

PROCEEDINGS
OF THE
MINERALOGICAL SOCIETY
(1942)

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., January 22, 1942, at 2 p.m.*

Mr. ARTHUR RUSSELL, President, in the Chair.

Mr. Edward Wilfred Nuffield, Lord Rayleigh, Dr. Robert Wigglesworth, and Miss Dorothy Ethel Wisden were proposed and provisionally elected Ordinary Members of the Society. The names of certain members in arrear with their annual subscriptions were read, and that of Mr. I. G. Jardine was removed from the List of Members.

In the absence of the Treasurer, the audited accounts and balance-sheet for 1941 were presented by the General Secretary, and were approved. It was agreed to limit the expenditure on the *Magazine* for 1942 to £400. A report was received from the Editor and the position arising out of the rationing of paper by the Paper Controller was discussed.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., January 22, 1942, at 3.15 p.m.*

Mr. ARTHUR RUSSELL, President, in the Chair.

Twenty-five Members and four Visitors were present.

The elections of Mr. E. W. Nuffield, Lord Rayleigh, Dr. R. Wigglesworth, and Miss D. E. Wisden as Ordinary Members of the Society were confirmed.

The following papers were read:

1. Merwinite as an artificial mineral: by Dr. James Phemister (vol. 26, p. 225).
2. Cummingtonite and gedrite from near Strathy, north Sutherland: by Dr. R. S. Collins (vol. 26, p. 254).
3. A suite of volcanic rocks from south-west Uganda containing kalsilite (a polymorph of KAlSiO_4): by Prof. Arthur Holmes (read by Dr. James Phemister) (vol. 26, p. 197).
4. Kalsilite, a polymorph of KAlSiO_4 , from Mafuru, Uganda: by Mr. F. A. Bannister, with micro-chemical analyses by Dr. M. H. Hey (vol. 26, p. 218).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., March 19, 1942, at 3.30 p.m.*

Mr. ARTHUR RUSSELL, President, in the Chair.

The death of Sir William Henry Bragg, Ordinary Member, was reported.

Reports were received from the Treasurer and the Editor. The Treasurer gave notice that he wished to resign from that office at the next anniversary meeting. To meet the paper shortage it was agreed that more matter be printed per page of the *Magazine*. The number of reprints of each paper, except the lists of new mineral names, was limited to 25.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., March 19, 1942, at 5 p.m.*

Mr. ARTHUR RUSSELL, President, in the Chair.

Twenty Members and five Visitors were present.

A lecture entitled 'Extra reflections on X-ray photographs of crystals' was delivered by Dr. Kathleen Lonsdale.

The following papers were read:

1. Preliminary observations on the distribution of trace elements in the rocks of the Skaergaard intrusion, Greenland: by Dr. L. R. Wager and Dr. R. L. Mitchell (vol. 26, p. 283).
2. An analysis of the movements of shadow-edges on the refractometer in the case of biaxial gemstones: by Mr. E. J. Burbage and Mr. B. W. Anderson (vol. 26, p. 246).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., June 4, 1942, at 3.30 p.m.*

Mr. ARTHUR RUSSELL, President, in the Chair.

Dr. Clifford Frondel was provisionally elected an Ordinary Member of the Society.

The death of Professor H. L. Bowman was reported.

Reports were received from the Treasurer and the Editor. Without altering the size of page and of type, but by increasing the area of the letterpress from 6.6 × 4 to 7.3 × 4.5 inches and by using thin leading in place of thick leading an increase of 35% in the matter per page of the *Magazine* has been obtained.

The following dates for meetings in 1943 were approved, subject to the agreement of the Geological Society: Thursdays, January 21, March 18, June 3, November 4. [The first two of these dates had afterwards to be changed to January 28 and March 25.]

The list of Officers and Council for 1942-3 was considered. The following were to retire: President, Mr. Arthur Russell; Treasurer, Mr. F. N. Ashcroft; Ordinary Members of Council, Mr. F. A. Bannister, Dr. S. R. Nockolds, Prof. Harold Simpson, and Mr. S. I. Tomkeieff. The following were proposed for submission to the Society: as President, Mr. F. N. Ashcroft; as Treasurer, Dr. A. J. Bull; as Ordinary Members of Council, Mr. C. E. N. Bromehead, Dr. J. V. Harrison, Mr. G. E. Howling, Dr. W. Campbell Smith, and Mr. R. C. Spiller.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., June 4, 1942, at 5.30 p.m.*

Mr. ARTHUR RUSSELL, President, in the Chair.

Twenty-two Members and five Visitors were present.

The election of Dr. Clifford Frondel as an Ordinary Member of the Society was confirmed.

The following exhibits were briefly explained:

1. A direct-reading balance of the Walker type for the determination of specific gravities of rocks and minerals (Dr. A. F. Hallimond).
2. A centrifuge tube for the quantitative separation of mineral grains (Mineral Department, British Museum).
3. Polyhalite from a depth of 4500 feet in a boring at Aislaby, Sleights, near Whitby (Prof. C. E. Tilley).
4. A copy of J. J. Scheuchzer's 'Itinera Alpina', 1708, showing a figure of Alpine twisted quartz ('Schwindelsteine') (Mr. F. N. Ashcroft).

The following papers were then read:

1. Chemical data on a silica-poor argillaceous hornfels and its constituent minerals: by Dr. F. H. Stewart (read by Prof. C. E. Tilley) (vol. 26, p. 260).
2. Brammallite (sodium-illite), a new mineral from Llandebie, South Wales: by Mr. F. A. Bannister (vol. 26, p. 304).
3. The mica of certain coal-measure shales in South Wales: by Dr. G. Nagelschmidt and Mr. D. Hicks (vol. 26, p. 297).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., November 5, 1942, at 2 p.m.*

Mr. ARTHUR RUSSELL, President, in the Chair.

Messrs. Carl Moore Cook, Herbert Steffen Peiser, George Ernest Steel, and Raymond Collinge Walsh were provisionally elected Ordinary Members of the Society.

The resignation of Mr. G. W. Gray was accepted, and the election of Dr. N. B. Keevil was declared void. The death of Prof. T. L. Walker, Honorary Member, was reported.

Reports were received from the Treasurer and the Editor. Two donations of £3. 16s. 6d. each towards the cost of illustrations had been received.

The General Secretary presented the draft annual report of the Council for 1941-2, which was approved.

Mr. E. H. Beard and Dr. J. Phemister were appointed auditors for 1942.

It was found necessary to change the dates of the January and March meetings of the Society in 1943 to January 28 and March 25.

GENERAL (ANNIVERSARY) MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., November 5, 1942, at 3.15 p.m.*

Mr. ARTHUR RUSSELL, and afterwards Mr. F. N. ASHCROFT, President,
in the Chair.

Twenty-four Members and ten Visitors were present.

Dr. A. F. Hallimond and Dr. R. S. Collins were appointed as scrutineers of the voting papers for the election of Officers and Council.

The elections of Messrs. C. M. Cook, H. S. Peiser, G. E. Steel, and R. C. Walsh were confirmed.

The General Secretary read the following:

ANNUAL REPORT OF THE COUNCIL FOR 1941-2

Membership.—Including 16 Ordinary Members and 2 Honorary Members resident in enemy or enemy-occupied countries, the total membership on October 31 was 265 against 262 on October 31, 1941. Seven new members have been elected during the year. The Society has lost by death one Honorary Member, Thomas Leonard Walker, Emeritus Professor of Mineralogy in the University of Toronto, and two Ordinary Members, Prof. H. L. Bowman and Sir William H. Bragg. There have been no resignations, but the name of one member has been removed from the List of Members on account of arrears in subscription. The Membership on October 31 consisted of 5 Honorary Members and 260 Ordinary Members of whom 44 were Life Members and the remainder Annual Subscribers. Of the 260 Ordinary Members 153 were resident in Great Britain, 52 in the Dominions and Colonies, 26 in the United States of America, and 29 in other countries.

Meetings.—At the four ordinary meetings held during the session 1941-2, 14 papers were read, 3 were taken as read, a lecture was delivered, and 5 exhibits were shown. There was a considerable increase in attendance as against the previous session. The total attendance was 105 members and 18 visitors, representing an average attendance of 30 persons.

Publications.—The quarterly issue of the *Mineralogical Magazine* has been maintained despite the severe limitation of paper supplies. Three (nos. 175-177) of the usual four numbers issued during the year have contained the Proceedings for 1941 in 12 pages, 13 papers in 128 pages, with 5 plates and 36 text-figures, and 393 abstracts in 108 pages. In order to economize in space, and so offset the effect of the reduced paper supplies available, the Council decided to introduce a change with the issue of the June number. By increasing the area of print per page and reducing the leading it has been possible without changing the type or the size of page to increase the number of words per page by 35%. This alteration, together with a small special allowance of paper, has enabled the Editor to include 83% of the normal amount of matter.

Financial.—The accounts for the calendar year 1941, published in March last, showed an excess of assets (exclusive of the stock of the *Mineralogical Magazine*, certain periodicals, and the securities allocated to the Composition Fees Account) over liabilities of £1503. 18s. 8d. against £1409. 1s. 6d. at the close of 1940. The value of the securities standing in the name of the Custodian Trustee on December 31, 1941, was, General Reserve £1244. 16s. 3d., Composition Fees Account £1120. 7s. 5d.

It was clear before the beginning of 1942 that, as in 1941, strict economy would continue

to be necessary, and the limit placed on the expenditure on the *Mineralogical Magazine* for 1941 was renewed.

The cash at Bankers, in the Post Office Savings Bank, and in hand on January 1, 1942, amounted to £238. 10s. 0d. against £157. 3s. 11d. at the beginning of 1941. At that time a further fall in the receipts from the Society's publishers for sales of the *Mineralogical Magazine* was anticipated, but the actual receipts for 1942, £174. 4s. 2d., were much in excess of the expected figure, and exceeded the receipts for 1941 by £52. 0s. 0d. A decline in the receipts from Annual Subscriptions was also expected, but, apart from the increase in the amount of 'frozen' subscriptions (those due from Members resident in enemy and enemy-occupied countries), present figures show that the decline will not be as great as was expected. The amount receivable from the 213 Annual Subscribers on the Society's books on January 1, 1942, was, for 1942, £223. 13s. 0d. and as arrears £43. 11s. 9d., in all £267. 4s. 9d. Of this sum £16. 16s. 0d. for 1942 and £25. 12s. 7d. due as arrears were 'frozen'. After the deduction of these sums, the amount receivable was, for 1942, £206. 17s. 0d. and as arrears £17. 19s. 2d. Of the amount payable in respect of 1942 subscriptions £12. 14s. 9d. had been received in advance before the beginning of the year.

By October 31, £185. 17s. 0d. (including twelve payments in advance) had been received in respect of 1942 subscriptions and £6. 8s. 2d. as arrears, as against £190. 19s. 10d. and £4. 4s. 0d. respectively by that date in 1941.

The cash available for current purposes on October 31 amounted to £458. 3s. 7d. as against £341. 6s. 6d. on that date in 1941, but the figures are not strictly comparable, owing to the delay in the issue of the September number of the *Mineralogical Magazine*, the bill for which had not by then been paid. The outgoings for the remainder of the year, provided it is possible to settle the account for the December number of the *Magazine* before the close of the year, are estimated at about £264, and the receipts therefor at about £48. On this basis the cash available at the close of the year should be about £242.

General.—The arrangements referred to in the Annual Report for 1940-1 relative to the remittance of subscriptions, &c., from Members resident overseas have proved satisfactory, and no losses of remittances through enemy action have occurred.

The Society is to be congratulated on its continued prosperity.

On the proposal of Dr. A. F. Hallimond, 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 rooms was proposed by Mr. E. H. Beard, seconded by Dr. N. F. M. Henry, and carried with acclamation.

The scrutineers reported that 22 ballot papers had been received and that the following list as nominated by the Council had been approved.

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

Vice-Presidents. Prof. H. H. Read, D.Sc., F.R.S.; Dr. W. P. F. McLintock, D.Sc., F.R.S.E. 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

E. H. Beard, B.Sc.	C. E. N. Bromehead, B.A., F.G.S.
Dr. L. Hawkes, D.Sc., F.G.S.	Dr. J. V. Harrison, D.Sc., F.R.S.E., F.G.S.
Miss J. M. Sweet, B.Sc.	G. E. Howling, B.Sc.
B. W. Anderson, B.Sc., F.C.S.	Dr. W. Campbell Smith, M.C., T.D., M.A., Sc.D., F.G.S.
C. F. Davidson, D.Sc., F.R.S.E., F.G.S.	R. C. Spiller, M.A.
Dr. N. F. M. Henry, M.A., B.Sc., Ph.D.	
Prof. W. R. Jones, D.Sc., M.I.M.M., F.G.S.	

A vote of thanks to the retiring President and Ordinary Members of Council
[continued on p. lxiv]

MINERALOGICAL

ABSTRACT OF RECEIPTS AND PAYMENTS

GENERAL PUR-

	RECEIPTS	£ s. d.	£ s. d.
By Balances brought in from 1941—			
1. At Bankers on Current Account		53 2 4	
2. In Post Office Savings Bank		185 7 4	
3. In Office		0 0 4	
		238 10 0	
Entrance Fees			8 8 0
Annual Subscriptions—			
1. Current Year		177 6 3	
2. Arrears		6 8 2	
3. Advance		7 8 0	
		191 2 5	
Sale of Publications—			
1. By Publishers, April 1, 1941–March 31, 1942. Sales at subscription rate £219. 0s. 0d. and other sales £28. 4s. 0d., less trade discount and commission £64. 3s. 0d. and distribution charges £8. 16s. 10d.		174 4 2	
2. By Custodian of Stock, 1942, £60. 2s. 6d. less distribution and other charges £3. 13s. 0d. and cost of back numbers purchased £20. 12s. 2d.		35 17 4	
		210 1 6	
Advertisement Fees £8. 18s. 3d. less commission £1. 15s. 8d.			7 2 7
Interest on Investments including Income Tax recovered—			
1. £693 3½% War Loan, 1952 and after, Inscribed Stock		24 5 2	
2. £105 4% Consolidated Loan, 1957, Inscribed Stock		4 4 0	
3. £100 4% Funding Loan, 1960–90, Inscribed Stock		4 0 0	
4. £201 Metropolitan Water Board 3% 'B' Stock, Inscribed		6 0 6	
5. £89. 10s. 0d. 3% War Loan, 1955–59, Inscribed Stock		2 13 8	
		41 3 4	
Deposit Interest—			
1. Bankers		0 0 9	
2. Post Office Savings Bank		8 7 8	
		8 8 5	
Donations towards cost of Illustrations			7 13 0
Small Receipts			0 1 8
Transfers from other Accounts—			
From Composition Fees Account, being Interest on Investments			37 1 4
			£749 12 3

SOCIETY

FOR THE YEAR ENDING DECEMBER 31, 1942

POSES ACCOUNT

	PAYMENTS	£ s. d.	£ s. d.
To Printing and distributing the Mineralogical Magazine Nos. 176-179 inclusive (Oxford University Press)			
1. Printing		290 3 0	
2. Illustrations		38 4 6	
3. Authors' Separate Copies (Nos. 176, 177 and 178)		18 10 1	
4. Distribution Charges		12 12 3	
5. Payment in advance in respect of Authors' Separate Copies from No. 179		5 8 6	
		<hr/>	364 18 4
Printing and distributing Notices of Meetings and other annual Miscellaneous printing			21 1 6
Miscellaneous Printing, &c. (not annual)— Treasurer's Notices			1 10 6
Expenses at Meetings—			
1. Operator of Lantern		2 2 0	
2. Porter		1 0 0	
3. Tea		2 19 0	
		<hr/>	6 1 0
Custodian Trustee's charges			0 11 8
Care of Stock of Publications, J. Mugford, Annual Fee			1 1 0
Editor's Honorarium			50 0 0
Postage and telegrams—			
1. Hon. Secretary		1 6 0	
2. Editor (not charged)		0 0 0	
3. Hon. Treasurer		5 12 8	
		<hr/>	6 18 8
Conversion of Foreign Exchange; Exchange Control Charges, losses on exchange, &c. (debit balance)			1 3 8
Bank Charges and other small items			0 8 4
Balances December 31, 1942—			
1. At Bankers			
(a) On Current Account		26 4 2	
(b) On Deposit Account		35 0 0	
2. In Post Office Savings Bank		233 7 8	
3. In Office		1 5 9	
		<hr/>	295 17 7
			<hr/> <hr/>
			£749 12 3

Examined and compared with Vouchers and found correct.

E. H. BEARD
JAMES PHEMISTER } Auditors.
A. J. BULL, Hon. Treasurer.

January 20, 1943.

Note—A payment in advance of £70. 5s. 0d. was made to cover the cost of No. 179, the Authors' Separate Copies therefrom and those from No. 178. The account for No. 179 and that for the Authors' Separate Copies from No. 178 have since been received and the figures have been adjusted accordingly.

BALANCE

	LIABILITIES	DECEMBER
		£ s. d.
To Annual Subscriptions received in advance—		
Received in 1942 for 1943		7 8 0
Sundry Creditors		0 0 0

Excess of Assets over Liabilities	£1685 3 2
	£1692 11 2

COMPOSITION FEES ACCOUNT

	RECEIPTS	£ s. d.	£ s. d.
Composition Fees received as per last account			1223 5 0
Interest on Investments including Income Tax recovered—			
1. £992 3¼% War Loan, 1952 and after, Inscribed Stock		34 14 4	
2. £26 3% Conversion Loan, 1948-53, Inscribed Stock		0 15 6	
3. £26. 14s. 0d. Metropolitan Water Board 3% 'B' Stock, Inscribed		0 16 0	
4. £25. 18s. 0d. 3% War Loan 1955-59, Inscribed Stock		0 15 6	
		37 1 4	
			£1260 6 4

SHEET

31, 1942

By Balances—	ASSETS	£ s. d.	£ s. d.
1. At Bankers			
(a) On Current Account		26 4 2	
(b) On Deposit Account		35 0 0	
2. In Post Office Savings Bank		233 7 8	
3. In Office		1 5 9	
		295 17 7	
Sundry Debtors—			
1. Publishers (Oxford University Press)			
(a) For Sale of Publications, April 1–December 31, 1942		129 17 11	
(b) For Advertisement Fees, April 1–December 31, 1942		9 5 6	
2. Other sales of Publications		1 0 0	
		140 3 5	
Investments at Brokers' Valuation—			
1. £693 3½% War Loan, 1952 and after, Inscribed Stock at 105%		727 13 0	
2. £105 4% Consolidated Loan, 1957, Inscribed Stock at 110½% ex div.		116 0 6	
3. £100 4% Funding Loan, 1960–90, Inscribed Stock at 113½%		113 15 0	
4. £201 Metropolitan Water Board 3% 'B' Stock, Inscribed, at 97%		194 19 5	
5. £89. 10s. 0d. 3% War Loan, 1955–59, Inscribed Stock at 102¼%		91 10 3	
		1243 18 2	
Annual Subscriptions in Arrear (£69. 14s. 7d. including £42. 8s. 7d. due from enemy and enemy-occupied countries) estimated to realize			10 10 0
Entrance Fees in Arrear			2 2 0
			£1692 11 2

Note:—The value of the periodicals retained after the disposal of the Library, that of the unsold Stock of Publications, and the Securities allocated to the Commission Fees Account are not included in the above Assets.

January 20, 1943.

A. J. BULL, Hon. Treasurer.

YEAR ENDING DECEMBER 31, 1942

Investments as per last account—	PAYMENTS	£ s. d.	£ s. d.
1. £992 3½% War Loan, 1952 and after, Inscribed Stock, valued by Brokers at £1041. 12s. 0d. (105%) at cost		1144 5 6	
2. £26 3% Conversion Loan, 1948–53, Inscribed Stock, valued by Brokers at £26. 18s. 3d. (103½%) at cost		26 9 6	
3. £26. 14s. 0d. Metropolitan Water Board 3% 'B' Stock, Inscribed, valued by Brokers at £25. 18s. 0d. (97%) at cost		26 5 0	
4. £25. 18s. 0d. 3% War Loan, 1955–59, Inscribed Stock, valued by Brokers at £26. 9s. 8d. (102¼%) at cost		26 5 0	
		1223 5 0	
Income transferred to General Purposes Account			37 1 4
			£1260 6 4

Examined and compared with Vouchers and found correct.

E. H. BEARD
 JAMES PHEMISTER } Auditors.
 A. J. BULL, Hon. Treasurer.

January 20, 1943.

was proposed by Dr. W. F. P. McLintock, seconded by Dr. G. F. Herbert Smith, and carried. Mr. Arthur Russell, vacating the chair in favour of his successor, Mr. F. N. Ashcroft, paid tribute to the latter's untiring service for the Society.

Mr. Arthur Russell exhibited a banded replacement of fluorite in limestone from Co. Durham.

The following papers were then read (no. 5 being taken as read):

1. The X-ray powder pattern of α -cristobalite: by Dr. A. H. Jay (communicated by Mr. F. A. Bannister).

2. Minyulite (hydrous K-Al fluophosphate) from South Australia: by Dr. L. J. Spencer, Mr. F. A. Bannister, Dr. M. H. Hey, and Miss Hilda Bennett.

3. A scheme for the complete analysis of complex mixtures of English fluor-spars: by Mr. G. H. Osborn.

4. The chemical composition of leucoxene in Cainozoic bauxite from Boolarra, Victoria: by Dr. A. B. Edwards (communicated by Dr. F. L. Stillwell and read by the Editor) (vol. 26, p. 273).

5. The lattice parameters of α -alumina and chromic oxide: by Dr. A. H. Jay and Dr. W. T. Wilde (communicated by Mr. F. A. Bannister).
