# Proceedings of the Fifty-ninth Annual Meeting of the Mineralogical Society of America in Toronto, Canada

LARRY W. FINGER, SECRETARY

The fifty-ninth meeting of the Society was held on October 22–26, 1978, in Toronto, Canada. There were seven sessions in petrology, two in mineralogy, and a symposium, "Metamorphic Field Petrology," organized by H. J. Greenwood and J. B. Thompson, Jr. The technical sessions were integrated with those of the Geological Society of America, other affiliated societies of GSA, the Geological Association of Canada, and the Mineralogical Association of Canada.

The retiring president, Peter J. Wyllie, addressed the Society on October 28 on the subject, "Magmas and Volatiles." The annual luncheon of the Society followed the address of President Wyllie. The Roebling Medal was presented to Professor J. B. Thompson, Jr., who was introduced by E-an Zen. The Mineralogical Society of America Award was given to J. Stephen Huebner, who was introduced by David B. Stewart.

At the annual business meeting, reports were presented by the Secretary, the Treasurer, and the Editor. The results of the election and Council Actions were announced.

#### 1978 Council Actions

The second meeting of the 1978 Council was held on October 22, 1978. The principal actions of the 1978 Council are as follows:

#### Awards

The Council voted to award the Roebling Medal for 1979 to W. H. Taylor, Cambridge University. The Mineralogical Society of America Award for 1979 will be given to H. K. Mao, Geophysical Laboratory.

# Nominations of Officers for 1980

The following slate of elective officers for 1980, based on the recommendations of the Nominating Committee for Officers (Iris Borg, Chair) was chosen by the Council and will appear on the ballot in 1979:

President:

W. Gary Ernst, University of California at Los Angeles

Vice-President: (one to be elected)

Joan R. Clark, U. S. Geological

Survey

Gerald V. Gibbs, Virginia Polytechnic Institute and State University

Secretary:

M. Charles Gilbert, Virginia Polytechnic Institute and State

University

Treasurer: Councillors: Not on the 1980 ballot (1980-1982) Two to be elected William C. Luth, Stanford Uni-

versity

Benjamin A. Morgan, U. S. Geo-

logical Survey

Paul H. Ribbe, Virginia Polytechnic Institute and State University

Peter Robinson, University of Massachusetts

## Fellowship

The Council elected members to Fellowship, based on the recommendations of the Nominating Committee for Fellows (J. L. Jambor, Chair). The new Fellows are:

E. Dowty	R. M. Hazen
A. D. Edgar	A. M. Langer
A. El Goresy	R. F. Martin
J. J. Fawcett	A. G. Plant
M. E. Fleet	H. A. Stalder
R. F. Fudali	J. C. Stormer, Jr.
R. I. Gait	J. A. Whitney
F. C. Hawthorne	F. J. Wicks

#### Actions of the 1979 Council

The first meeting of the 1979 Council was held on October 25, 1978.

The Council approved the budgets for the Society and *Mineralogical Abstracts*, and reappointed Brian Mason as Editor, Kathleen Krafft as Managing Editor, and A. F. Spilhaus, Jr. as Executive Secretary.

#### Committees

The report of the Committee on Committees (David R. Wones, Chair) was approved with modifications.

#### Elections

The Council approved an amendment to the Bylaws of the Society. This change, to be submitted to the membership with the 1979 ballot, would require that the election for Vice-President be contested with at least two candidates for the office.

## Report of the Secretary for 1978

### Results of the Election

The results of the 1978 election are as follows:

President: Vice President: David R. Wones (1979) W. Gary Ernst (1979)

Treasurer: Councillors:

Malcolm Ross (1979-1980) Roger Burns (1979-1981)

H. Catherine Skinner (1979-

1981)

# Membership Statistics

As of September 1978, there were 2451 members, divided as follows: Members, 1485; Student Members, 404; Fellows, 562; and Honorary Fellows, 9.

## Necrology

Members and Fellows whose deaths have been reported since the last report are:

Herbert O. Albrecht E. Dale Jackson Paul M. Bartholome Lester E. Lang Margaret F. Boos Paul P. Boving Janet L. Hoffman

Delmar H. Larsen Fritz Laves Hugh S. Spence

Norman D. Watkins

Jun Ito

LARRY W. FINGER Secretary

## Report of the Treasurer for 1978

This report is for the period January 1, 1978 through December 31, 1978, denoted FY 1978. The financial data for FY 1978, as well as for FY 1977, are presented in Table 1 (balance sheet) and Table 2 (statement of income and expense). The financial records of the Society will be audited early in 1979 by Hoke, Long and Company of Alexandria, Virginia. A copy of the full audit report will be on file at the society's business office, 2000 Florida Ave., NW, Washington, D. C. 20009.

For FY 1978 the total income of the Society was \$195,552; total expense was \$182,633, giving a surplus of income over expense of \$12,919. The predicted operating loss of \$7000 (Treasurer's Report for FY 1977) did not materialize. It now appears that the Society's financial operations will remain in the black for at least one more year, possibly two. The General Operating Fund now stands at \$72,965. This surplus can be used, in part, to defray operating losses should they occur in future years. Membership dues increases are not predicted in the near future.

The Revolving Fund now stands at \$16,543 and is the profit to date on the Society's book publication ventures. In addition there is a paid-up \$46,000 inventory of books in stock.

The Kraus Crystallographic Fund and the Jewell Glass Fund have been reinvested into the Society's investment portfolio as explained in the Report of the Financial Advisory Committee for 1978. These two funds are to be used to subsidize a biennial award of \$1500 for research in crystallography as defined by the Kraus legacy. The next award will be made in 1980.

The Mineralogical Society of America continues to be in a sound financial position even considering the recent high rates of inflation. I again wish to thank our professional accounting staff for their fine service to the Society.

> MALCOLM ROSS Treasurer

Table 1. Mineralogical Society of America balance sheet, FY 1978

Current Assets:	Dec. 31 1977	Dec. 31 1978	
Cash - Reserve Fund Cash - Checking Accounts Cash - Savings Accounts Investment Fund at Cost* Investment - S. Cen. Bell Bond Investment - Goodyear Stock Receivables - Customers Prepaid Expense	\$ 38,977 52,509 369,829 4,977 10,950 14,586 1,754	\$ 55,131 52,241 5,671 396,998 10,810 5,379	
Total Assets	\$ 493,582	\$ 526,230	
Current Liabilities:			
Checks in Suspense Accounts Payable - Trade Min. Abstr./Unl. of Petr. Other Payables Prepaid Dues Prepaid Subscriptions Total Liabilities	\$ 23,481 9,720 2,776 27,184 53,760 \$ 116,921	\$ 24,851 29,081 9,727 2,494 27,163 39,226 \$ 132,542	
Net Worth:  General Operating Fund Revolving Fund Endowment Fund Membership Assistance Fund Kraus Crystallographic Fund	\$ 67,313 3,896 284,500 6,593 14,359	\$ 72,965 16,543 282,430 6,939 14,811	
Total Equity Funds	\$ 376,661	\$ 393,688	
Total Liabilities & Capital	\$ 493,582	\$ 526,230	
*Investment Fund at Market	\$ 387,822	\$ 437,428	

Table 2. Mineralogical Society of America statement of income and expense, FY 1978 (negative values in parentheses)

Table 2. (continued)

	Dec. 31 1977	Dec. 31 1978
OPERATION OF AMERICAN	MINERALOGIST	
INCOME:	-	
Subscriptions	\$ 83,300	\$ 82,432
Page Charges	24,520	19,949
Reprints	5,615	6,342
Author Alterations Charges	808	979
Back Issues Royalties	3,084	3,066
Advertising	826 3,439	278 2,291
Miscellaneous Income	188	230
Total Income	\$ 121,780	\$ 115,567
EXPENSE:		
Editorial Office:		
Honorarium	\$ 2,000	\$ 2,000
Salaries	15,031	12,891
Expenses	2,228	3,000
Travel	1,009	383
Publication & Distribution:		
Composition & Set-up	54,210	58,983
Printing & Mailing	24,551	26,670
Author Alterations	3,699	4,474
Advertising	1,683	740
Reprints	6,861	8,398
Salaries	922	5,521
Data Processing	9,328	4,822
Back Issue Handling	1,693	2,781
Services & Supplies	729	953
Promotion & Miscellaneous	255	142
Total Direct Costs	124,199	131,758
Indirect Costs	26,454	27,669
Total Expense	\$ 150,653	\$ 159,427
MEMBER SUBSCRIPTION COSTS	\$ 28,873	\$ 43,860
ENDOWMENT FU	ND	
incons.		
Contributions	\$ 730	\$ 345
New Life Memberships	1,600	4,000
Investment Fund - Div./Int.	7,847	12,761
Cap. Gains (Losses)	-	(8,486)
Total Income	\$ 10,177	\$ 8,620
TRANSFERS:	,,	,
g Div./Int. Income	\$ 6,220	\$ 6,380
Life Member Dues	\$ 6,220 4,190	\$ 6,380 4,310
DIE TOMBEL DUCG	4,100	4,310
Total Transfers	\$ 10,400	\$ 10,690
INCREASE (DECREASE) IN FUND	\$ (223)	\$ (2,070)
KRAUS CRYST	FUND	
INCOME:	_	
hare of Invest. Income	-	\$ (99)
oodyear Div.	\$ 480	390
avings Interest	184	161
ransfer from Scholarship Fund	1,254	
Total Income	\$ 1,918	\$ 452
XPENSE:		
	ė 1 con	
rant-In-Aid	\$ 1,697	
Total Expense	\$ 1,697	\$ 0
NCREASE (DECREASE) IN FUND	\$ 221	\$ 452
MEMBERSHIP ASSISTA	NCE FUND	
NCOME:		
Share of Invest, Income Sond Interest	\$ 412	\$ (47) 413
Total Income	5 412	\$ 366
EXPENSE:	58 (F ST	
Membership Assistance	\$ 14	\$ 20
	4 47	- 20
	1	
Total Expense	\$ 14	\$ 20

	Dec. 31 1977	Dec. 31 1978
SOCIETY OPERATION	NS	
INCOME:		
Dues - Fellows & Members	\$ 35,560	\$ 36,913
Students	2,436	2,421
Life Prior Years	4,180 414	4,310 882
Investment Fund - Div./Int.	2,147	3,600
Cap. Gains (Losses)	_	(2,376
Savings & Short Term Investment	1,424	2,037
Mailing List Sales Miscellaneous Income	1,094	286
		-
Total Income	\$ 47,479	\$ 48,047
EXPENSE:		
Indirect Administrative Costs: Salaries	\$ 14,100	\$ 14,665
Data Processing	6,740	3,600
Postage	2,003	2,420
Telephone Mailing Lists	398 75	101 36
Professional Services	1,500	1,937
Services & Supplies	2,285	1,571
Annual & Council Meetings	2,145 461	1,697
Travel & Official Expenses Miscellaneous Expense	3,167	1,266
Subtotal	32,874	29,262
Less: Allocation on above	30,810	28,273
Balance allocated to Memb.	2,064	990
Membership Services:	2 252	0.056
Dues & Contributions Awards, Directory (1977 only)	3,660 6,067	2,860 1,063
		-
Total Membership Costs Member Subscr. Costs	11,791 28,873	4,913
Total Expense	\$ 40,664	\$ 48,770
EXCESS INCOME OVER EXPENSE Transfer from Endowm. (% D + I)	6,815 6,220	6,380
INCREASE (DECREASE) IN GEN. OPER. FUND	\$ 13,035	\$ 5,654
REVOLVING FUND		
INCOME:		
Special Paper Sales	\$ 2,319	\$ 749
Guidebook, High Temp. Reprint	211	221
	2,554	2,475 1,892
Short Course II Notes	5,308	4,238
Short Course II Notes Short Course III Notes	685	4,000
Short Course II Notes Short Course III Notes Short Course IV Notes		2,342
Short Course II Notes Short Course III Notes Short Course IV Notes Decennial Index	3,922	403
Short Course II Notes Short Course III Notes Short Course IV Notes Decennial Index Investment Fund - Div./Int.	3,922 24	
Short Course II Notes Short Course III Notes Short Course IV Notes Decennial Index Investment Fund - Div./Int. Cap. Gains (Losses)		(30)
Short Course II Notes Short Course III Notes Short Course IV Notes Decennial Index Investment Fund - Div./Int.	24	(301
Short Course II Notes Short Course III Notes Short Course IV Notes Decennial Index Investment Fund - Div./Int. Cap. Gains (Losses) Miscellaneous Income	(20)	(301
Short Course II Notes Short Course III Notes Short Course IV Notes Decennial Index Investment Fund - Div./Int. Cap. Gains (Losses) Miscellaneous Income Short Course IV, Reg.	(20) 6,397	99
Short Course II Notes Short Course III Notes Short Course IV Notes Decemnial Index Investment Fund - Div*/Int. Cap. Gains (Losses) Miscellaneous Income Short Course IV, Reg. Total Income EXPENSE: Short Course Notes Printing	24 (20) 6,397 \$ 24,125	\$ 16,120
Short Course II Notes Short Course III Notes Short Course IV Notes Decennial Index Cap. Gains (Losses) Miscellaneous Income Short Course IV, Reg. Total Income EXPENSE: Short Course Notes Printing Storage & Mailing	\$ 24,125 \$ 12,372 2,250	\$ 16,120
Short Course II Notes Short Course III Notes Short Course IV Notes Decennial Index Investment Fund - Div./Int. Cap. Gains (Losses) Miscellaneous Income Short Course IV, Reg. Total Income EXPENSE: Short Course Notes Printing Storage & Mailing Promotion	\$ 24,125 \$ 12,372 2,250 20	\$ 16,120
Short Course II Notes Short Course III Notes Short Course IV Notes Decennial Index Investment Fund - Div*/Int. Cap. Gains (Losses) Miscellaneous Income Short Course IV, Reg. Total Income EXPENSE: Short Course Notes Printing Storage & Mailing Promotion Short Course Admin.	\$ 24,125 \$ 24,125 \$ 12,372 2,250 20 5,807	\$ 16,120 \$ 5,111 1,861
Short Course II Notes Short Course IIV Notes Short Course IIV Notes Decennial Index Cap. Gains (Losses) Miscellaneous Income Short Course IV, Reg. Total Income  EXPENSE: Short Course Notes Printing Storage & Mailing Promotion Short Course Admin. Total Direct Costs	\$ 12,372 2,250 5,807	\$ 16,120 \$ 5,11: 1,860
Short Course II Notes Short Course III Notes Short Course IV Notes Decennial Index Investment Fund - Div./Int. Cap. Gains (Losses) Miscellaneous Income Short Course IV, Reg. Total Income EXPENSE: Short Course Notes Printing Storage & Mailing Promotion Short Course Admin.	\$ 24,125 \$ 24,125 \$ 12,372 2,250 20 5,807	\$ 16,120 \$ 5,111 1,860 6,980
Short Course II Notes Short Course IIV Notes Short Course IIV Notes Decennial Index Cap. Gains (Losses) Miscellaneous Income Short Course IV, Reg. Total Income  EXPENSE: Short Course Notes Printing Storage & Mailing Promotion Short Course Admin. Total Direct Costs	\$ 12,372 2,250 5,807	\$ 16,120 \$ 5,11: 1,860

# Report of the MSA Financial Advisory Committee for 1978

# Status of investments

During 1978, the market value of the Society's investment portfolio increased approximately 12.8%,

**PROCEEDINGS** 

from \$387,822.30 to \$437,427.66. Corrected for reinvestment of dividends and income, and for internal transfer of the assets of the Kraus Crystallographic Research Fund and the Membership Assistance Fund (Jewell Glass legacy), the increase is 2.8%, as compared with a decrease of 3.2% in the Dow-Jones Industrial Average over the same period. As of the end of December, the portfolio's market value represented a gain over cost of \$41,538.97, or 10.5%; current overall income (interest and dividend) yield was 4.7% of the market value. These figures indicate that the Society's investments are being managed in a satisfactory manner.

Table 1 lists the individual securities in the portfolio and their market value as of December 29, 1978. The assets of the Kraus Crystallographic Research Fund and the Membership Assistance Fund (Jewell Glass legacy) were consolidated into the investment portfolio this year, and are included here; these funds will maintain their identities as *pro rata* participants in the consolidated investment fund. Table 2 details

Table 1. MSA investment portfolio

	PortFolio	Cost	Approximate Market Valu 12/29/78
Senior	Securities		
15,000	Commercial Credit Co. Notes, 8 4%, 3/1/81	\$ 15,000.00	\$ 14,381.25
25,000	GNMA Pool #20285, 8.0%, 10/1/07	*22,418,13	22,750.00
35,000	Georgia Power Co., 1st, 7 5/8%, 11/1/01	25,550.00	26,250.00
46,000	International Bank Recon. & Devel. Notes, 8,15%, 1/1/85	15,022.50	13,912.50
10,000	U.S. Steel Corp., sub. deb. cv., 5.75%, 7/1/01	10,000.00	6,775.00
30,000	U.S. Treasury Notes, 8%, 2/15/83	30,004.69	28,621.80
		\$117,995.32	\$112,690.55
Common	Stocks		
200	Aetna Life & Casualty Co.	7,959.91	7,750.00
200	American Standard, Inc.	5,799-35	8,275,00
200	American Tel. & Tel. Co.	11,086.46	12,100.00
200	Amsted Industries	3,574.50	7,075.00
300	Beech Aircraft Co.	6,817.50	7,387.5
200	Boeing Co.	6,617,00	14,275.0
200	Capital Cities Communications	7,615.00	7,925.0
400	Church's Fried Chicken, Inc.	8,712.00	9,000.0
400	Computer Sciences Corp.	5,046.00	4,500.0
200	Cordis Corp.	9,552,00	4,500.0
100	Datapoint Corp.	3,922.31	6,950.0
100	Dome Petroleum, Ltd.	7,305.00	8,050.0
200	Dresser Industries, Inc.	6,837.01	7,400.0
400	El Paso Co.	6,528,67	6,100_0
200	Fort Howard Paper Co.	8,433.00	7,700.0
200	General Foods Corp.	5,759.00	6,425.0
400	Hilton Hotels	4,410.84	8,950.0
266	Hospital Corp. America	4,864.20	8,113.0
300	Houston Natl. Gas Corp.	8,709.23	6,637.5
45	IBM	10,283.75	13,432.5
300	Levi Strauss & Co.	6,250-42	10,462.5
265	MCA, Inc.	7,780.73	10,997.5
400	Melville Curp.	8,251,49	10,550.0
400	Northwest Industries, Inc.	6,867,68	10,800.0
300	Ogilvie & Mather Intal.	8,289.00	6,525.0
312	Overseas Shipholding Group, Inc.	7,940.28	6,786.0
200	Owens Corning Fiberglas Corp.	6,521.82	5,300.0
100	Farker Drilling Co.	5,315.00	6,100.0
100	Philip Morris, Inc.	6,880.73	7,050.0
300	Revce D.5., Inc.	8,061.00	7,012.5
200	Santa Fe Intnl, Corp.	5,019.00	5,625.0
400	Scott Foresman & Co.	7,702.00	6,850,0
300	Sea Containers, Inc.	7,183.88	6,150,0
300	Storage Technology, Inc.	3,576.00	9,225.0
110	Teledyne, Inc.	6,106.51	10,656.2
300	Tiger International, Inc.	7,308,00	7,312,5
300	Tymshare, Inc.	5,565.00	8,175.0
200	UAL, Inc.	6,167.00	5,825.0
200	United Technologies Corp. Xerox Corp.	5,104.24 9,806.50	7,775.0
		\$275,529.01	\$322,372.7
	Cash accounts	2,364.36	2,364.3
	TOTALS	\$395,888.69	\$437,427.6

Table 2. Dividends and interest in 1978

Senior Securities		
Commercial Credit Co. Notes	\$1,260.00	
Digital Equipment Conv. Debs.	375.25	
Georgia Power Co. 1st Mtg. Bonds	2,668.76	
GNMA pool	242.I7	
Intnl. Bank Recon. & Devel. Notes	1,222.50	
Ingersoll Rand Corp. conv. pref.	470.00	
South Central Bell Bond	579.79	
Transcontinental Gas Pipe Line Corp. 1st Mtg. Bond		
U.S. Steel Sub. Conv. Deb.	575.00	
U.S. Treasury Notes	2,400.00	\$ 9,985.76
Common Stocks		
Aetna Life & Casualty	55.00	
American Standard	470.00	
Am. Tel. & Tel.	900.00	
Amsted Industries	512.00	
Boeing Aircraft	280.00	
Capital Cities Communications	20.00	
CBS, Inc.	60.00	
Chessie System, Inc.	116.00	
Church's Fried Chicken	86.00	
Colt Industries	295.00	
Continental Oil Co.	140.00	
Diamond Shamrock Corp.	210.00	
Dresser Industries El Paso Gas	188.00	
Ford Motor Co.	462.00	
Fort Howard Paper Co.	212.50 48.00	
General Foods	254.00	
Goodyear Tire & Rubber Co.	520.00	
Hilton Hotels	295.00	
Hospital Corp. America	112.60	
Houston Natural Gas	285.00	
TRM	518.40	
Intern. Minerals & Chemicals	195.00	
Koppers	337.50	
Levi Strauss & Co.	600.00	
MCA	370.11	
J. Ray McDermott	250.00	
Melville Corp.	464.00	
Middle South Utilities	360.00	
Northwest Industries	635.00	
Ogilvie & Mather	75.00	
Overseas Shipholding Group, Inc.	123.60	
Owens-Corning Fiberglas	200.00	
Parker Drilling Co.	10.00	
Philip Morris, Inc.	51.25	
Pittston Co.	153.00	
Potlatch Corp.	337.00	
Revco D.S.	126.00	
Santa Fe International	90.00	
Scott Foresman	178.00	
Sea Containers, Inc. comb CTF	72.00	
U.S. Steel	240.00	
United Technologies	450.00	
F.W. Woolworth	280.00	411 026 26
Xerox Corp.	290.00	\$11,926.96
TOTAL		\$21,912.72

Table 3. Capital gains or losses in 1978

		1000		
		Cost	Sale	Gain (Los
LOK	Digital Equipment Conv. Debs. 4 1/2s, 12/15/02	\$ 10,000.00	\$ 10,305,00	\$ 305.0
10K	Ingersoll Rand \$2.35 cv pfd	10,406.80	7.831.73	( 2.575.0
5K	So, Central Bell Deb. 8 1/4s 8/1/13	4,977.00	4,300.00	677.0
15K	Transcontinental Gas Pipe Line Corp.			20
	1st Mtg. P.L. 4 7/8s 11/1/82	14,968.00	17.350-00	2,382.0
100	Amsted Industries	3,290.37	8,750.70	5,460.3
100	CBS, Inc.	5,752.50	4,575_09	6 1,177.4
200	Chessie System, Inc.	8,106,00	6.345.28	1.760.7
150	Colt Industries	4,711.75	4,620,58	( 91.1
200	Continental Oil Co.	7,127-50	5.851.30	1.276.2
300	Diamond Shamrock Corp.	9.643.70	8,263,97	( 1,379.7
125	Ford Motor Co.	6,031,51	5,626,37	( 405.1
400	Goodyear Tire & Rubber	10,950.00	6,126,79	( 4,823.2
100	Intnl, Minerals & Chemicals	4,051,00	3,855,55	( 195.4
300	Koppers	6,947.80	5,888,80	( 1.059.0
106	MCA	3,594.52	5,211,29	1,616.7
100	J. Ray McDermott	2,234,75	2,491,16	256.4
300	14 14	6,704.25	7,601,74	897.4
500	Middle South Utilities	8,375.00	7,606.29	( 768_7
102	Pittston Co.	3,723.00	2,223.00	( 1.500.0
204	H H	6,564,72	4,485,59	( 2,079-1
100	Potlatch Corp.	2,982,50	2,327,67	6 654.8
300	0 0	8,413-23	8,264,72	( 148.5
100	Storage Technology	1,192,00	3,166,89	1.974.8
200	U.S. Steel	8,463,48	5.355.81	( 4,107.6
100	United Technologies	2,788.75	3,435.13	646.3
400	F.W. Woolworth Co.	9,798.18	7,954.73	( 1,843.4
	TOTALS	\$172,798.31	\$159,815,18	(\$12,983.1)

the income derived from investments; interest from short-term operating surpluses in savings accounts and "capital" funds is not included. Table 3 shows capital gains and losses realized during the year.

Respectfully submitted,
CHARLES W. BURNHAM
GEORGE W. FISHER
LINCOLN S. HOLLISTER
MALCOLM ROSS, Treasurer
PRIESTLEY TOULMIN, III, Chairman
KENNETH M. TOWE

# Report of the Editor for 1978 (October 1, 1977– September 30, 1978)

Manuscripts received during the twelve months ending September 30, 1978, totalled 231, a slight increase from the 224 received during the previous twelve months. Council authorized a maximum of 1344 pages for *The American Mineralogist*, volume 63, 1978; the actual number of pages was 1301. Table 1 summarizes the operations of the journal for the period October 1, 1977–September 30, 1978.

During the year one issue (September-October) was designated the Frondel-Hurlbut issue, for which invited papers were sought. This resulted in a minor backlog of publication for accepted manuscripts, which will be largely overcome by publishing a somewhat larger November-December issue. All issues published during the year have been printed and

Table 1.

Volume	No.	# Articles	# Page Articl		Pages Misc.	Total Pages
Publishe	ed					
62	9-10	27	214	5	5	224
62	11-12	23	196	6	22	224
63	1-2	29	215	6	3	224
63	3-4	29	205	10	9	224
63	5-6	25	165	4	23	192
63	7–8	22	172	6	14	192
In Press	3					
63	9-10	30	213	6	5	224
63	11-12	26	260	9	19	288
	pts accer	oted	19			
	pts under		90			
	pts rejec		32			
	pts with		3			

mailed on schedule, thanks to effective cooperation between the editorial office and the printer.

Ann Garlington, the Managing Editor since October 1975, resigned in December 1977 to move to New York; I would like to express my appreciation for her excellent services. She was replaced by Kathleen Krafft, who has rapidly become familiar with the operations of the journal and is largely responsible for their efficiency. The services of the retiring Associate Editors Werner H. Baur, James R. Craig, and Joseph J. Finney deserve special mention, as do the contributions of Michael Fleischer and his collaborators in the preparation of "New Mineral Names." Those who have kindly reviewed manuscripts for the journal are listed below.

BRIAN MASON Editor

## **REFEREES 1978**

G. O. Allard
C. M. Andreas
G. M. Anderson
D. E. Appleman
J. D. Axe
C. R. Bacon
C. Barker
P. Bartholomé
P. B. Barton
R. Barton
M. N. Bass
A. Basu
W. H. Baur
P. Bayliss
P. Bell
J. G. Blencoe
F. D. Bloss
A. L. Boettcher
J. R. Boles
O. P. Bricker
G. W. Brindley
E. H. Brown
G. E. Brown, Jr.
T. Brown
B. J. Burley
B. J. Buriey
C. W. Burnham R. G. Burns
R. G. Burns
D. M. Burt
P. Buseck
P. Butler, Jr.
E. N. Cameron
M. F. Cameron
M. E. Cameron
L. Cary
L. Cary F. P. Cesbron
R. Charles
J. M. Charlet
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