986**	50,769

Restricted Funds

	Designated Activities Fund	Endowment Fund	Math Olympiads Fund	2000	1999
REVENUE	$	$	$	$	$
Donations	-	929	776	**1,705**	6,760
Membership fees	-	12,000	-	**12,000**	6,000
Dividend, interest and other income	-	86,290	10,847	**97,137**	109,828
Gain on sale of investments	-	22,344	2,762	**25,106**	228,718
	0	121,563	14,385	**135,948**	351,306
EXPENDITURES					
Lifetime membership fees annual transfer	-	12,120	-	**12,120**	10,788
Projects	87	37,700	-	**37,787**	25,302
Mathematical Olympiad annual transfer	-	-	6,000	**6,000**	6,000
Commissions	-	9,467	877	**10,344**	5,195
	87	59,287	6,877	**66,251**	47,285
Excess (Deficiency) of revenue over	(87)	62,276	7,508	**69,697**	304,021
Fund balances, beginning of year	4,440	1,640,942	187,211	**1,832,593**	1,476,034
	4,353	1,703,218	194,719	**1,902,290**	1,780,055
Interfund transfer from Operations Fund	-	32,269	-	**32,269**	52,538
Fund balances, end of year	4,353	1,735,487	194,719	**1,934,559**	1,832,593

Budget 2001 - Operations Fund Summary

Division Grand Summaries	Budget 2000	Budget 2001
GENERAL		
Total Revenue	117,770	126,391
Total Expenditure	178,228	197,856
NET REVENUE/EXPENDITURE	(60,458)	(71,465)
EDUCATION		
Total Revenue	170,325	186,000
Total Expenditure	269,928	282,306
NET REVENUE/EXPENDITURE	(99,603)	(96,306)
RESEARCH		
Total Revenue	224,285	184,260
Total Expenditure	332,963	317,121
NET REVENUE/EXPENDITURE	(108,678)	(132,861)
PUBLISHING		
Total Revenue	858,296	912,099
Total Expenditure	562,899	599,536
NET REVENUE/EXPENDITURE	295,397	312,562
OPERATIONS FUND		
Total Revenue	1,370,676	1,408,750
Total Expenditure	1,344,018	1,396,820
NET REVENUE/EXPENDITURE	26,658	11,929

Budget 2001 - General and Education Divisions

GENERAL - SUMMARY

	Budget 2000	Budget 2001
REVENUE		
Administration	27,500	32,000
Members	90,270	94,391
Projects	0	0
TOTAL REVENUE	**117,770**	**126,391**
EXPENDITURE		
Administration	166,878	183,706
Members	3,000	5,500
Projects	8,350	8,650
TOTAL EXPENDITURE	**178,228**	**197,856**
NET REVENUE/EXPENDITURE	**(60,458)**	**(71,465)**

SUMMARY - EDUCATION

	Budget 2000	Budget 2001
REVENUE		
Administration	31,950	20,000
Competitions	108,625	126,000
Projects	29,750	40,000
TOTAL REVENUE	**170,325**	**186,000**
EXPENDITURE		
Administration	126,318	141,846
Competitions	113,810	110,660
Projects	29,800	29,800
TOTAL EXPENDITURE	**269,928**	**282,306**
NET REVENUE/EXPENDITURE	**(99,603)**	**(96,306)**

Budget 2001 - Research and Publications Divisions

RESEARCH - SUMMARY	Budget 2000	Budget 2001
REVENUE		
Administration	400	700
Meetings	222,885	183,560
Projects	1,000	-
TOTAL REVENUE	**224,285**	**184,260**
EXPENDITURE		
Administration	113,468	130,746
Meetings	217,895	184,775
Projects	1,600	1,600
TOTAL EXPENDITURE	**332,963**	**317,121**
NET REVENUE/EXPENDITURE	**(108,678)**	**(132,861)**

PUBLISHING - SUMMARY	Budget 2000	Budget 2001
REVENUE		
Administration	0	0
Journal	530,240	557,459
Bulletin	165,850	179,571
Notes	10,030	11,655
Electronic Services	78,391	84,811
Crux	48,485	52,303
Other Publications	25,300	26,300
Projects	0	0
TOTAL REVENUE	**858,296**	**912,099**
EXPENDITURE		
Administration	129,467	139,296
Journal	170,794	178,247
Bulletin	78,851	85,095
Notes	30,870	30,350
Electronic Services	99,930	110,379
Crux	40,287	41,769
Other Publications	12,300	14,000
Projects	400	400
TOTAL EXPENDITURE	**562,899**	**599,536**
NET REVENUE/EXPENDITURE	**295,397**	**312,562**

Education

Edward Barbeau (Toronto) Chair

Jacques Bélair (Montréal)
Afton Cayford (UBC)
John Grant McLoughlin (Memorial)
Jennifer Hyndman (UNBC)
Jacqueline Klasa (Dawson College)
Andy Liu (Alberta)
Morris Orzech (Queen's)
Abraham Punnen (UNBSJ)
Keith Taylor (Saskatchewan)

Sub-Committees:

Camel:
Edward Barbeau (Toronto) Chair
Jennifer Hyndman (UNBC)

Provincial Competitions:
Edward Barbeau (Toronto) Chair
Afton Cayford (UBC)
Abraham Punnen (UNBSJ)

Public Appreciation of Mathematics:
John Grant McLoughlin (Memorial) Chair
Edward Barbeau (Toronto)
Andy Liu (Alberta)

A principal function of the Education Committee is to ensure that there is a significant portion of each professional meeting of the Society devoted to educational matters. The Committee selects for each meeting, a session organizer and possibly nominates a plenary speaker. While given information about areas of emphasis at past meetings, the organizer has a great deal of discretion and can count on financial support together with whatever extra funding can be raised.

At both the meetings in 2000, we were fortunate to have rich and informative sessions. In Hamilton, in June, Robert Corless and Eric Muller organized sessions on the education of future school teachers and new approaches to the use of technology. The guest speaker was Lawrence Shampine of Southern Methodist University. At Vancouver, in December, George Bluman and Klaus Hoechsmann organized a session on the knowledge of teachers, with a focus on the book of Liping Ma, with Liping Ma herself present to participate in the discussion. The public address was delivered by Roger Howe of Yale University; Ravi Vakil, of MIT, not only gave an hour talk but also had a problems session for local high school students. It was gratifying that several regional school teachers attended this meeting, and that Kanwal Neel, President of the British Columbia Association of Mathematics Teachers was one of the contributors to the session.

The Committee nominated Bernard Courteau, emeritus professor at the Université de Sherbrooke to receive the 2000 Adrien Pouliot Award in recognition of his significant contribution in the popularization of mathematics, leadership among the teachers in Quebec and efforts to bring about positive change in the curriculum in that province. The Award was presented to him at the banquet at the December meeting.

Financial support for provincial contests in several provinces was allocated by the Committee. In addition, the Society provided a grant towards the cost of a 32-page insert on the Mathematical Sciences in Quebec, for the journal "Québec Science".

Each year, the Canada-Wide Science Fair is held at a different Canadian Centre. In May 2000, it was held in London, Ontario, and the Society participated by awarding prizes of $300, $200 and $100 to the most meritorious exhibits that involved mathematics. These were judged by David Borwein and Peter Cass of the University of Western Ontario, along with Ole Nielsen of Queen's University. There will be CMS prizes also at the 2001 Science Fair in Kingston, Ontario.

The Committee recommended to the Executive that graduate students in mathematics education be offered membership in the Society on terms similar to those for mathematics graduate students.

At the moment, the Society's main role in education in Canada is a supportive one, collaborating with other organizations on particular ventures. In particular, we would like to provide grants to professional teachers' organizations to defray the costs of having good mathematical expositors at their meetings and public functions.

Let me close with some comments on particular challenges in the educational sphere:

(a) Since a majority of members of the Society teach at a college or a university, an important activity of the Society should be to support this. Part of this can come through an exchange of information in the *CMS Notes* and at our regular meetings, but we need to be able to wrestle more deeply with the implications of recent developments in educational research and changes that might be needed in the curriculum.

(b) We need to consider how we can act most productively in education at the primary and secondary level, partly through informed criticism of the curriculum and partly through the formation of teachers. The Committee has been urged to come up with an official statement, but this seems to be premature. There needs to be a further exchange of opinion among the membership, and we probably should be in contact with other professional organizations in the mathematical sciences.

(c) We need to have a more extensive presence on the web. Currently, school students can find problems on the CMS website, along with solutions, and can subscribe to *CRUX with MAYHEM* and *Olymon*. It would be nice to make available more resources, particularly for teachers and students at the tertiary level. For students who are not competition oriented, we should be providing mathematical fare that might encourage individual research or delving into the literature.

(d) The Society is often approached for information about careers in the mathematical sciences, which, at the moment, we have no systemic way of providing. If we are to encourage students into the study of mathematics, we need to provide them with up-to-date information about where a degree in mathematics can take them and what the prospects are for a productive and satisfying career.

(e) There is clearly increasing interest in mathematics among the general public, fuelled in part by some recent films and plays. We need to be cognizant of what the public understands by mathematics and support enterprises that convey an authentic sense of our discipline.

I acknowledge with thanks the support and advice of the members of the Education Committee: Jacques Belair (representing CAIMS), Afton H. Cayford (representing MAA), John Grant McLoughlin (also representing CMESG), Jennifer Hyndman, Jacqueline Klasa, Andy C.F. Liu, Morris Orzech (past chair) and Keith Taylor (CMS Executive).

Electronic Services

Edgar Goodaire (Memorial) Chair

François Bergeron (UQAM)
Jason Brown (Dalhousie)
Robert Corless (Western)
L.W. Marcoux (Alberta)
David Rodgers (Argus Associates)
Gail Wolkowicz (McMaster)
Graham P. Wright (Ottawa)

The Electronic Services Committee of the Canadian Mathematical Society oversees the Society's electronic operations and serves as an advisory board to the Director of Electronic Products and Services. It monitors the CMS web site and recommends changes when and as necessary. Its responsibilities are considerable because almost every area of concern to the CMS is affected by and makes use of modern technology, from the Executive Office to publications, research, education and outreach.

At the start of the year, in response to a major review of the Society's electronic services operations, the Committee was reduced to a hard-working group of six people. The hope was that the small size (less than half its previous composition) would permit more internal focus, that it would encourage the discussion of broader issues and that it would enable the Committee to respond more quickly and effectively to the developments and requirements of the enormous and vital aspect of the organization which CMS electronic services has become. The experience of just one year suggests that the restructuring of the Committee was a very positive move.

We devoted a good deal of time to the possible introduction of "The Camel Club", an addition to the CMS web site that would keep subscribers up to date on the latest, most interesting mathematical content available on the world wide web, complete with links to mathematical software tools, a hyperlinked archive for research and education, and interactive articles introducing research-level topics.

We entertained a major proposal from APuRL, a digital publishing research group in Vancouver, which would integrate all aspects of the CMS publishing enterprise into a single "vortal". We saw and were most favourably impressed by the mock up of a new look to the CMS web site which had been created by a student working for the Camel Manager in Ottawa.

The CMS web site, popularly known as Camel - the Canadian Mathematics Electronic Service (Les Services Mathématiques Electroniques Canadiens)---was created in 1994 as an experimental project of the Centre for Experimental and Constructive Mathematics of Simon Fraser University. It now receives hundreds of thousands of "hits" each month and has become an enormous depository of information and resources to mathematicians, teachers and lay people.

All CMS publications are on-line and during the past year, preprint areas were established whereby manuscripts ready for publication in the *Canadian Journal of Mathematics* and the *Canadian Mathematical Bulletin*, but not yet assigned an issue, are posted and freely available.

My term as Chair of this committee ended on December 31, 2000. It was an exciting and productive two year period made tolerable (and at times even pleasurable) by the fabulous group with whom I was privileged to work. In this regard, I thank profoundly my good friends François Bergeron, Jason Brown, Laurent Marcoux, David Rodgers and Gail Wolkowicz. Best wishes to you all, and good luck to CMS Electronic Services!

Endowment Grants

James Timourian (Alberta) Chair

George Bluman (UBC)
Lisa Jeffrey (Toronto)
Thomas Ransford (Laval)
Richard Wood (Dalhousie)

The Committee created documents to publicize the program, prepared an application form and review procedure, conducted the 2000 Endowment Grants Competition and made the awards. In this competition we offered two means of applying, either by using an online HTML form or by submitting an MS Word form document as an e-mail attachment.

We received 7 applications for the 2000 competition. Six used the electronic HTML form while one was submitted as an attachment to an e-mail. The total amount requested was $78,000. In December, 2000 the Committee approved full or partial funding for 5 applicants, for a total of $32,000 out of a budget of $40,000 that had been authorized by the CMS Finance Committee.

Applicants were quickly and informally told the results of the competition by e-mail and were formally notified in early January, 2001 of the decisions. The successful applications for the 1999 and 2000 competitions are available on line at the CMS web site, at

http://www.cms.math.ca/Grants/EGC/

We have received all the reports required for the projects supported in the 1999 competition and we are generally pleased with the results. These will appear in the *CMS Notes* and are available on the web site. Materials for the 2001 competition will be available on line early in the New Year and they will not be substantially different from the ones for the 2000 grants. Potential applicants should find it useful to look at the successful 1999 and 2000 proposal applications.

We welcome any comments about projects that should be funded, the procedures created, the decisions made, and the information in the reports from projects that have been supported. In the 2001 competition, we hope to start earlier with more publicity so that the number of applicants increases.

Finance

Ian Goulden (Waterloo) Chair

Timothy Appelt (Structured Analytics)
David Bates (Maritime Life)
Jonathan Borwein (Simon Fraser)
Alan Dow (York)
Richard Kane (Western)
Michael Lamoureux (Calgary)
Gordon Mason (UNB)
F. Arthur Sherk (Toronto)
Graham P. Wright (Ottawa)

The Finance Committee is responsible for the overall financial activities of the Society, including the annual budget and the restricted investments funds (the Endowment Fund, the Mathematical Olympiad Fund and, now, the Designated Activities Fund).

The Treasurer's Report provides details on the 2000 Financial Year and the 2001 Budget.

This is the second year after the transfer of the management of the Society's Restricted Investments to the Toronto Dominion Quantative Capital Division. The Committee is delighted with the "passive" approach to the Society's endowment funds that has been implemented at Toronto Dominion, with all investments in indexed funds.

Fund Raising

Jonathan Borwein (Simon Fraser) Chair

Richard Kane (Western)
Georg Schmidt (McGill)
F. Arthur Sherk (Toronto)
Jon Thompson (UNB)
Joan Wick Pelletier (York)
Robert Woodrow (Calgary)
Graham P. Wright (Ottawa)

Fundraising was not as successful in 2000 as had been anticipated, in part because of unexpected calls on the Executive Director's time. This is expected to change in 2001 in which a fund raising drive has already started.

That said, in addition to roughly the usual level of support from Provincial Ministries amounting to just over $25,000, we received major funding from the Imperial Oil Charitable Foundation, Sun Life of Canada and Waterloo Maple. We were also successful in being funded by NSERC's new Public awareness of Science Committee for the next three years totalling $68,800. Support from corporations, foundations and institutes for our educational activities increased by almost $19,000 over 1999. In addition, just over 100 individual members donated nearly $10,800. Thanks go to all those who helped support our various activities in 2000.

The Fund Raising Committee is developing a package suitable for use in marketing Camel web services to potential clients. The Committee is re-drafting a letter to send to potential companies, who would solicit advertisements, indicating what we think Camel offers and where we wish to have advertising directed (such as job placement in insurance and finance, publishers and software vendors).

The other major initiative has been to consider the relationship between fundraising, publicity and related activities. After much thought, the Committee recommended the establishment of an Advancement of Mathematics Committee (AMC) within which would sit a Fund Raising Subcommittee whose members would be largely ex-officio. Moreover, a written report from the AMC would form a standing item for discussion annually with the Development Group. It might be sensible for funding of public lectures and like activities to be taken over by the AMC. The AMC would have broad obligations to monitor activities within and without the CMS and to seek out opportunities for coordination, outreach, publicity, fund raising and other promotional activities.

Terms of reference are being prepared by Woodrow, Borwein and Wright to be circulated to Fund Raising Committee in March, so that a recommendation can be submitted to the Executive Committee in April 2001.

Human Rights

Paul Gauthier (Montréal) Chair

Margaret Beattie (Mt. Allison)
Zhiguo Hu (Windsor)
David Poole (Trent)
Robert van Den Hoogen (St. Francis Xavier)

In 1999, the Society adopted a position statement on the employment situation for young mathematicians in Canada. This statement was prepared by the Human Rights Committee at the request of the Executive. In principal, the Human Rights Committee feels responsible to monitor the ongoing situation. However, we felt that the employment situation had improved sufficiently that there was no need to make a detailed study of hiring practices in 2000.

In the fall of 1999, there was good news in the form of a news report that the South Korean mathematician Ahn Jae-Ku had been released from prison following a change of government in that country. Professor Ahn had been jailed in 1994 for allegedly pro-North Korean activities. The Committee and the Society had been monitoring the case and, along with other international organizations, had lobbied for Ahn's release. Several Canadian mathematicians visited South Korea in 2000 and the Human Rights Committee attempted to obtain confirmation through them of Ahn's well-being, but without success. Finally, with the help of one of our Korean students, we were able to speak with Ahn's family and learn that Ahn is indeed no longer in prison, but he is under surveillance.

International Affairs

Peter Fillmore (Dalhousie) Chair

Henri Darmon (McGill)	Thomas Salisbury (York)
Mohammad Hamdan (UNB)	Catherine Sulem (Toronto)
Robert Miura (UBC)	Nicole Tomczak-Jaegermann (Alberta)

During the past year the Committee:

Wrote to the International Mathematical Union (IMU) Executive suggesting that the IMU be more active in ICSU; inquiring about mathematics representation at the congress "Science for the Twenty-first Century" since the word "mathematics" did not appear in the draft documents; and suggesting that more items about mathematics should appear in the ICSU newsletter, *Science International*.

In consultation with the CMS Research Committee, an ad-hoc committee was formed to prepare a submission to the IMU listing potential Canadian speakers at the next International Congress of Mathematicians, ICM2002. A report was submitted to the ICM2002 Program Committee at the end of December 2000.

The International Affairs Committee provided advice to the CMS Executive on the subject of hosting a reception, with the Canadian Embassy in Beijing, at ICM2002.

The Committee advised NRC (the adhering agency for Canada) that Canada vote affirmatively on the 3 IMU postal ballots of the year, namely:

- that Holland move to Group IV

- that Peru be admitted in Group I, and

- that Estonia be admitted in Group I

The Committee was unhappy that these ballots were not accompanied by more--in some cases any--supporting information. For the ballot on Estonia MathSciNet was used to obtain data on numbers of research papers published.

Mathematical Competitions

Daryl Tingley (UNB) Chair

Edward Barbeau (Toronto)
Margaret Beattie (Mt. Allison)
Peter Crippin (Waterloo)
Luis Goddyn (Simon Fraser)
Richard Nowakowski (Dalhousie)
Bill Sands (Calgary)
Christopher Small (Waterloo)
Jean Turgeon (Montréal)
Graham P. Wright (Ottawa)

Sub-Committees:

Correspondence Programme:
Edward Barbeau (Toronto) Coordinator

International Mathematical Olympiad:
Bill Sands (Calgary) Chair
Edward Barbeau (Toronto)
Andy Liu (Alberta)
Richard Nowakowski (Dalhousie)
Christopher Small (Waterloo)

Canadian Open Mathematics Challenge:
Peter Crippin (Waterloo) Chair
Radford de Peiza
Ronald Dunkley (Waterloo)
Gareth Griffith (Saskatchewan)
Gordon Nicholls (Waterloo)
Daryl Tingley (UNB)

Canadian Mathematical Olympiad:
Luis Goddyn (Simon Fraser) Chair
Iliya Bluskov (UNBC)
Richard Brewster (Capilano College)
Petr Lisonek (Simon Fraser)
Richard Lockhart (Simon Fraser)
Reza Naserasr (Simon Fraser)
Naoki Sato (Yale)
Daryl Tingley (UNB)
Edward Wang (Wilfrid Laurier)

Introduction

The Mathematical Competitions Committee (MCC) 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 MCC is also responsible for Canada's participation in the Asian Pacific Mathematics Olympiad (APMO) and the International Mathematical Oympiad (IMO). Other activities of MCC include the Mathematical Olympiads' Correspondence Program, and Math Camps.

Much of the work of the MCC 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:

www.math.ca/CMS/Competitions/

The 32nd Canadian Mathematical Olympiad (CMO) took place on April 5, 2000. The top three students were Daniel Brox, Sentinel Secondary School, West Vancouver; David Arthur, Upper Canada College, Toronto; and David Pritchard, Woburn Collegiate Institute, Scarborough. Prizes for the CMO were presented at the CMS Awards Banquet. The Banquet was held at Renison

College, on the Campus of the University of Waterloo. At the Banquet, Daniel, and David Arthur and David Pritchard were awarded prizes of $2,000, $1,500 and $1,000 respectively. In addition, Daniel Brox was presented with the Sun Life Cup, and all winners received book prizes, donated by John Wiley & Sons and Nelson Thomson Learning. More information about the 2000 CMO is available from the CMS web site communiques section, the CMO web page and the report which can be obtained from the CMS Executive Office.

The 2000 Asian Pacific Mathematics Olympiad (APMO) was written in March by 39 Canadian students, selected either because they had been been invited to the Canadian Mathematical Society's 2000 Winter IMO Training Camp in January, or because they had placed well in the 1999 Canadian Open Mathematics Challenge. The Canadian Students performed very well, receiving 7 medals and three honourable mentions. Canada placed 6th amongst the 19 participating countries. David Arthur received a gold medal, Daniel Brox and Denise Cheung silver medals, andStephen Fung, Chris Cappadocia, Lino Demasi and Mark MacDonald, bronze medals. David Pritchard, Shu Niu, and Edmond Choi earned honourable mentions.

To mark the twentieth anniversary of Canada's participation in the IMO, a reunion of IMO alumni was held in Toronto on Sunday June 11. About 60 Canadian IMO Allumni attended, as well as others who have been involved with Canada's IMO efforts over the years (including several who participated in the 1995 IMO, held at York University). Thanks goes to the CMS Office for organizing the event, as well as to Ravi Vakil and Bruce Shawyer for their interesting speeches.

At the reunion, Canada's 2000 IMO team was introduced. The team consisted of David Arthur, Upper Canada College, Toronto and David Pritchard, Woburn Collegiate Institute, Scarborough, Ont., both of whom were on Canada's 1999 IMO team, as well as Daniel Brox, Sentinel Secondary School, Vancouver; Denise Cheung Albert Campbell Collegiate Institute Toronto; Keon Choi, A.Y.Jackson Secondary School, Toronto; and David Goodman, Kelvin High School, Winnipeg.
The Team Leader was Dr. Andy Liu (University of Alberta), the Deputy Team Leader was Dr. Christopher Small, (University of Waterloo) and the Deputy Team Leader - Observer was Ms. Viktoria Mineva (Alberta International College).

The 41st International Mathematical Olympiad (IMO) was held in Seoul, Republic of Korea, July 13-25, 2000, with 81 countries and 461 students participating. At the Awards Ceremony (July 24, 2000) a Gold Medal was awarded to David Arthur, Silver Medals to Daniel Brox and David Pritchard and a Bronze Medal to Keon Choi. Denise Cheung received an Honourable Mention. More information is available from the CMS web site and from the article written by Andy Liu in the December 2000 issue of the CMS Notes.

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 2000 Winter IMO Training camp took place at Trent University from January 5 to January 9. Students were selected for the camp on the basis of their work in the Mathematical Olympiads Correspondence Program (below) and their performance on a time limit examination (TLE) organized by Richard Nowakowski (Dalhousie University). The TLE is to provide some indication of the students performance in a competition like setting. The students write the TLE at their home. They have a total of six hours, over two sessions, to do a total of eight problems. This year, 34 students participated in the TLE.

The Winter Camp featured a group of 15 students from across Canada as well as a team of trainers and support people:

Andy Liu, Christopher Small, Viktoria Mineva (the team leaders)
David Poole (the local organizer, who also took an active part in the training),
Bill Sands (University of Calgary, Chair of the IMO Committee),
Richard Hoshino and Byung Chun (IMO Allumni) as well as myself.

The 2000 Summer IMO Training Camp was held at Simon Fraser University from June 30 to July 15. The trainers were Andy Liu, Christopher Small, and Viktoria Mineva. The local organizer for the camp was Deanne Verones, of SFU. Five local students attended the camp for the first 5 days. On their last day (July 4), a media luncheon took place. At the luncheon the Korean Consulate General presented the team with some Korean coins.

Both camps went very well and, on behalf of the CMS, I wish to thank both David Poole and Deanne Verones for all their hard work in making the camps so successful.

The Mathematical Olympiads' Correspondence Program (MOCP) is a problems based correspondence program. It is intended for Canadian (or permanent resident) 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. Dr. Edward Barbeau has been the Coordinator of this program for many years. This year, he was assisted by Dr. Dragos Hrimiuc at the University of Alberta and Dr. Valeria Pandelieva of Ottawa. Problem sets are sent each month to the students and they have six weeks to return solutions. These are then marked and returned (with copious comments) to the students. Currently, 25 students are actively participating in the program.

National and Regional Math Camps

Once again, the Imperial Oil Charitable Foundation generously agreed to be the Title Sponsor of a series of “Esso Math Camps”.

During June 17-23, 2000 the third annual CMS National Math Camp took place at Huron College (on the Campus of the University of Western Ontario). With 24 students from across the country in attendance. The camp was organized and run by Tom and Marlene Griffiths, Richard Hoshino, Jean Collins, Wai Ling Yee, and John Grant McLoughlin.

In 2000, in addition to the National Math Camp, nine Regional ESSO Math Camps were held at Dalhousie University, the University of New Brunswick, Brebeuf College, Brock University, the University of Western Ontario, the University of Ottawa (two camps, one French one English), the University of Regina, and the University of Alberta.

The format and length of these camps varied considerably: from two day non-residential to six day residential camps. The considerable success of these camps is evident from the desire of each university to continue to offer a camp and the inclusion of Memorial University of Newfoundland and Simon Fraser University as part of the program. Further information on the Math Camps can be found
at

http://www.cms.math.ca/MathCamps/.

The Canadian Open Mathematics Challenge (COMC) is a math contest written in November of each year. Although it is the last MCC event of the calendar year (and hence of this report) it is the first scheduled MCC event of the CMS "competition year". The COMC provides mathematical enrichment for a large number of students and serves as a qualifying paper for the Canadian Mathematical Olympiad (CMO). The results are also used in the selection process for students to the IMO winter training camp. Plaques are awarded to both the students and schools for being a provincial or regional winner and Gold Medals are awarded to up to nine other students in each province or region.

The Fifth COMC was held on November 29, 2000. Over 5000 students participated. This was a small increase from last year and very encouraging since the Ontario school system was experiencing significant labour difficulties. A list of the regional and provincial winners can be found at:

www.cms.math.ca/CMS/Competitions/COMC/

As the increasing number of students shows, the COMC is going well. Schools and 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 (including the COMC and Math Camps) is reaping numerous rewards.

As I hope this report shows, the MCC is a very active committee. I wish to thank all of the members of the MCC and its sub-committees for their time and considerable efforts. As many know, the CMS is a society of volunteers. Members of the MCC contribute large amounts of time to make our events run smoothly. I must also thank the staff of the CMS Executive Office and the Executive Director, Graham Wright. They perform much of the administrative work for the MCC and its sub-committees and ensure seamless transition as chairs and membership changes.

Nominating

Catharine Baker (Mount Allison) Chair

Jonathan Borwein (Simon Fraser)
Steven Boyer (UQAM)
Eddy Campbell (Queen's)
Kenneth Davidson (Waterloo)
Richard Kane (Western)
Anthony Lau (Alberta)
Barry Monson (UNB)

The Nominating Committee approved the following amendments to the Terms of Reference of the Finance Committee:

- that the Past-President or President-Elect be a member; and
- that the Manager Finances and Accounting be invited to attend each meeting of the Finance Committee as an observer.

Nominations were sought for the following committee positions and the appointments were approved at the December 2000 meeting of the Board of Directors.

Education	Ross Willard (Waterloo)	01/01 - 12/03
Electronic Services	Jason Brown (Dalhousie)	01/01 - 12/02 (Chair) - 12/03 (Member)
	Peter Borwein (Simon Fraser)	01/01 - 12/03
Endowment Grants	Thomas Ransford (Laval)	01/01 - 12/03
Fund Raising	Ed Williams (Memorial)	01/01 - 12/03
	John Whitfield (Lakehead)	01/01 - 12/03
International Affairs	Niky Kamran (McGill)	01/01 - 12/04
Mathematical Competitions	Daryl Tingley (UNB)	09/00 - 08/01 (Chair) - 08/02 (Member)
Publications	James Mingo (Queen's)	01/01 - 06/01 (Chair)
	Keith Taylor (Saskatchewan)	07/01 - 12/02 (Chair) - 12/03 (Member)
Research	Douglas Stinson (Waterloo)	01/01 - 12/02 (Chair) - 12/03 (Member)
	Gordon Slade (UBC)	01/01 - 12/03
Women in Mathematics	Chantal David (Concordia)	01/01 - 12/03

Subsequently, nominations were made for the remaining committee vacancies which will be submitted to the Board for approval in June 2001.

We recommended a two-year extension (01/01-12/02) to the term of David Bates (Maritime Life) as a private sector member on the Board and nominated Daniel Piche (Manitoba) and Deidre Mahar (Dalhousie) as a student delegate to the Board and as an alternate, respectively, from 01/01-12/02. These appointments were also approved at the December 2000 meeting of the Board.

Eddy Campbell (Queen's) was appointed Dean at Queen's and so resigned as Chair of the Nominating Committee. We thank Eddy for his service on the Committee. Catharine Baker (Mount Allison) took over as Chair from July 1, 2000.

We have proposed a slate of nominees for the 2001 CMS elections to the Executive Committee and Board of Director positions. These names will appear in the February issue of the *CMS Notes* along with a call for other nominations.

Publications

James Mingo (Queen's) Chair

Gerald Cliff (Alberta)	Thomas Salisbury (York)
Bradd Hart (McMaster)	Christine Soteros (Saskatchewan)
Anthony Peirce (UBC)	Anthony Thompson (Dalhousie)

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

The Canadian Journal of Mathematics (J. Carrell and N. Ghoussoub),
The Canadian Mathematical Bulletin (M. Min-Oo and A. Nicas),
Crux Mathematicorum with Mathematical Mayhem (Bruce Shawyer),
CMS Book Series (J. Borwein and P. Borwein),
CMS Tracts in Mathematics (K. Davidson and N. Kamran),
CMS Notes (P. Fillmore and S. Swaminathan),
A Taste of Mathematics (R. Nowakowski).

The G. de B. Robinson 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.

The 2000 Prize was awarded to Dr. Ravi Vakil of the Massachusetts Institute of Technology, for his article `Characteristic numbers of quartic plane curves ' which appeared in the *Canadian Journal of Mathematics*, volume 51, no. 5, pp.1089-1120 (1999).

The following editorial appointments were recommended by the Committee and, where necessary, approved by the Board of Directors.

Canadian Journal of Mathematics - Editors-in-Chief
Henri Darmon and Niky Kamran (07/01 - 12/06)
Canadian Mathematical Bulletin - Editors-in-Chief
James Lewis, Arturo Pianzola and Noriko Yui (01/01 - 12/05)
Scientific Editorial Board for the CJM and CMB
George Elliott and Freydoon Shahidi, (01/01 - 12/05)
CMS Notes - Editors-in-Chief
Peter Fillmore and S. Swaminathan (01/01 - 21/02)
Ian Putnam - Contributing Editor for Research (01/01 - 12/02)
E. Barbeau and H. White - Contributing Editors for Education (01/01 - 12/02)
Paul Milnes - Photo Editor (01/01 - 12/02)
Digital Editor
Loki Jörgensen (01/01 - 12/01)

TeX Editor
    Michael Doob (01/02 - 12/02)
Crux Mathematicorum with Mathematical Mayhem
    Edward Wang - Problems Editor (01/01 - 12/05)
    Robert Woodrow - Olympiad Editor (01/01 - 12/05)

The Society launched a new publication to be called the *CMS Tracts in Mathematics* and the Editors-in-Chief are K. Davidson and C. Stewart (07/00 - 12/04). Tracts will consist of original monographs of about 150 to 200 pages giving an exposition of a research topic of current interest or lecture notes for an advanced graduate level course. The series will be co-published with the American Mathematical Society.

The Task Force on Publications was asked to review the status of all CMS publications, considering their quality, success, full cost, electronic viability, operating efficiency, and ability to generate revenue, and then to develop a strategy to address the concerns identified and to ensure long-term viability of the Society's publications. It was also asked to consider the feasibility of additional publications; perhaps jointly with other organizations. The Task Force made the seven recommendations below. Following each is the Committee's response.

1. That the Publications Committee appoint a sub-committee or, perhaps better, an individual member who will continuously monitor the relevant literature on the future of scholarly publication and report back to the committee on a regular basis.

   Response:
   The Committee endorsed the idea of having a member responsible for advising the rest of the Committee on the future of digital publishing. This might be incorporated into the Digital Editor's duties.

2. That the Publications Committee approach the editors of the *Canadian Applied Mathematics Quarterly* to discuss possibilities of supporting the journal that are of mutual benefit to the CMS and CAIMS.

   Response:
   The Chair will appoint someone to approach the *Quarterly*.

3. That the Publications, Research and Electronic Services Committees strike a joint sub-committee to determine the feasibility of purely electronic journals being offered that would become part of packages with the electronic versions of CJM and CMB.

   Response:
   The Committee endorsed this proposal. There are some technical and financial issues to be discussed; however the proposal appears feasible.

4. If an encouraging report comes from the above recommendation, the Research Committee should be responsible for announcing the Society's willingness to assist in the establishment of electronic journals and should receive and vet any proposals.

   Response:
   Agreed as in 3.

5. That the Executive and the Publications Committee consider, in consultation with the TeX Editor, the creation of an Associate TeX Editor position. It is envisaged that such a person would be an experienced mathematician, committed to the CMS, and skilled at both TeX and forms of on-line communication of mathematics.

   Response:
   The Committee endorsed this proposal and will seek to implement it.

6. That any member of the CMS who loves their specialty and has a flair for explaining it to young people, submit a proposal to the editors of *ATOM*.

   Response:
   The Committee agrees with this sentiment.

7. That the Publication and Electronic Services Committees form an ad-hoc sub-committee to investigate the scholarly merit and financial implications of reviving the *CMS Conference Proceedings Series* in a purely electronic format.

   Response:
   The Committee thought that this was a good idea and will look into re-establishing the *Conference Proceedings Series* as an electronic publication.

Research

Niky Kamran (McGill) Chair

Martin Barlow (UBC)
François Bergeron (UQAM)
Hermann Brunner (Memorial)
Ian Putnam (Victoria)
Douglas Stinson (Waterloo)
Catherine Sulem (Toronto)

The 2000 Summer Meeting (Math 2000) was held jointly with CAIMS, CORS, the Canadian Undergraduate Mathematics Conference, and the 14th Canadian Symposium on Fluid Dynamics, in Hamilton, Ontario. The meeting was hosted by McMaster University. There were the following research sessions:

Algebraic groups, organized by Carl Riehm (McMaster)
Biofluid Dynamics and Medical Science, organized by Siv Sivalogonathan (Waterloo),
Control Theory, organized by Kirsten Morris (Waterloo)
Cryptography and Number Theory, organized by Hugh Williams (Manitoba) and Gary Walsh (Ottawa)
Financial Mathematics, organized by Luis Seco (Toronto)
Geophysical Fluid Dynamics, organized by Kevin Lamb (Waterloo) and Richard Greatbatch (Dalhousie)
Group Theory, organized by Olga Kharlampovich (McGill)
History of Mathematics and the Dawn of a New Millenium, organized by Tom Archibald (Acadia),
Imaging and Vision, organized by Ed Vrscay and Alan Law (Waterloo)
Industrial Statistics, organized by N. Balakrishnan (McMaster)
Logic, organized by Bradd Hart (McMaster) and Claude Laflamme (Calgary),
Mathematical Biology, organized by Robert Miura (UBC)
Math on the Internet, organized by June Lester (Simon Fraser)
Operations Research, presented by CORS and organized by Rick Caron (Windsor),
Partial Differential Equations, organized by Pengfei Guan (McMaster)
Symplectic Geometry, organized by Lisa Jeffrey (Toronto)
Topology of Manifolds, organized by Ronnie Lee (Yale) and Ian Hambleton (McMaster)

At Math 2000, the 2000 Krieger-Nelson Prize Lecturer was Kanta Gupta (Manitoba) and the research plenary lectures were given by James Arthur (Toronto), Francis Clarke (Lyon), Dusa McDuff (Stony Brook), Gene Myers (Celera Genomics), Raymond Pierrehumbert (Chicago), Carl Pomerance (Georgia), Maurice Queyranne (UBC), Lawrence Shampine (Southern Methodist), Lou Van Den Dries (Urbana), Shing Tung Yau (Harvard), and Efim Zelmanov (Yale).

The Research Committee met in Hamilton and selected the four core CMS sessions for the Summer 2002 meeting, to be held in Quebec City. This was done in consultation with the Meeting Director, Claude Levesque (Laval).

The 2000 Winter Meeting of the CMS was held in Vancouver, and hosted by the University of British Columbia. This meeting featured research sessions in the following areas:

Algebraic Geometry, organized by Peter Russell (McGill)
Classical and Computational Analysis, organized by Peter Borwein (Simon Fraser)
Financial Mathematics, organized by Abel Cadenillas (Alberta) and co-sponsored by MITACS and PIMS
History of Mathematics, organized by Len Berggren (SFU), in collaboration with the Canadian Society for the History and Philosophy of Mathematics
Number Theory, organized by Rajiv Gupta and Nike Vatsal (UBC)
Operator Algebras, organized by Michael Lamoureux (Calgary) and Ian Putnam (Victoria)
Ordered Groups, organized by Akbar Rhemtulla (Alberta)
Partial Differential Equations, organized by Richard Froese, Nassif Ghoussoub and Izabella Laba (UBC), and sponsored by PIMS
Probability and Applications, organized by Martin Barlow (UBC), Richard Durrett (Cornell), Claudia Nehauser (Minnesota) and Edwin Perkins (UBC), and, sponsored by the National Program Committee (CRM, Fields, PIMS)

The 2000 Coxeter-James Prize Lecture was given by Damien Roy (Ottawa) and the 2000 Doctoral Prize Lecture was given by Steve Astels (Waterloo). The research plenary lectures were given by Patrick Dehornoy (Caen), Richard Durrett (Cornell), Roger Howe (Yale), Izabella Laba (UBC), Stanley Pliska (UI Chicago), Paul Roberts (Utah) and Peter Sarnak (Princeton).

The Research Committee met in Vancouver together with the Meeting Director, Daniel Daigle (Ottawa) and selected the four core sessions for the Winter 2002 meeting to be held in Ottawa.

The next four meetings of the CMS will be held in Saskatoon in the Summer of 2001, Toronto in the Winter of 2001, Quebec City in the Summer of 2002 and Ottawa in the Winter of 2002.

Students

Daniel Piché (Waterloo) Chair

Jean Phillippe Boulet (Laval)
Benoit Charbonneau (MIT)
Susan Cooper (Queen's)
Gabriella Couto (McMaster)
Tullia Dymarz (Alberta)
Alexandre Girouard (Montréal)
Andrew Irwin (Rutgers)
Robert Juricevic (Concordia)
Dave Morgan (Memorial)
Lindsey Shorser (Toronto)
Robert Woodrow (Calgary)
Graham P. Wright (Ottawa)

This is the second annual report of the Student Committee, and describes our first full year of operation. The Committee is responsible for all aspects of mathematics student affairs. Information on the goals of the Committee and its membership can be found on the student website:

www.cms.math.ca/Students

At its first meeting in December 1999, the Committee identified a number of initiatives it wished to undertake. The activities of the Committee in 2000 were the following:

1. Maintaining a student website (www.cms.math.ca/Students)

   The site contains a calendar of events, local activities, grant applications, information on the annual Canadian Undergraduate Mathematics Conference (CUMC), and a number of other items of interest to mathematics students. Our Web master continues to update the site on a regular basis to maintain relevant information. Contributions from the community are appreciated.

2. Publishing a national student newsletter

   This initiative was started by Student Editor, Robert Juricevic and his predecessor Alexandre Girouard. Since M. Girouard's departure last summer, M. Juricevic has spearheaded the project. The newsletter will contain articles, profiles, Web links, jokes, and other information of interest to mathematics students. The goal of the Committee is to have several issues each year, with primary distribution through the student website. Each issue would have content from a different region. The first issue, which has received positive feedback from many individuals in the community, will be published in early 2001 and sent to the various mathematics departments at that time.

3. Sponsoring the CUMC

   The 2000 CUMC was held at McMaster University during the Math 2000 meeting in Hamilton. A number of the Committee's members attended the conference and did some last minute recruiting of students for the CUMC from the CMS-MITACS job fair in Toronto.

The Committee is also assisting the CUMC in planning its future and enabling its continuity through the development of an operations manual for its organisers. The CMS Endowment Grant, the Committee and the CUMC are providing funding for this initiative. It is the goal of the Committee that the development of the manual will be completed in 2001.

4. Providing funding to various regional student events

   Three events were funded in 2000: the Industrial Problem Solving Workshop, the Graduate Industrial Math Modelling Camp, and the APICS annual meeting. A total of $500 was provided.

5. Sponsoring talks on mathematics.

   The Committee sponsored a talk by Ravi Vakil at the CMS Winter Meeting in Vancouver. This talk was actually a topology problem solving session involving many students in the Vancouver and Victoria regions. It received a great deal of excellent feedback. Related to this talk was also a talk by Ravi in the Education Session about the importance of mathematicians speaking to a general audience.

6. Responding to the Task Forces on the Future of the CMS

   The Committee prepared a 10-page response to the various task force recommendations on student related issues. It is hoped that this response will be of assistance to the Executive Committee in preparing its final recommendations.

Although a number of initiatives have been started successfully, the Committee has identified others that are still proving a challenge. For example, the CUMC holds its conference annually, with 30 to 40 students giving talks at each. However, during the seven years it has been held, only two of the conferences have proceedings. A number of factors make it difficult to prepare proceedings, including the fact that few students have given talks before attending a CUMC, fewer are familiar with LaTeX, and even fewer still have edited such a document. Helping start initiatives like the CUMC proceedings and providing a framework for their continuity will be one of the goals of the Committee as its role continues to evolve.

Women in Mathematics

Malgorzata Dubiel (Simon Fraser) Chair

Robert Corless (Western)
Jennifer Hyndman (UNBC)
June Lester (UNB)
Neal Madras (York)
Keith Taylor (Saskatchewan)
Shelly Wismath (Lethbridge)
Frank Zorzitto (Waterloo)

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

The year 2000 saw the completion of our major project: a poster to celebrate distinguished Canadian women of mathematics, amongst them six winners of the CMS Krieger-Nelson prize. The project was supported by the Canadian Mathematical Society and Waterloo Maple. Copies of the poster are being distributed to all high schools, universities and colleges in Canada, to present these women as role models for female students.

The Committee continues to maintain the Directory of Canadian Women in the Mathematical Sciences: a collection of web pages of Canadian women who are actively involved in research or studies in mathematics, or any other aspects of mathematical sciences. The directory is a valuable source for information about Canadian women mathematicians.

Jennifer Hyndman and Shelly Wismath (past chair) completed their terms on the Committee in December 2000 and Chantal David (Concordia) will become a member commencing January 1st, 2001.

Editorial Boards

Contributors

The Canadian Mathematical Society would like to acknowledge the following individuals, foundations and corporations for their encouragement and support. In addition to these, more than 70 members contributed anonymously to the Society's various activities.

James Aczél
Government of Alberta
University of Alberta
James and Dorothy Arthur
Igor Babchine
Howard Bell
J.L Berggren
George Bluman
University of British Columbia
Brock University
Peter Cass
J. R. Choksi
Centre de Recherches Mathématiques
The Centre for Education in Mathematics and Computing
Helen Cullen
Dalhousie University
Carl Faith
The Fields Institute for Research in Mathematical Sciences
Keith Geddes
Anthony Geramita
Edgar Goodaire
Katherine Heinrich
Jennifer Hyndman
Imperial Oil Charitable Foundation
Wilfred Kaplan
Spiros Karigiannis
Hans Kummer
David Lay
McMaster University
Memorial University of Newfoundland
MITACS
Université de Montréal
Benjamin Moyls
Nelson Thomson Learning
Government of New Brunswick
University of New Brunswick
Government of Newfoundland & Labrador
Government of the Northwest Territories
Michael Nutt
Government of Ontario
Morris Orzech
University of Ottawa
The Pacific Institute for the Mathematical Sciences
Government of Québec
University of Regina
Bruce Richmond
Samuel Beatty Fund
Government of Saskatchewan
Simon Fraser University
Springer-Verlag
Sun Life Assurance Company of Canada
Elmer Tory
Trent University
University of Waterloo
Waterloo Maple
University of Western Ontario
Alan Wong
Robert Woodrow
Grant Woods
Noriko Yui

CMS Executive Committee

President	Jonathan Borwein	Simon Fraser University
Past-President (June-Dec 2000)	Richard Kane	University of Western Ontario
Vice Presidents	Margaret Beattie	Mount Allison University
	François Bergeron	Université du Québec à Montréal
	Thomas S. Salisbury	York University
	Keith F. Taylor	University of Saskatchewan
Executive Director and Secretary	Graham P. Wright	University of Ottawa
Treasurer	F. Arthur Sherk	University of Toronto

CMS Board of Directors

Thomas Archibald - Acadia University
David Bates - Maritime Life Insurance Co.
Margaret Beattie - Mount Allison University
Jacques Bélair - Université de Montréal
François Bergeron - UQAM
George Bluman - University of British Columbia
Peter Booth - Memorial Univ of Newfoundland
Jonathan Borwein - Simon Fraser University
Jason Brown - Dalhousie University
David Burggraf - University of British Columbia
F. Peter Cass - University of Western Ontario
John Chadam - University of Pittsburgh
Benoit Charbonneau - Massachusetts Inst. of Tech
Susan Cooper - Queen's University
Henri Darmon - McGill University
Robert Dawson - St-Mary's University
François Dubeau - Université de Sherbrooke
Fereidoun Ghahramani - University of Manitoba
Penny Haxell - University of Waterloo
Jennifer Hyndman - Univ. of Northern British Columbia
Lisa Jeffrey - University of Toronto
Richard Kane - University of Western Ontario
Anthony Lau - University of Alberta
Neal Madras - York University
Judith McDonald - University of Regina
Daniel Piché - University of Waterloo
Thomas Ransford - Université Laval
Thomas Salisbury - York University
Georg Schmidt - McGill University
Karen Seyffarth - University of Calgary
Keith Taylor - University of Saskatchewan
Daryl Tingley - University of New Brunswick
David Wehlau - Royal Military College
Sylvia Wiegand - University of Nebraska
Gail Wolkowicz - McMaster 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
Elizabeth Atkinson-Thangaraj	Database Clerk
Caroline Baskerville	Assistant to the Executive Director
Alan Kelm	Site Manager - Camel East
Suzanne Lalonde	Executive Office Clerk
Jason Lemieux	Technical Assistant - Camel East