# PROCEEDINGS

#### OF THE

### MINERALOGICAL SOCIETY

### EXCERPT MINUTES OF COUNCIL MEETING.

Held in the Apartments of the Geological Society, Burlington House, London, W., January 15, 1929, at 4 p.m.

Dr. G. T. PRIOR, F.R.S., President, in the Chair.

The death of Mr. Franklin White on October 28 was announced.
Messrs. Victor Ambrose Eyles, William Quarrier Kennedy, Archibald Gordon MacGregor, Murray Macgregor, James Ernest Richey, Max Hutchinson Hey, and Professor Leonhard Weber were provisionally elected Ordinary Members of the Society.

The Treasurer presented the audited accounts and balance-sheet for the year ending December 31, 1928, which, were approved.

The Treasurer reported on the meeting called by the British Association in January to consider the position of scientific societies in regard to income tax.

The Librarian made a report on the state of the Library of the Society and the necessity of moving it from the Mineralogical Schools at Cambridge as the room it occupied was required by the department. The following were nominated to serve on a committee 'to consider the future housing of the Library, and to report in March': the Librarian, the Secretary, the Editor, the Treasurer, Dr. G. F. Herbert Smith, and Prof. Harold Hilton.

#### GENERAL MEETING.

Held in the Apartments of the Geological Society, Burlington House, London, W., January 15, 1929, at 5.30 p.m.

Dr. G. T. PRIOR, F.R.S., President, in the Chair.

Thirty-one Members and five Visitors were present.

The elections of Messrs. V. A. Eyles, W. Q. Kennedy, A. G. MacGregor, M. Macgregor, J. E. Richey, M. H. Hey, and Prof. L. Weber as Ordinary Members of the Society were confirmed.

### XXXVIII PROCEEDINGS OF THE MINERALOGICAL SOCIETY

The following papers were read :--

- 1. The tholeite dikes of the north of England: by Prof. Arthur Holmes and Dr. H. F. Harwood (p. 1).
- 2. On the occurrence of gold at Hope's Nose, Torquay, Devonshire: by Mr. Arthur Russell (p. 159).

A paper on the crystallography of some organic compounds, by Mr. H. E. Buckley, was taken as read.

Mr. C. S. Hitchen exhibited a fine specimen from Boltsburn mine, Weardale, Co. Durham, illustrating a sequence of crystalline growths—galena, chalybite, purple fluorite, quartz, green fluorite, calcite.

### EXCERPT MINUTES OF COUNCIL MEETING.

Held in the Apartments of the Geological Society, Burlington House, London, W., March 19, 1929, at 4.30 p.m.

Dr. G. T. PRIOR, F.R.S., President, in the Chair.

The death of Mr. Bristow J. Tully on February 13 was announced.

Messrs. John Desmond Bernal, Sidney Ewart Hollingworth, Horace
Woollaston Monckton, Edward James Wayland, Alfred Kingsley
Wells, and William Dixon West were provisionally elected Ordinary
Members of the Society.

The Treasurer reported that he had had photographic reproductions made, at his own expense, of pp. 261-284 of No. 20 of the Magazine, as it was found that certain copies in libraries and in the remaining stock were wanting these sheets which were issued loose to replace pp. 261-270. He proposed to present copies to all who asked for them. It was agreed to accept this offer with thanks, and to put an advertisement in the next number of the Magazine.

À report was received from the committee appointed to consider the housing of the Society's Library and also a letter from the Trustees of the British Museum. It was decided to accept the offer of the Trustees to keep the Library temporarily at the British Museum of Natural History on condition that it be kept separate from the Library of the Mineral Department and subject to the proviso that the Trustees accept no responsibility for any loss or damage to the books while housed in the Museum. The Secretary was instructed to thank the Trustees. The resignation of Prof. A. Hutchinson from the office of Librarian, consequent on the removal of the Library from Cambridge, was accepted, and a vote of thanks to him was passed. Miss J. M. Sweet was elected as Librarian.

# GENERAL MEETING.

Held in the Apartments of the Geological Society, Burlington House, London, W., March 19, 1929, at 5.30 p.m.

Dr. G. T. Prior, F.R.S., President, in the Chair.

Twenty Members and five Visitors were present.

The elections of Messrs. J. D. Bernal, S. E. Hollingworth, H. W. Monckton, E. J. Wayland, A. K. Wells, and W. D. West as Ordinary Members of the Society were confirmed.

The following papers were read:--

- 1. The inclusions in the apatites of some igneous rocks: by Dr. A. W. Groves and Mr. A. E. Mourant (p. 92).
- 2. Calc-gneisses and cordierite-sillimanite-gneisses of Coimbatore, Madras Presidency, and of similar occurrences in India: by Mr. L. A. Narayana Iyer (p. 121).
- 3. A relation between the density and refractive index of silicate glasses, with application to the determination of imitation gemstones: by Mr. F. A. Bannister (p. 136).
  - 4. The crystallization of potash-alum: by Mr. H. E. Buckley.
- Mr. A. F. Hallimond exhibited on behalf of H.M. Geological Survey a simple form of projection microscope by E. Leitz, and showed thin sections of lapis-lazuli and other minerals therewith. Prof. W. T. Gordon exhibited fine crystals of apatite from Canada.

#### EXCERPT MINUTES OF COUNCIL MEETING.

Held in the Apartments of the Geological Society, Burlington House, London, W., June 11, 1929, at 4.15 p.m.

Dr. G. T. Prior, F.R.S., President, in the Chair.

Sir Douglas Mawson was provisionally elected an Ordinary Member of the Society.

The resignation of Mr. H. Baker was accepted.

The Treasurer reported that the Society's claim for exemption of income tax had been granted.

Prof. Hutchinson reported that the removal of the Society's Library from Cambridge was carried out on June 10, and Dr. Spencer reported that the books were now housed in the Mineral Department of the British Museum of Natural History. The rules for the Library were discussed and agreed to. It was decided to print 500 copies and circulate to all members; also to procure a rubber stamp for marking all the Society's books.

The following changes in the list of Officers and Council were proposed. Dr. G. F. Herbert Smith to be a Vice-President in place of Dr. J. W. Evans (who would remain as Foreign Secretary only). To be asked to stand for election as Ordinary Members of Council: Dr. A. Brammall and Miss M. W. Porter, as former members; Prof. W. G. Fearnsides and G. M. Davies as new members. The four senior Ordinary Members due to retire were Prof. H. L. Bowman, Prof. W. T. Gordon, Dr. H. F. Harwood, and Dr. G. F. Herbert Smith.

It was decided to hold meetings in 1930 on the following dates: Tuesdays, January 14, March 18, June 3, November 4.

Attention was drawn to the fact that Mr. S. Henson and Prof. H. Louis would complete fifty years of membership in June and October respectively. The President agreed to send to them letters of congratulation.

A letter was received from the University of Cape Town, and it was decided to ask Prof. S. J. Shand of Stellenbosch University to act as the Society's delegate at the celebration of the Centenary of the South African College on October 5.

#### GENERAL MEETING.

Held in the Apartments of the Geological Society, Burlington House, London, W., June 11, 1929, at 5.30 p.m.

Dr. G. T. Prior, F.R.S., President, in the Chair.

Twenty-three Members and five Visitors were present.

The election of Sir Douglas Mawson as an Ordinary Member of the Society was confirmed.

The following papers were read:-

- 1. Bismutotantalite, a new mineral, from Uganda: by Mr. E. J. Wayland and Dr. L. J. Spencer (p. 185).
- 2. On a partially fused quartz-felspar-rock and on glomero-granular texture: by Dr. L. Hawkes (p. 163).

- 3. The occurrence of a mineral hitherto unrecognized in the phonolites of Dunedin, New Zealand: by Dr. P. Marshall (p. 174).
- 4. The meteoric stone of Lake Brown, Western Australia: by Dr. G. T. Prior (p. 155).
- Dr. L. J. Spencer exhibited on behalf of the authors, Mr. I. de Finály and Dr. S. Koch, Fülöppite, a new Hungarian mineral of the plagionite-semseyite group (p. 179); and also klebelsbergite from Felsőbánya, recently described by Dr. V. Zsivny, who was present at the meeting.

### EXCERPT MINUTES OF COUNCIL MEETING.

Held in the Apartments of the Geological Society, Burlington House, London, W., November 5, 1929, at 4 p.m.

Dr. G. T. PRIOR, F.R.S., President, in the Chair.

The death of Mr. J. Lainson Wills on February 28 was announced. Mr. Percy Blight, Mr. George Wynter Gray, Mr. Ben Lightfoot, Dr. Louis Taylor Nel, Prof. Alexander Hamilton Phillips, Prof. Edward Sampson, and Dr. Marcel Jean Louis Solignac were provisionally elected Ordinary Members of the Society.

The Editor read a letter from Dr. Károly Zimányi of the Hungarian National Museum, Budapest, saying that owing to failing eyesight he could not continue abstracting the Hungarian literature for Mineralogical Abstracts, and that Dr. V. Zsivny would be prepared to take his place. The Editor was asked to write a letter of thanks and sympathy to Dr. Zimányi.

The Librarian reported that the Library of the Society arrived at the Natural History Museum in June, since when it has been rearranged and the periodicals catalogued. A list of the more important periodicals has been printed, together with the rules, and copies have been sent to all members. A catalogue of the separata is in course of preparation.

Mr. T. Crook and Mr. A. J. Bull were appointed auditors of the accounts for the year ending December 31, 1929.

The Annual Report of the Council, submitted by the Secretary, was read and approved.

A letter was read from the Federal Council for Chemistry, and it was decided that the Society should cease to be a constituent member of that organization. It was decided to forward a donation of £5 towards the funds of the Federal Council.

# GENERAL (ANNIVERSARY) MEETING.

Held in the Apartments of the Geological Society, Burlington House, London, W., November 5, 1929, at 5.30 p.m.

Dr. G. T. PRIOR, F.R.S., President, in the Chair.

Twenty-five Members and eight Visitors were present.

The President nominated Mr. A. F. Hallimond and Mr. C. S. Hitchen to act as scrutineers of the voting-papers for the election of Officers and Council. The scrutineers reported that seventy-seven voting-papers had been returned to the Secretary, and that the list as nominated by the Council was approved, namely:—

President. Dr. G. T. Prior, M.A., D.Sc., F.R.S.

Vice-Presidents. Sir John S. Flett, K.B.E., M.A., LL.D., D.Sc.,

F.R.S.

Dr. G. F. Herbert Smith, M.A., D.Sc., F.G.S., F.R.A.S.

Treasurer. F. N. Ashcroft, M.A., F.G.S., F.C.S.

General Secretary. W. Campbell Smith, M.C., T.D., M.A., F.G.S.

Foreign Secretary. Dr. J. W. Evans, C.B.E., D.Sc., LL.B., F.R.S.

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

# Ordinary Members of Council.

A. J. Bull, M.Sc., F.Inst.P., F.G.S. Prof. C. G. Cullis, D.Sc., F.G.S. Prof. Harold Hilton, M.A., D.Sc. Dr. W. P. F. McLintock, D.Sc., F.G.S.

Colonel N. T. Belaiew, C.B., F.C.S. Harvey Collingridge, B.Sc., F.G.S. Henry Dewey, F.G.S. Prof. Arthur Holmes, D.Sc., F.G.S. Dr. A. Brammall, Ph.D., M.Sc., F.G.S.

G. MacDonald Davies, M.Sc., F.G.S.

Prof. W. G. Fearnsides, M.A., F.G.S.

Miss W. M. Porter, B.Sc.

The elections of Mr. P. Blight, Mr. G. W. Gray, Mr. B. Lightfoot, Dr. L. T. Nel, Prof. A. H. Phillips, Prof. E. Sampson, and Dr. M. J. L. Solignac as Ordinary Members of the Society were confirmed.

The General Secretary then read the following

#### ANNUAL REPORT OF COUNCIL.

During the session 1928-9 four ordinary meetings have been held, by kind permission, in the apartments of the Geological Society, Burlington House,

London, W., at which fourteen papers were read. There were exhibits of specimens and apparatus at each of the four meetings.

Four numbers of the Journal of the Society (nos. 123-126) have been issued. No. 123 consists of indexes to vol. 21 of the Magazine and vol. 3 of the Abstracts. In these indexes, which have been prepared by the Editor, there are about 15,000 entries. Nos. 124-126 contain twelve papers occupying 162 pages with six plates, and 444 abstracts occupying 144 pages.

The balance-sheet for the year ending December 31, 1928, showed assets (exclusive of the Library and stock of the publications) £1,986 0s. 8d., with liabilities nil. The value of the stock invested in the names of the Trustees of the Society was on December 31, 1928, £1,708 8s. 6d., equivalent to £34 3s. 4½d. for each life-member.

In view of the uncertainty which had arisen as to the position of scientific societies in the matter of liability for income tax (on income derived from invested funds), the Treasurer raised the matter with the Inland Revenue authorities and prepared a statement showing the objects and scientific activities of the Society and the application of its funds. This statement was submitted to the authorities concerned, was accepted, and the continuance of exemption from tax was granted.

Seventeen new members have been elected, two ordinary members have resigned, and two have died, leaving the total membership on October 31 at 221 including eleven honorary members. The two members whose deaths have to be reported are Mr. Joseph Lainson Wills and Mr. Bristow J. Tully. Mr. Lainson Wills was the sole surviving original member of the Society; for many years he had resided in New York City, where he died on February 28, 1929.

The Society's Library, which since 1890 has been housed in the Mineralogical Museum of Cambridge University, has been moved during the year to the Mineral Department of the British Museum of Natural History, where temporary accommodation for it has been generously provided by the Trustees. The Society owes a debt of gratitude to the Department of Mineralogy at Cambridge for having provided a home for the Library for many years, and to Professor Hutchinson for the very useful work which he did while Librarian. Miss J. M. Sweet has been appointed Librarian. A printed list of the most important serials in the Library has been issued, and the books are now available for use by the members of the Society on week-days between the hours of 10 a.m. and 4.30 p.m.

The President has continued to represent the Society on the Federal Council for Chemistry, and Dr. G. F. Herbert Smith on the Miscellaneous Minerals Committee of the Mineral Resources Department of the Imperial Institute. Professor S. J. Shand, of Stellenbosch University, acted as the Society's delegate at the celebration of the Centenary of the South African College (University of Cape Town) on October 5, and on October 17 Mr. James Broadhead represented the Society at the Centenary celebrations of the Natural History Society of Northumberland, Durham, and Newcastle-upon-Tyne.

Miss G. L. Elles proposed, and Mr. M. H. Hey seconded, a vote of thanks to the Geological Society for the use of their rooms, which was carried unanimously. [continued on p. xlviii.]

# MINERALOGICAL

# ABSTRACT OF RECEIPTS AND PAYMENTS

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5. Advance .	•	•	•	•	•	•		<u>.</u>	1 -	164	11	2
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<sup>&</sup>lt;sup>1</sup> Including part payments.

# SOCIETY

# FOR THE YEAR ENDING DECEMBER 31, 1929

# POSES ACCOUNT.

PAYMENTS.				£	8.	d.	£	s.	d.
To Printing and distributing the M Magazine Nos. 124-127 inclusive									
University Press)— 1. Printing				297	2	0			
1. Printing		•	•		12	0			
3. Authors' Separate Copies .	:	:	:	27	9	6			
4. Distribution Charges				13	14	0			
5. Printed postal wrappers (renewal	of s	tock)	•	2	1	6	200	10	Δ
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1. Bye-laws and List of Members				1	17	6			
2. Banker's orders	:	:	•	î	ì	ŏ			
3. Treasurer's Compliments slips				0	18	6			
4. Income Tax Memorandum (typing	g)			1	10	0	_	_	_
Expenses at Meetings, 1929—					_		5	7	0
1. Operator of lantern				2	2	0			
2. Porter	:	:		ī	õ	ŏ			
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Editor's Honorarium, 1929	•	•			•	•	50	0	0
Postage—									
1. Hon. Secretary	•	•	•	1	1	3			
2. Editor	•	•	•	1	8	1			
3. Hon. Treasurer (not charged)	•	•	•			_	2	9	4
Bank charges and other small items.								13	7
Donations—									
1. Federal Council for Chemistry				5	0	0			
2. Cesàro Portrait Fund				2	2	0			
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# PROCEEDINGS OF THE MINERALOGICAL SOCIETY

LIBRARY FUND

DECEMBER  $\mathbf{\hat{t}}$  s. d.

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Receipts.				£	8.	d.	£	8.	d.
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LIABILITIES.
By In trust for a member . . . . . . .

Excess of Assets over Liabilities . . . .

### ACCOUNT.

ACCOUNT.				
PAYMENTS.	£	8.	d.	£ s. d.
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1. Notices of transference of Library to London 2. Library rules	. 1 . 2	7 10	6 0	
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Librarian's Honorarium, 1929	:	•		$\begin{array}{cccc} 5 & 0 & 0 \\ 0 & 8 & 2 \end{array}$
Balance, December 31, 1929—  I. At Bankers: Current Account	. 1	1	9	
2. In Office	. 0		10	1 3 7
				£24 5 3
Examined and compared with vouchers and found cor				
A. J. BULL F. A. BANN		R	${A \over I}$	Auditors.
January 6, 1930. F. N. ASHC	ROFT	, Н	on.	Treasurer.
SHEET				
31, 1929.				
Assets.	£	8.	d.	£ s. d.
Balances— I. General Purposes Account: 1. At Bankers:				
(a) Current Account	10 170	3	8	
(b) Deposit Account	0	9	9	180 13 5
II. Library Fund Account—		7	_	100 18 8
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Sale of Publications—				1 3 1
1. By Publishers, April 1 to Dec. 31, 1929 2. By custodian, 1929	100 3	17 15	8	
Investments at Broker's Valuation—				104 13 5
1. £1,580 5 % War Loan 1929–47 Inscribed Stock	1509	10	•	
at $100\frac{1}{4}$	1583		0	
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Stock at $85\frac{1}{2}$	42	15	0	1713 17 0
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The value of the Library and that of the Stock of Publications are not included in the above assets.

January 14, 1930.

F. N. ASHCROFT, Hon. Treasurer.

### xlviii Proceedings of the mineralogical society

Mr. E. Heron-Allen then exhibited a so-called meteorite from Hangehow, Chekiang, China; and Mr. J. Broadhead exhibited a specimen of witherite from Nentsbury mine, Nenthead, Cumberland.

The following papers were then read:-

- Scawtite, a new mineral from Scawt Hill, Co. Antrim: by Dr.
   E. Tilley, with a chemical analysis by Mr. M. H. Hey (p. 222).
- 2. The composition-plane of [010]-twins in the acid plagioclases: by Dr. F. Coles Phillips (p. 225).
- 3. The variation of optical properties with chemical composition in the rhodonite-bustamite series: by Mr. M. H. Hey (p. 193).
- 4. A preliminary account of some mineralogical and chemical changes induced by progressive metamorphism in the Green Bed group of the Scottish Dalradian: by Dr. F. Coles Phillips.