

PROCEEDINGS
OF THE
MINERALOGICAL SOCIETY
(1944)

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., January 27, 1944, at 2.15 p.m.*

Mr. F. N. ASHCROFT, President, in the Chair.

Mr. John Jerom Hartley, Mr. Kiguma Jack Murata, and Mr. Douglas Gilbert Alban Whitten, were proposed and provisionally elected Ordinary Members of the Society. The deaths of Major H. J. L. Beadnell and Dr. R. C. Wilson were reported.

Reports were received from the Treasurer and the Editor, and the Treasurer presented the audited accounts for 1943 which were adopted. It was agreed that arrears of subscriptions from Members in enemy-occupied countries which had accumulated since the outbreak of war should be remitted.

The President reported that paper for the index number of the *Magazine* had become available, and that the printer had agreed to print the Bye-laws and List of Members as a separate publication.

The following committee was appointed to consider the utilization of the Miers bequest and to report its findings at the next meeting: the Officers of the Society, Sir Thomas H. Holland, Dr. W. F. P. McLintock, and Sir Arthur Russell.

The following were appointed to serve on the committee formed in conjunction with the Geological Society and the Royal Microscopical Society to investigate the manufacture of petrological microscopes in this country after the war: Dr. G. F. Claringbull, Dr. C. E. Marshall, and Dr. F. C. Phillips. It was agreed that the Mineralogical Society should take formal responsibility for convening the committee.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., January 27, 1944, at 3.30 p.m.*

Mr. F. N. ASHCROFT, President, in the Chair.

Thirty-seven Members and twenty-eight Visitors were present.

The elections of Messrs. J. J. Hartley, K. J. Murata, and D. G. A. Whitten as Ordinary Members of the Society were confirmed.

Two short lectures on Quartz, with special reference to its piezoelectric

properties and their applications, were delivered and followed by a general discussion.

(1) Dr. W. A. Wooster: Crystallography and crystal physics of quartz. (a) Importance of quartz in the science of crystallography and crystal physics. (b) Development of the study of the angles between faces of quartz. (c) Growth forms and twinning relationships. (d) Optical properties, particularly of rotatory polarization. (e) Thermal conduction. (f) Elasticity. (g) Piezo- and pyroelectricity.

(2) Mr. J. L. Creighton: Manufacture and performance of quartz crystal units. (a) Design requirements of oscillators and resonators. (b) Suitability of quartz for the purpose. (c) Manufacture. (d) Performance.

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., March 23, 1944, at 2 p.m.*

Mr. F. N. ASHCROFT, President, in the Chair.

Mr. Alfred Heller and Mr. Theodor Martin William Strong were proposed and provisionally elected Ordinary Members of the Society. The death of Mr. J. P. de Castro was reported. The name of Mr. D. Balsillie was removed from the List of Members for non-payment of arrears of subscription.

A report was received from the committee appointed at the last meeting to consider the utilization of the Miers bequest. It was agreed that the legacy of £200 be used as a nucleus of a fund to be called "The Miers Memorial Fund", and that Members of the Society be invited to contribute to the fund. A draft set of rules for the administration of the fund was approved (vol. 27, p. 23).

Reports were received from the Treasurer and the Editor. It was decided to print as soon as possible in the *Magazine* a biographical notice with bibliography and portrait of the late Sir Henry A. Miers (vol. 27, pp. 17-28). The portrait (plate III) would be issued as the first illustration published under the Miers Memorial Fund.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., March 23, 1944, at 3.30 p.m.*

Mr. F. N. ASHCROFT, President, in the Chair.

Thirty-three Members and twenty-two Visitors were present.

The elections of Messrs. A. Heller and T. M. W. Strong as Ordinary Members of the Society were confirmed.

Mr. E. P. Bottley exhibited a fine specimen of autunite from Portugal; and Dr. G. Nagelschmidt showed a series of X-ray photographs of minerals.

The following papers were read:

1. An X-ray study on the crystal-structure of gümbelite: by Dr. E. Aruja (communicated by Mr. F. A. Bannister) (vol. 27, p. 11).

2. On rhodonite and tephroite from Treburland manganese mine, Altarnun, Cornwall; and on rhodonite from other localities in Cornwall and Devonshire: by Sir Arthur Russell.

3. The determination of beryllium in minerals and rocks: by Mr. G. H. Osborn and Dr. W. Stross.

4. Notes on the sawing and cleaving of diamond: by Mr. Paul Grodzinski (vol. 27, p. 47).

5. An unusual occurrence of bedded thenardite: by Dr. Edmundson Spencer (read by Dr. G. F. Claringbull) (vol. 27, p. 29).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., June 8, 1944, at 2 p.m.*

Mr. F. N. ASHCROFT, President, in the Chair.

Mr. Harold Elliott, Dr. William David Evans, and Mr. Charles A. Steen were provisionally elected Ordinary Members of the Society. The death of Dr. Wilbert Goodchild was reported.

The list of Officers and Council for 1944-5 was considered. The following were due to retire: Vice-President, Dr. W. F. P. McLintock; Ordinary Members of Council, Mr. B. W. Anderson, Dr. C. F. Davidson, Prof. W. R. Jones, and Dr. J. V. Harrison. The following were nominated for election at the Anniversary Meeting on November 2, 1944: as Vice-President, Prof. W. R. Jones; as Ordinary Members of Council, Mr. A. B. Broughton-Edge, Dr. K. C. Dunham, Prof. W. T. Gordon, and Dr. David Williams.

It was agreed that, subject to approval by the Geological Society, the meetings in 1945 would be held on Thursdays, January 25, March 22, June 7, and November 8.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., June 8, 1944, at 3.30 p.m.*

Mr. F. N. ASHCROFT, President, in the Chair.

Twenty-seven Members and four Visitors were present.

The elections of Messrs. H. Elliott, W. D. Evans, and C. A. Steen as Ordinary Members of the Society were confirmed.

The following exhibits were shown:

1. Minerals from new localities in the Machakos district of Kenya, including riebeckite, ilmenite, quartz, kyanite, staurolite, albite, oligoclase, euxenite, corundum, and corundophilite: by Dr. C. S. Hitchen.

2. Lava from the recent eruption of Vesuvius, and Scottish mica: by Mr. C. E. N. Bromehead.

3. A petrological microscope fitted with analyser and polarizer of new-type polaroid: by Dr. A. F. Hallimond.

The following papers were read:

1. Banalsite, a new mineral from North Wales: by Dr. W. Campbell Smith, Mr. F. A. Bannister, and Dr. M. H. Hey (vol. 27, p. 33).
2. Boracite from a boring at Aislaby, Yorkshire: by Miss É. M. Guppy (communicated and read by Dr. J. Phemister) (vol. 27, p. 51).
3. An X-ray study of the crystal-structure of antigorite: by Dr. E. Aruja (communicated by Mr. F. A. Bannister) (vol. 27, p. 65).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., November 2, 1944, at 2 p.m.*

Mr. F. N. ASHCROFT, President, in the Chair.

Mr. James Cameron, Mr. Thorold George Jones, and Lt.-Col. Josslyn Vere Ramsden were provisionally elected Ordinary Members of the Society. The deaths of Dr. Harry Berman, Dr. E. L. G. Clegg, and Mr. E. H. Davison were reported.

Reports were received from the Treasurer and the Editor. The Miers Memorial Fund, including the original legacy of £200, had totalled £424. 18s. 0d. The Secretary read the draft of the Annual Report of Council, which was approved.

Mr. C. E. N. Bromehead and Mr. F. A. Bannister were appointed auditors for 1945.

GENERAL (ANNIVERSARY) MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., November 2, 1944, at 3.30 p.m.*

Mr. F. N. ASHCROFT, President, in the Chair.

Thirty-five Members and two Visitors were present.

Dr. A. W. Groves and Dr. G. Nagelschmidt were appointed as scrutineers of the voting papers for the election of Officers and Council.

The elections of Mr. J. Cameron, Mr. T. G. Jones, and Lt.-Col. J. V. Ramsden were confirmed.

The General Secretary read the following:

ANNUAL REPORT OF THE COUNCIL FOR 1943-4

Membership.—Including 11 Ordinary Members resident in enemy and enemy-occupied countries, the total membership on October 31 was 275 against 267 on October 31, 1943. Sixteen new members have been elected during the year, a considerable increase over recent years. The Society has lost by death the following seven members: Major H. J. L. Beadnell, Dr. Harry Berman, Dr. E. L. G. Clegg, Mr. E. H. Davison, Mr. J. P. de Castro, Dr. Wilbert Goodchild, and Dr. R. C. Wilson. The name of one member has been removed from the list on account of arrears in subscription. On October 31 the membership consisted of 5 Honorary Members and 270 Ordinary Members, of whom 43 were Life Members.

Meetings.—At the four meetings held during the session 1943-4 the total attendance was 127 members and 57 visitors. The average attendance of 46 compares most favourably with that

of previous years, 35 in 1942-3, and 30 in 1941-2. At three of these meetings 10 papers have been read and 6 exhibits shown. The remaining meeting was devoted to two lectures on 'Piezo-electric quartz', followed by a discussion. The Society has acted as convener of a committee nominated by the Geological and Mineralogical Societies at the suggestion of Mr. Broughton-Edge, to consider and recommend on the manufacture of petrological microscopes in Great Britain after the war.

Publications.—Four numbers (182-185) of the *Mineralogical Magazine* have been issued during the year and have contained the Proceedings in 15 pages, 6 papers in 52 pages with 3 plates and 3 text-figures, and 262 abstracts in 58 pages. No. 183 contained the index to volume 26 of the *Magazine* and volume 8 of the Abstracts. A new edition of the Bye-laws and List of Members has also been issued. The portrait of the late Sir Henry A. Miers published in no. 185 of the *Magazine*, accompanied by a biographical notice and bibliography, is the first illustration published with the aid of the recently instituted Miers Memorial Fund.

Financial.—The accounts for the calendar year 1943, published in the March number of the *Magazine*, showed an excess of assets (exclusive of the stock of the *Magazine*, certain periodicals in the Society's Library, and the securities allocated to the Composition Fees Account) over liabilities of £1912. 10s. 7d. against £1685. 3s. 2d. at the close of 1942. The value of the securities standing in the name of the Custodian Trustee on December 31, 1943, was, General Reserve £1560. 4s. 7d., Composition Fees Account £1204. 14s. 2d.

The cash at Bankers, in the Post Office Savings Bank, and in hand on January 1, 1944, amounted to £381. 9s. 3d. as against £295. 17s. 7d. at the beginning of 1943. On the other hand, there were undischarged liabilities at the close of 1943, which were then estimated at £110, but which amounted to £118. 8s. 4d. There were no undischarged liabilities at the close of 1942.

The receipts from the annual subscriptions have been well maintained, and from January 1 to October 31, 1944, amounted to £180. 6s. 0d. in respect of annual subscriptions for 1944, £13. 17s. 7d. as arrears, and £3. 7s. 1d. in advance for 1945. The receipts from the Society's publisher for sales of the *Mineralogical Magazine* have improved somewhat. They amounted to £190. 15s. 5d. against £179. 13s. 5d. in 1943.

As in 1943, the expenditure on the *Magazine* has had to be restricted. The payments made in 1943 amounted to £215. 5s. 6d. and the liabilities in respect of the 1943 issue to £118. 8s. 4d., making £333. 13s. 10d. against £364. 18s. 4d. in 1942.

Two Composition Fees were received and invested.

Early in the present year the following three important decisions were taken by the Council:

(1) The commemoration of the name of Sir Henry A. Miers and his services to the Society by the institution of a Fund bearing his name. The rules governing the use and administration of this Fund have been published in the June number of the *Magazine*. The legacy of £200 bequeathed by Sir Henry Miers has been transferred to the Fund and up to October 31, £224. 18s. 0d. had been received as donations thereto. The invested capital of the Fund now stands at £375. 0s. 0d.

(2) The remission of all Annual Subscriptions due from Members of the Society resident in enemy-overrun countries, and the recommendation to future Councils that this policy should be continued until the end of the war in Europe.

(3) In view of the receipt of further information as to the legal position, discontinuation of publication of the Composition Fees Account, amalgamation of the securities representing Composition Fees received with those of the General Reserve, and the issue of an account—to be termed The Composition Fees (Investment) Account—in which only the Composition Fees received each year and the investments made therewith shall be recorded.

The cash available for current purposes on October 31 amounted to £608. 19s. 11d. as against £445. 15s. 4d. on that date in 1943, but the account for the printing and distribution of the June number of the *Magazine* and the authors' offprints from the March number, now to hand and totalling £65. 10s. 0d., had not then been received. That of the Miers Memorial Fund was £22. 10s. 9d. The outgoing for the remainder of the year, provided it is possible to settle the accounts for the September and December numbers of the *Magazine* before the close of the year, are estimated at about £275, but it is probable that some of these will remain as undischarged liabilities. The receipts are estimated at about £55, and on this basis the cash available for general purposes at the close of the year should be about £389.

General.—The arrangements referred to in recent Annual Reports relative to the transmission of remittances from overseas have been continued with success.

MINERALOGICAL

ABSTRACT OF RECEIPTS AND PAYMENTS

	RECEIPTS	GENERAL PUR-	
		£	s. d.
By Balances brought forward from 1943—			
1. At Bankers on Current Account		138	14 0
2. In Post Office Savings Bank		240	17 6
3. In Office		1	17 9
		381	9 3
Entrance Fees			12 12 0
Annual Subscriptions—			
1. Current Year		187	9 3
2. Arrears		14	18 5
3. Advance		13	19 6
		216	7 2
Sale of Publications—			
1. By Publisher, April 1, 1943–March 31, 1944. Sales at subscription rate £216. 0s. 0d. and other sales £52. 4s. 6d. less trade discount and commission £71. 8s. 2d. and distribution charges £6. 0s. 11d.		190	15 5
2. By Custodian of Stock, 1944, £14. 13s. 11d. less distribution charges £0. 7s. 8d.		14	6 3
		205	1 8
Advertisement Fees £8. 18s. 3d. less commission £1. 15s. 8d.			7 2 7
Interest on Investments including Income Tax recovered—			
1. £1685 3½% War Loan, 1952 and after		58	19 6
2. £105 4% Consolidated Loan, 1957		4	4 0
3. £100 4% Funding Loan, 1960–90		4	0 0
4. £146 10s. 0d. 3% War Loan 1955–59		4	7 8
5. £26 3% Conversion Loan 1948–53		0	15 6
6. £100 3% Defence Bonds		3	19 9*
7. £250 3% Savings Bonds 1960–70		7	10 0
8. Income Tax recovered on 3% Savings Bonds dividend paid less tax in 1943		1	17 2
		85	13 7
Deposit Interest—			
1. Bankers		0	10 9
2. Post Office Savings Bank		6	0 0
		6	10 9
Small Receipts			0 3 1
Transfers from other accounts—			
From Miers Memorial Fund, for provision of Illustrations			22 2 8

* Including dividend on £200 Defence Bonds received prior to the institution of the Miers Memorial Fund and the transfer of Sir Henry Miers's legacy thereto.

SOCIETY

FOR THE YEAR ENDING DECEMBER 31, 1944

POSES ACCOUNT

	PAYMENTS			
	£	s. d.	£	s. d.
To Printing and distributing the Mineralogical Magazine, Nos. 183-186 (Oxford University Press)—				
1. Printing	286	12 9		
2. Illustrations	33	12 2		
3. Authors' Separate Copies	8	10 9		
4. Distribution Charges	10	14 1		
5. Composing extra copy of cover for use with offprints	3	6 6		
6. Balance due in respect of Authors' Separate Copies from No. 182	0	1 3		
			342	17 6
Printing and distributing Bye-laws and List of Members—				
1. Printing	20	12 0		
2. Distribution Charges	0	16 5		
			21	8 5
Printing and distributing Notices of Meetings and other annual printing			15	18 9
Miscellaneous printing, &c., not annual—				
1. Treasurer's Notices	1	9 0		
2. Letter headings, &c.	2	8 5		
3. Petrological Microscope Committee, duplicating Report	3	2 0		
			6	19 5
Expenses at Meetings—				
1. Operator of Lantern	2	2 0		
2. Porter	1	0 0		
3. Tea	4	5 0		
			7	7 0
Custodian Trustee's charges			0	13 0
Care and storage of stock of Publications—				
1. Care of stock in London; J. Mugford	1	1 0		
2. Storage of stock in Oxford	1	15 0		
			2	16 0
Editor's Honorarium			50	0 0
Postage—				
1. Hon. Secretary	1	13 6		
2. Editor (not charged)	0	0 0		
3. Hon. Treasurer	1	5 0		
			2	18 6
Foreign Exchange; Control charges and losses on exchange			1	8 5
Small items including Bank Charges			1	12 8
Balances December 31, 1944—				
1. At Bankers:				
(a) On Deposit Account	110	0 0		
(b) On Current Account	126	5 0		
2. In Post Office Savings Bank	246	17 6		
3. In Office	0	0 7		
			483	3 1
			£937	2 9

Examined and compared with Vouchers and found correct.

C. N. BROMEHEAD } Auditors.
F. A. BANNISTER }

January 23, 1945.

A. J. BULL, Hon. Treasurer.

ENDING DECEMBER 31, 1944

	PAYMENTS	£	s.	d.
To Investments representing legacy; £200 3% Defence Bonds		200	0	0
Investment; purchase of £175 3% Defence Bonds		175	0	0
Preliminary expenses; printing and distributing circular letter, &c.		5	3	7
Printing and distributing complimentary copies of the portrait of Sir Henry Miers		3	1	0
Transferred to General Purposes Account for Illustrations		22	2	8
Balance December 31, 1944—				
At Bankers on Current Account		28	0	6
		<u>£433 7 9</u>		

Examined and compared with Vouchers and found correct.

January 23, 1945. C. N. BROMEHEAD } Auditors. A. J. BULL, Hon. Treasurer.
F. A. BANNISTER

YEAR ENDING DECEMBER 31, 1944

	PAYMENTS	£	s.	d.
To Investments; purchase of £31. 2s. 0d. 3% War Loan, 1955-59		31	10	0
		<u>£31 10 0</u>		

Examined and compared with Vouchers and found correct.

January 23, 1945. C. N. BROMEHEAD } Auditors. A. J. BULL, Hon. Treasurer.
F. A. BANNISTER

SHEET

31, 1944

	ASSETS	£	s.	d.	£	s.	d.
By Investments at Broker's Valuation—							
1. £1685 3½% War Loan, 1952 and after, at 104%		1752	8	0			
2. £105 4% Consolidated Loan, 1957, at 110 ¹ / ₁₆ %		115	11	3			
3. £100 4% Funding Loan, 1960-90, at 113½%		113	10	0			
4. £146 10s. 0d. 3% War Loan, 1955-59, at 102 ³ / ₁₆ %		149	14	1			
5. £26 3% Conversion Loan, 1948-53, at 103¼%		26	16	11			
6. £100 3% Defence Bonds at par		100	0	0			
7. £250 3% Savings Bonds, 1960-70 at 100½%		251	5	0			
					2509	5	3
Special Funds (Miers Memorial Fund)—							
£375 3% Defence Bonds at par					375	0	0
Sundry Debtors—							
Publishers (Oxford University Press):							
1. For sales of Publications, April 1-December 31, 1944		75	1	3			
2. For Advertisement Fees, April 1-December 31, 1944		8	11	5			
					83	12	8
Annual Subscriptions in Arrear (£65. 11s. 7d. including £37. 3s. 7d. due from enemy countries) estimated to realize					10	10	0
Entrance Fees in Arrear					1	1	0
Balances—							
General Purposes Account—							
1. At Bankers							
(a) On Deposit Account		110	0	0			
(b) On Current Account		126	5	0			
2. In Post Office Savings Bank		246	17	6			
3. In Office		0	0	7			
					483	3	1
Special Funds (Miers Memorial Fund)							
At Bankers on current account					28	0	6
					<u>£3490 12 6</u>		

Note:—The value of the periodicals retained after the disposal of the Library and that of the un sold stock of Publications are not included in the above Assets.

January 23, 1945.

A. J. BULL, Hon. Treasurer.

On the proposal of Dr. K. C. Dunham, seconded by Mr. G. H. Osborn, the adoption of the Annual Report was carried unanimously.

A vote of thanks to the Geological Society for the use of its apartments was proposed by Dr. C. E. Marshall, seconded by Mr. A. W. G. Kingsbury, and carried with acclamation.

A vote of thanks to the retiring Vice-President and Ordinary Members of Council was proposed by Dr. C. S. Hitchen, seconded by Dr. R. S. Collins, and carried.

The scrutineers reported that 18 ballot papers had been returned and examined and that the following list as nominated by the Council had been approved and were accordingly duly elected.

President. Mr. F. N. Ashcroft, M.A., F.G.S., F.C.S.

Vice-Presidents. Sir Lewis L. Fermor, O.B.E., D.Sc., F.R.S.; Prof. W. R. Jones, D.Sc., M.I.M.M., F.G.S.

Treasurer. Dr. A. J. Bull, M.Sc., Ph.D., F.G.S.

General Secretary. Dr. G. F. Claringbull, B.Sc., Ph.D., F.G.S.

Foreign Secretary. Sir Thomas H. Holland, K.C.S.I., K.C.I.E., D.Sc., LL.D., F.R.S.

Editor of the Journal. Dr. L. J. Spencer, C.B.E., M.A., Sc.D., F.R.S.

Ordinary Members of Council

C. E. N. Bromehead, B.A., F.G.S.

G. E. Howling, B.Sc.

Dr. W. Campbell Smith, M.C., T.D., M.A.,
Sc.D., F.G.S.

R. C. Spiller, M.A.

Dr. S. E. Hollingworth, M.A., D.Sc., F.G.S.

Dr. C. E. Marshall, B.Sc., Ph.D., F.G.S.

Dr. F. C. Phillips, M.A., Ph.D., F.G.S.

Dr. A. K. Wells, D.Sc., F.G.S.

A. B. Broughton-Edge, M.B.E., B.Sc.,
M.I.M.M., F.G.S.

Dr. K. C. Dunham, B.Sc., Ph.D., S.D., F.G.S.

Prof. W. T. Gordon, M.A., D.Sc., F.R.S.E.,
F.G.S.

Dr. David Williams, M.Sc., Ph.D., M.I.M.M.,
F.G.S.

Professor C. E. Tilley exhibited specimens of bustamite and bementite from Treburland manganese mine, Altarnun, Cornwall.

The following papers were then read:

1. An account of the Struy lead mines, Inverness-shire, and of wulfenite, harmotome, and other minerals which occur there: by Sir Arthur Russell.

2. Banalsite crystals from North Wales: by Dr. W. Campbell Smith (vol. 27, p. 63).

3. X-ray diffraction experiments on illite and bravaisite: by Dr. G. Nagelschmidt (vol. 27, p. 59).

4. Riebeckite from near Sultan Hamud, Kenya Colony: by Dr. W. Campbell Smith.