

PROCEEDINGS
OF THE
MINERALOGICAL SOCIETY
(1959)

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London W., 29 January 1959, at 3.15 p.m.*

Prof. C. E. TILLEY, President, in the Chair.

The following were provisionally elected Ordinary Members of the Society: Thomas Edwards Brown, Alden Bliss Carpenter, John Barry Dawson, Raymond Dearnley, Auguste Mailloux, Jill Raymonde Harvey, Satya Prio Mitra, Eduard Woerman, John Fitzthomas Wyley.

The death of Dr. Francis Elizabeth Somerville Alexander was reported.

The resignations of Mr. C. W. Spencer, Dr. F. Jones, Mr. J. C. C. Romans, Mr. G. Snowball, Mr. W. C. C. Rose, Mr. S. L. Toyn, Mme Sandra, and Mr. A. Baker were accepted.

Reports were received from the Treasurer, the Editors, and the Clay Minerals Group; and the Group's projected publication of a pamphlet on Clay mineralogy of British sedimentary rocks and of an Electron-optical monograph were considered.

The remission of subscription on completion of 45 years' fully-paid membership by Dr. A. M. Macgregor, Dr. W. F. P. McLintock, and Miss M. W. Porter was confirmed, and Miss Porter's donation to the Society of £8, her refunded subscription, was allocated to the Miers Memorial Fund.

The Council recommended that, pending further negotiation, the mineral names proposed by Dr. Campbell Smith and Dr. Hey for use in *Mineralogical Abstracts* be used. It was reported that the initial contribution of £500 from the Mineralogical Society of America towards the cost of *Mineralogical Abstracts* had been received.

The appointment of Miss J. M. Harris as Publications Clerk was reported.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London W., 29 January 1959 at 5 p.m.*

Prof. C. E. TILLEY, President, in the Chair.

Thirty-six Members and eight Visitors were present.

The elections of nine Ordinary Members of the Society provisionally made by the Council were confirmed.

The following exhibit was shown:

Colour photomicrographs of sulphide minerals from the Skaergaard Intrusion, East Greenland: by Dr. E. A. Vincent.

The following papers were read and discussed:

1. Stevensite from the Whin Sill in the region of the North Tyne: by Mr. B. A. O. Randall (vol. 32, p. 218).

2. Delorenzite is tanteuxenite: by Dr. J. R. Butler and Mr. P. G. Embrey (vol. 32, p. 308).

3. A differentiated boss of alkali dolerite from Cnoc Rhaonastil, Islay: by Dr. F. Walker and Dr. E. M. Patterson (vol. 32, p. 140).

4. Contributions to the theory of alumino-silicate glasses, with especial reference to the properties and structure of vitreous rocks of igneous origin: by Dr. E. D. Lacy.

The oxygen packing of obsidians is directly comparable with that of glasses prepared artificially. Water is held as random $\text{AlO}_3(\text{OH})$ or $\text{SiO}_3(\text{OH})$ groups.

More highly hydrated acid glasses are characterized by a comparatively uniform, tighter oxygen packing. Their content of glass-forming ions shows a linear decrease with water content. Such features are attributed to a fivefold coordination of aluminium by oxygen, and mechanisms of hydration are outlined.

In glasses of essentially quartz-feldspathic composition the limited amount of oxygen available rules out the possibility of certain internal configurations. This limitation does not apply to basaltic glasses. In the latter the internal structure appears to be pressure-sensitive.

In general there is a tendency for the specific refractivity of water to increase with the degree of hydration of the glass.

The following papers were taken as read:

1. Residual hydroxyl groups in the metakaolin range: by Dr. V. Stubičan (vol. 32, p. 38).

2. A new method for thermal dehydration studies of clay minerals: by Dr. Georges Kulbicki and Prof. Ralph E. Grim (vol. 32, p. 53).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London W., 2 April 1959, at 3.15 p.m.*

Prof. C. E. TILLEY, President, in the Chair.

The following were provisionally elected Ordinary Members of the Society: Peter Evans Brown, Stanley Ernest Ellis, Jules François Jean Marie Moreau, Robert Rice, Colin Van Zyl.

The death of Dr. A. M. Cockburn was reported.

The resignation of Mr. W. H. Sutton was accepted.

The names of Dr. P. J. S. Byrne and Dr. B. N. Rolfe were removed from the list of members for non-payment of subscriptions.

Reports were received from the Treasurer, the Editors, and the Clay Minerals Group. The Treasurer presented the audited accounts for 1958, which were approved (vol. 32, pp. lii-lvii).

The resignation of Dr. G. F. Claringbull as General Secretary was accepted and the proposal as his successor of Dr. J. R. Butler was approved.

Nominations for election to the Council were considered. The following were due to retire: Vice-Presidents, Prof. L. R. Wager and Dr. A. K. Wells; Ordinary Members of the Council, Prof. A. Stuart, Dr. A. F. Seager, Prof. D. Williams, and Dr. W. H. Taylor. In view of the forthcoming transfer of Dr. J. R. Butler to the office of General Secretary and the possible resignation of Dr. McLaughlin, it was agreed to retain Dr. A. F. Seager, Publications Manager, as an Ordinary Member of Council. The following were proposed for election at the Anniversary Meeting in November 1959; Vice-Presidents, Dr. G. F. Claringbull, Dr. A. F. Hallimond; Ordinary Members of Council, Mr. A. E. Jobbins, Dr. I. D. Muir, Dr. W. S. MacKenzie, and Dr. R. M. S. Perrin.

Appreciation was expressed of Sir Arthur Russell's offer to talk on the history of mineral collectors in Cornwall in October 1959.

Prof. C. E. Tilley was appointed the Society's representative on the recently formed British National Committee for Geology.

The proposed new international periodical, *Journal of Petrology*, was reported.

Dr. J. Phemister was nominated the Society's representative on the Commission on Abstracts appointed by the International Mineralogical Association.

The resignation of Miss J. Harris as Publications Assistant was reported.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London W., 2 April 1959, at 5 p.m.*

Prof. C. E. TILLEY, President, in the Chair.

Forty-seven Members and six Visitors were present.

The elections of five Ordinary Members of the Society provisionally made by the Council were confirmed.

The following exhibit was shown:

Minerals from Ivigtut, South-west Greenland: by Dr. Hans Pauly (communicated by Dr. H. I. Drever).

The following papers were read and discussed:

1. X-ray studies of synthetic diamonds: by Dame Prof. Kathleen Lonsdale, Dr. H. J. Milledge (*née* Grenville-Wells), and Mr. E. Nave (vol. 32, p. 185).

2. The ageing of sesquioxide gels. I. Iron Oxide gels: by Dr. R. C. Mackenzie and Dr. R. Meldau (vol. 32, p. 153).

3. A new method for orthoscopic adjustment with the Fedorov stage: by Dr. A. F. Hallimond (vol. 32, p. 245).

4. The kinetics of the ordering process in synthetic albite: by Dr. J. D. C. McConnell and Mr. Duncan McKie (vol. 32, p. 436).

The following papers were taken as read:

1. Nepheline solid solutions: by Dr. Gabrielle Donnay, Dr. J. F. Schairer, and Prof. J. D. H. Donnay (vol. 32, p. 93).

2. Recent secondary minerals in the Billingham anhydrite mine: by Mr. L. R. Raymond (vol. 32, p. 172).

3. Mineralogy of the Silvermines district, County Tipperary, Eire: by Dr. H. N. Rhoden (communicated by Dr. A. P. Millman; vol. 32, p. 128).

4. X-ray study of psilomelane and cryptomelane: by Dr. B. Mukherjee (vol. 32, p. 166).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London W., 4 June 1959, at 3.15 p.m.*

Prof. C. E. TILLEY, President, in the Chair.

The following were provisionally elected Ordinary Members of the Society: Geoffrey Herbert Collins, Philip Stanley Keeling, Ralph E.

Merrill, Duncan George Murchison, Mitsuoki Nakahira, Hans Johannes Christian Pauly.

The death on 14 April of Dr. Leonard James Spencer, C.B.E., F.R.S., Foreign Secretary, was reported. Dr. Spencer, Ordinary member since 1894, had served as President from 1936 to 1939, as Editor of the *Mineralogical Magazine* from 1900, and of *Mineralogical Abstracts* since their inception in 1920 until 1955.

The resignation of Mr. J. Angove was accepted.

Reports were received from the Treasurer, the Editors, the Clay Minerals Group, and the Publications Committee on Mineralogical Abstracts.

The proposals of the Sub-Committee of the Clay Minerals Group for proceeding with the Electron-optical Monograph were approved, and Dr. R. C. Mackenzie's offer to act as editor of the Bulletin, pending formal appointment on the relinquishment of this office by Dr. R. J. W. McLaughlin, was accepted.

A programme to publicize the *Mineralogical Abstracts* was reported, and discussion with the Mineralogical Society of America on reducing publication costs was recommended.

The resignation from the Council of Dr. R. J. W. McLaughlin was accepted.

The nomination of Dr. W. Campbell Smith, C.B.E., to the office of Foreign Secretary was confirmed.

Dr. G. F. Claringbull, Dr. M. H. Hey, and Dr. J. Phemister were appointed alternate (non-voting) delegates to attend the 1st General Meeting of the International Mineralogical Association in Zurich.

The appointment of Mrs. E. M. Castle as Publications Assistant was reported.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London W., 4 June 1959, at 5 p.m.*

Prof. C. E. TILLEY, President, in the Chair.

Forty-eight Members and four Visitors were present.

The elections of six Ordinary Members of the Society provisionally made by the Council were confirmed.

The following papers were read and discussed:

1. The growth of synthetic quartz from impure nutrients: by Mr. C. S. Brown and Mr. L. A. Thomas.

Synthetic quartz has been grown by a temperature-gradient hydrothermal process using impure siliceous nutrients native to the United Kingdom. Some of these materials are found to behave in a way similar to a pure quartz nutrient, but others require that the process be modified in order to grow the high-quality crystals required. Using a number of analytical tools, it has been shown that the presence of impurities, particularly aluminium, can affect the growth of quartz. The role of aluminium in various forms and the manner in which it is incorporated in the growing crystals will be discussed.

2. Order and disorder in the feldspars: by Dr. Helen D. Megaw (vol. 32, p. 226).

3. The Amygdale minerals in the Tertiary lavas of Ireland. II. The distribution of Gmelinite: by Dr. G. P. L. Walker (vol. 32, p. 202).

The following paper was taken as read:

1. A note on pyrosmalite from Nant Francon, North Wales: by Dr. P. E. Brown (vol. 32, p. 242).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., 5 November 1959, at 3 p.m.*

Prof. C. E. TILLEY, President, in the Chair.

The following were provisionally elected Ordinary Members of the Society: Donovan William Abbott, Ronald Elrick Anderson, Raymond Albert Binns, Michael Jack Frost, Antony Collen Gifford, Subrata Ghose, John Wallace Hosterman, Michael Rossiter Hughson, Charles Strachan Hutchison, Ernest Henry Nickel, Keiichi Omori, Ki Nam Sang Sang, Takeo Watanabe.

The resignations of Prof. R. Barta, Dr. F. G. H. Blyth, Miss J. J. Glass, Mr. H. M. Rice, and Mr. R. D. S. Shrimpton were accepted.

Reports were received from the Treasurer, the Editors, the Clay Minerals Group, and the Publications Committee on Mineralogical Abstracts.

A reciprocal gift to the Lvov University of the D.T.I. monograph and copies of the C.M. bulletin was agreed.

The inclusion of Prof. J. H. Taylor, Dr. J. R. Butler, and Dr. M. H. Hey in the Sub-Committee of the Clay Minerals Group comprising Dr. R. C. Mackenzie, Mr. G. Brown, Dr. J. A. Gard, and Mr. R. H. S. Robertson was decided.

The joint recommendations of the British and American Publications Committees on organization, economy measures, and future lay-out of the *Mineralogical Abstracts* were approved.

The decision of the International Geological Congress Commission to proceed with an international geological abstracts journal was reported.

It was agreed to discontinue existing exchange arrangements for magazines between the Society and other specified Societies, and the privilege of new members to purchase Mineralogical Magazines back to the commencement of the volume current at the time of their election at the rate of the annual subscription.

The limitation of the library to principal national mineralogical journals was agreed and the disposal of certain transactions not in this category was approved.

Dr. J. R. Butler and Dr. A. P. Millman were appointed auditors of the Society's accounts for the year ending 31 December 1959.

The Council appointed the President as the Society's delegate to the International Geological Congress, in Copenhagen, in August 1960.

In response to an appeal by Sir Arthur Russell, a committee was appointed to collaborate with other interested societies in resisting destruction of Cornish mining dumps.

The Secretary read the draft of the Annual Report of the Council for the past year and this was approved for presentation at the ensuing Anniversary Meeting.

GENERAL (ANNIVERSARY) MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London W., 5 November 1959, at 5 p.m.*

Prof. C. E. TILLEY, President, in the Chair.

Seventy-one Members and eleven Visitors were present.

The elections of thirteen Ordinary Members of the Society provisionally made by the Council were confirmed.

The General Secretary read the following:

ANNUAL REPORT OF THE COUNCIL FOR 1958-9.

Membership. The total membership on 31 October 1959 was 685 against 661 on 31 October 1958. Forty-three new members have been elected during the year, eleven members have resigned, and the names of two members have been removed on account of arrears of subscription. The Society has lost by death six Ordinary members, including the Foreign Secretary and senior member, Dr. L. J. Spencer, who was Editor (1900-55) and President (1936-9). On 31 October 1959 the membership consisted of five Honorary members and 680 Ordinary members, of whom 69 are Life members: 321 members are also members of the Clay Minerals Group.

Meetings. The total attendance at the four general meetings held during the session 1958-9 was 218 members and 33 guests, giving an average of 63 per meeting. At these meetings 16 papers were read, 10 papers were taken as read, and 3 exhibits shown.

At two meetings of the Clay Minerals Group, held in London and Sheffield, respectively, 16 papers were read: the average attendance was 31.

Publications. Two numbers of the *Mineralogical Magazine* have been issued during the year, and the third (September 1959) is expected shortly. The three numbers (244-6) contain the Proceedings (15 pages), 24 papers, 5 short communications, and 10 book reviews in 260 pages, with 10 plates and 74 text-figures. Two numbers of *Mineralogical Abstracts* have been issued and the third (September 1959) should appear in the near future. Nos. 1 and 2 contain 1,165 abstracts and 31 book notices in 162 pages.

Two numbers (20 and 21) and the Index to Vol. 3 of the *Clay Minerals Bulletin* have been issued during the year. The preparation of the new edition of the X-ray monograph is nearing completion, and the possibility of producing two new publications, Electron-optical Monograph, and Clay Mineralogy of British Sediments, is under consideration.

Financial. The accounts for the calendar year 1958 are published in *Mineralogical Magazine* No. 245. The excess of assets (exclusive of the Society's library and stock of publications) over liabilities at 31 December 1958 was £7,156. 15s. 7d. against £7,541. 9s. 11d. at the close of 1957.

During 1958 expenditure from the General Fund exceeded income by £445. 2s. 4d. This deficit was occasioned by the transfer of £500 of the Society's funds to help finance the new and enlarged *Mineralogical Abstracts* sponsored jointly with the Mineralogical Society of America, who have contributed a similar sum. During 1958 preliminary expenses in connexion with *Mineralogical Abstracts* amounted to £219. 4s. 4d.

Two numbers of the *Mineralogical Magazine* and two of *Mineralogical Abstracts* have appeared since the beginning of 1959. Owing to delays occasioned by the printing strike the only costs at present known are for the March numbers, £640. 8s. 9d. (excluding costs for authors' reprints) in the case of the Magazine, and £966. 6s. 0d. for Abstracts. The cost of reprinting 2 numbers of the *Mineralogical Magazine* has amounted to £288. 0s. 0d.

Sales of publications so far during 1959 have amounted to: *Mineralogical Magazine* £1,708. 0s. 10d., *Mineralogical Abstracts* £754. 2s. 11d., and the Clay Minerals Group monograph on differential thermal analysis £419. 4s. 0d.

The balances at the Society's Bankers and in the Post Office Savings Bank on 31 October 1959 were: General Fund £3,697. 10s. 2d., Miers Memorial Fund £170. 13s. 2d.

General. (i) *International Mineralogical Association.* The first General Meeting and Congress of the International Mineralogical Association took place in Zurich from 29 August to 3 September. The President was the Society's voting delegate. The Society was also represented by a member of each of the four Commissions: Abstracts (Dr. J. Phemister), Data (Dr. M. H. Hey), Museums (Dr. G. F. Claringbull), New Minerals (Dr. M. H. Hey), and by the General Secretary as advisory member of the Executive Committee.

(ii) *Committees.* The Society has been represented during the year on the following committees: Geological Conservation Committee, British National Committee for Crystallography, British National Committee for Geology, and the Barker Index Committee.

On the proposal of Dr. R. W. Nurse, seconded by Dr. J. D. C. McConnell, the adoption of the Annual Report was carried unanimously.

A vote of thanks to the Geological Society for the use of the apartments during the past session was proposed by Mr. P. Game, seconded by Mr. H. P. Rooksby, and carried with acclamation.

The President read the following list of Officers and Council elected for the session 1959–60 in accordance with bye-law 20:

President. Prof. C. E. Tilley, B.Sc., Ph.D., F.R.S.
Vice-Presidents. Dr. G. F. Claringbull, B.Sc., Ph.D., A.Inst.P., F.G.S.; Dr. A. F. Hallimond, M.A., Sc.D., F.G.S.
Treasurer. Prof. J. H. Taylor, M.A., B.Sc., Ph.D., F.G.S.
General Secretary. Dr. J. R. Butler, B.A., Ph.D.
Foreign Secretary. Dr. W. Campbell Smith, C.B.E., M.C., T.D., M.A., Sc.D., F.G.S.

Editor of the Mineralogical Magazine. Dr. M. H. Hey, M.A., D.Sc.
Editor of Mineralogical Abstracts. Dr. J. Phemister, M.A., D.Sc., F.R.S.E., F.G.S.

Ordinary Members of Council

Dr. G. M. Brown, M.A., D.Phil., B.Sc., F.G.S.	Dr. W. S. MacKenzie, M.A., B.Sc., Ph.D.
Dr. H. I. Drever, B.Sc., Ph.D., F.R.S.E.	Dr. I. D. Muir, B.A., Ph.D., F.G.S.
Prof. K. C. Dunham, D.Sc., Ph.D., S.D., M.I.M.M., F.G.S., F.R.S.	Dr. R. M. S. Perrin, M.A., B.Sc., Ph.D.
Mr. P. G. Embrey, M.A., B.Sc., A.R.I.C.	Dr. A. F. Seager, B.Sc., Ph.D., A.K.C., F.G.S.
Dr. R. A. Howie, M.A., Ph.D., F.G.S.	Prof. F. H. Stewart, B.Sc., Ph.D., F.G.S.
Mr. E. A. Jobbins, B.Sc.	Dr. R. F. Youell, B.Sc., Ph.D.

A vote of thanks to the retiring Vice-Presidents, General Secretary, and Ordinary Members of the Council was proposed by Prof. K. C. Dunham and seconded by Dr. M. G. Bown.

The following exhibits were shown:

1. Ancient deer horn pick: by the Viscount Falmouth.
2. A new occurrence of tobermorite and xonotlite in the Isle of Skye: by Miss J. M. Sweet.
3. Vaterite (μ -CaCO₃) from Ballycraigy, Larne, Northern Ireland: by Dr. J. D. C. McConnell.

The following papers were read:

1. Some observations on 'iddingsite': by Dr. P. Gay and Mr. R. W. LeMaitre.

Specimens of 'iddingsite' from many localities have been examined by X-ray, chemical, and optical methods in a study of the alteration of olivine to 'iddingsite'. This proves to be a continuous transformation, and although at any stage it is possible to recognize embryonic structures, the pseudomorph is throughout a disordered atomic arrangement, and at no stage can it be assigned a definite structure or chemical composition or be regarded as a simple submicroscopic mineral intergrowth. The mechanism of the alteration appears to be one of cationic diffusion and replacement, the anion framework suffering little change; the presence of a high proportion of mobile hydrogen ions is probably an important factor. Some speculations are offered regarding the physical and chemical conditions under which alteration takes place.

2. Quantitative mineralogical analysis by X-ray powder diffraction: by Mr. W. A. Mitchell, read by Dr. R. C. Mackenzie (vol. 32, p. 492).

3. Ugite from Skye is thomsonite: by Miss J. M. Sweet (vol. 32, p. 340).

[Continued on p. lxvii.]

4. The Lewisian pegmatites of South Harris, Outer Hebrides: by Dr. O. von Knorring and Dr. R. Dearnley (vol. 32, p. 366).

The following papers were taken as read:

1. An X-ray study of manganese minerals: by Dr. B. Mukherjee (vol. 32, p. 332).

2. A dickite with an elongated crystal habit and its dehydroxylation: by Mr. E. R. Schmidt and Mr. R. O. Heckroodt (vol. 32, p. 314).

3. Pseudomorphs after olivine in Markle basalt: by Dr. W. W. Smith (vol. 32, p. 324).

4. A note on a nordmarkite and an associated rare-earth mineral from the Ben Loyal syenite complex, Sutherlandshire: by Dr. O. von Knorring and Dr. R. Dearnley (vol. 32, p. 389).

MINERALOGICAL

INCOME AND EXPENDITURE ACCOUNT

A. GENERAL

1958		INCOME	£	s.	d.	£	s.	d.
	£							
		Members' subscriptions—						
		Annual subscriptions				926	7	7
		Entrance fees				38	0	0
1228								
		<i>Mineralogical Magazine</i> —						
		Advertisement fees				95	5	1
		Sales				2291	8	7
2806								
		Investment revenue—						
		Interest on investments				300	13	11
		Post Office Savings Bank interest				38	5	6
256								
		Clay Minerals Group—						
		<i>Clay Minerals Bulletin</i> :						
		Subscriptions				224	8	3
		Sales, including authors' reprints				131	18	3
418								
1002		Monograph on <i>The Differential Thermal Investigation of Clays</i>						
6		<i>Glossary of Clay Trade Names</i> , sales						
10		Interest on Bank Accounts (Harpden and Cambridge)						
		Transfer from Publications Fund						

445	Balance, being excess of expenditure over income for the year	519	16	7
<u>£6171</u>		<u>£5399</u>	<u>16</u>	<u>8</u>

B. MIERS

18	Investment revenue	£	s.	d.
1	Donations	17	13	2
		9	1	0
<u>£19</u>		<u>£26</u>	<u>14</u>	<u>2</u>

SOCIETY

31 DECEMBER 1959

FUND

1958 £	ASSETS	£ s. d.	£ s. d.
	Office furniture and equipment—		
	Original cost	931 14 6	
	Less depreciation	397 17 8	
627	Investments (at cost or as valued at 31 December 1951)—		533 16 10
	£2232. 9s. 3½ % War Stock 1952	1856 8 6	
	£753. 12s. 11d. 4 % Consolidated Stock 1957	694 4 9	
	£806. 4s. 6d 4 % Funding Stock 1960-90.	598 5 0	
	£250. 3 % Savings Bonds 1960-70	216 17 6	
	£1013. 9s. 6d. 3 % Savings Bonds 1965-7	916 7 0	
	£173. 6s. 6d. 3 % British Transport Stock 1978-88	127 1 3	
	£275. 2½ % Consolidated Stock	169 2 6	
	£261. 12s. 6d. 3½ % Treasury Stock 1977-80	244 8 3	
	£1058. 9s. 11d. 4½ % British Electricity Stock 1967-69	1005 17 3	
5778			5828 12 0
	Note:—The total market value of the above investments at 31 December 1959 was £5065 7s. 10d.		
	Deposits—		
1757	Balance with Post Office Savings Bank		794 19 10
	Subscriptions, &c., in arrears—		
	Members' subscriptions	64 15 1	
	Subscriptions to <i>Clay Minerals Bulletin</i>	24 0 0	
78			88 15 1
	Sundry debtors—		
126	Purchasers of <i>Clay Minerals Bulletin</i> and authors' reprints		65 13 0
	Cash—		
	Coutts & Co., London	439 18 7	
	Barclays Bank, Harpenden	690 0 11	
	Cambridge & District Trustee Savings Bank	90 10 0	
	Cash in hand, London	25 0 0	
	„ Harpenden	5 11 10	
750			1251 1 4
<u>£9116</u>			<u>£8562 18 1</u>

Note:—The value of the Society's library and stock of publications is not included in the above assets.

MEMORIAL FUND

		£ s. d.
	Investments (at cost)—	
439	£504. 17s. 4d. 3½ % War Stock 1952	439 7 0
	Note:—The total market value of the above investment at 31 December 1959 was £330. 13s. 9d.	
153	Cash—Coutts & Co., London	179 9 9
<u>£592</u>		<u>£618 16 9</u>

28 March 1960 J. R. BUTLER } Auditors
A. P. MILLMAN }

JAMES H. TAYLOR, Hon. Treasurer

MINERALOGICAL SOCIETIES OF MINERALOGICAL INCOME AND EXPENDITURE ACCOUNT

INCOME						£	s.	d.	£	s.	d.
Subscriptions—											
	Mineralogical Society of America	.	.	.	.	267	12	4			
	Mineralogical Society of Great Britain	.	.	.	.	683	0	8			
									950	13	0
Sales	.	.	.	.	.				1323	4	11

Balance, being excess of expenditure over income	.	.	.	.	.	.	.	.	568	10	9
									<u>£2842</u>	<u>8</u>	<u>8</u>

BALANCE SHEET AS AT

LIABILITIES						£	s.	d.	£	s.	d.	£	s.	d.
Fund Account—														
	Balance per Balance Sheet at 31 December 1958	.	.	.	.				780	15	8			
	Less depreciation on office furniture and equipment	.	.	.	.	11	14	3						
	excess of expenditure over income for year ended 31 December 1959	.	.	.	.	568	10	9						
									580	5	0			
												200	10	8
Subscriptions received in advance	.	.	.	.	.							68	0	0
Sundry creditors—														
	Royal Entomological Society for house expenses	.	.	.	.							13	15	6
												<u>£282</u>	<u>6</u>	<u>2</u>

SOCIETY

FOR THE YEAR ENDED 31 DECEMBER 1959

FUND

1958 £	EXPENDITURE	£ s. d.	£ s. d.
	<i>Mineralogical Magazine—</i>		
	Nos. 244–247:		
	Printing	1727 3 11	
	Illustrations	193 15 0	
	Authors' reprints	187 17 4	
	Distribution to members	88 16 2	
	Distribution to subscribers	85 11 3	
2821			2283 3 8
471	Reprinting Magazines Nos. 151, 152, 161, 165.		508 5 0
	Editorial Expenses:		
	Magazine editor	56 3 8	
	Abstracts editor	69 8 0	
236			125 11
500	Capital contribution to new <i>Mineralogical Abstracts</i>		— — —
—	Contribution to <i>Mineralogical Abstracts</i> for Life and Honorary Members		79 0 0
—	Subscriptions to International Mineralogical Association 1958–60		28 16 6
	Meeting expenses—		
	Notices of meetings	96 19 0	
	General expenses in connexion with meetings	26 17 0	
123			123 16 0
	General expenses—		
	Office rental and house expenses	275 13 2	
	Clerical assistance	1195 7 6	
	Printing and stationery	24 3 7	
	Postage and telephone	108 5 11	
	Sundry office expenses	46 1 8	
1617			1649 11 10
3	Library binding charges		63 0 0
	Clay Minerals Group—		
	<i>Clay Minerals Bulletin:</i>		
	Printing Bulletins 20 and 21	325 6 0	
	Editorial expenses	11 0 0	
301			336 6 0
	General expenses:		
	Notices of meetings	44 5 8	
	Expenses in connexion with meetings	25 12 1	
	Office expenses	132 8 3	
99			202 6 0
<u>£6171</u>			<u>£5399 16 8</u>

MEMORIAL FUND

	Bank charges.	£ s. d.
19	Balance, being excess of income over expenditure for the year	1 4
		26 12 10
<u>£19</u>		<u>£26 14 2</u>

28 March 1960 J. R. BUTLER } Auditors
A. P. MILLMAN }

JAMES H. TAYLOR, Hon. Treasurer

MINERALOGICAL

BALANCE SHEET AS AT

A. GENERAL

1953 £	LIABILITIES	£ s. d.	£ s. d.	£ s. d.
	Fund Account—			
	Balance per Balance Sheet at 31 December 1958 .	6564 11 8		
	Add Composition Fees received	60 0 0		
	Bequest from Dr. L. J. Spencer	200 0 0		
			6824 11 8	
	Less depreciation on office furniture and equip- ment	93 3 6		
	excess of expenditure over income for year ended 31 December 1959	519 16 7		
			613 0 1	
6565				6211 11 7
1478	Publications Fund			1177 13 9
	Subscriptions, &c., received in advance—			
	Members' subscriptions and entrance fees		120 19 9	
	Subscriptions to <i>Clay Minerals Bulletin</i>		1 10 0	
101				122 9 9
	Sundry creditors—			
	Oxford University Press for Magazine No. 243 (estimated) .	665 0 0		
	A. Walker & Son, Ltd., for Bulletin No. 21	212 16 0		
	Colonna Press for reprinting Magazine No. 151	110 0 0		
	Royal Entomological Society for house expenses	27 11 2		
	Editors for sundry editorial expenses	35 15 10		
972				1051 3 0

£9116

£8562 18 1

B. MIERS

	£ s. d.	£ s. d.
Fund Account—		
Balance per Balance Sheet at 31 December 1958	592 3 11	
Add excess of income over expenditure for the year ended 31 December 1959	26 12 10	
		618 16 9
592		
<u>£592</u>		<u>£618 16 9</u>

AMERICA AND GREAT BRITAIN

ABSTRACTS

FOR THE YEAR ENDED 31 DECEMBER 1959

EXPENDITURE						£	s.	d.	£	s.	d.
<i>Mineralogical Abstracts</i>											
Vol. 14, Nos. 1 and 2:											
Printing	.	.	.	.	.	1504	2	6			
Distribution (including envelopes)	.	.	.	.	.	185	6	1			
									1689	8	7
Editorial expenses—											
Editor's honorarium	.	.	.	.	.	400	0	0			
Editorial Assistant's stipend	.	.	.	.	.	503	14	4			
General editorial expenses	.	.	.	.	.	47	10	0			
									951	4	4
Office expenses—											
Office rental and house expenses	.	.	.	.	.	137	16	7			
Printing and stationery	.	.	.	.	.	39	3	10			
Postage	.	.	.	.	.	18	10	4			
Sundry office expenses	.	.	.	.	.	6	5	0			
									201	15	9
									<u>£2842</u>	<u>8</u>	<u>8</u>

31 DECEMBER 1959

ASSETS						£	s.	d.	£	s.	d.
Office furniture and equipment—											
Original cost	.	.	.	.	.	117	2	7			
Less depreciation	.	.	.	.	.	11	14	3			
									105	8	4
Subscriptions in arrears	.	.	.	.	.	.	.	.	35	0	0
Cash—Coutts and Co., London	.	.	.	.	.	.	.	.	141	17	10

£282 6 2

28 March 1960 J. R. BUTLER } Auditors
A. P. MILLMAN }

JAMES H. TAYLOR, Hon. Treasurer