PROCEEDINGS

OF THE

MINERALOGICAL SOCIETY

EXCERPT MINUTES OF COUNCIL MEETING.

Held in the Apartments of the Geological Society, Burlington House, London, W., January 26, 1933, at 4.15 p.m.

Sir John S. Flett, F.R.S., President, in the Chair.

Mr. Arthur Richard Alderman, Mr. Harry Berman, Mr. Francis Ian Gregory Rawlins, and Prof. Karl Hermann Scheumann were provisionally elected Ordinary Members of the Society.

The resignation of Dr. L. T. Nel was received and accepted.

The Treasurer reported on the financial position of the Society and presented the audited accounts and Balance Sheet for the year ending December 31, 1932, which were accepted and passed (pp. l-liii).

GENERAL MEETING.

Held in the Apartments of the Geological Society, Burlington House, London, W., January 26, 1933, at 5.30 p.m.

Sir John S. Flett, F.R.S., President, in the Chair.

Thirty Members and thirteen Visitors were present.

The elections of Messrs. A. R. Alderman, H. Berman, F. I. G. Rawlins, and Prof. K. H. Scheumann as Ordinary Members of the Society were confirmed.

The following papers were then read:-

- 1. Meteoric irons and silica-glass from the meteorite craters of Henbury (Central Australia) and Wabar (Arabia): by Dr. L. J. Spencer (p. 387).
- 2. Garnet in the Dartmoor granite: its petrogenetic significance: by Dr. A. Brammall and Mr. S. Bracewell.
- 3. The identity of mottramite and psittacinite with cupriferous descloizite: by Mr. F. A. Bannister (p. 376).

EXCERPT MINUTES OF COUNCIL MEETING.

Held in the Apartments of the Geological Society, Burlington House, London, W., March 23, 1933, at 4.30 p.m.

Sir John S. Flett, F.R.S., President, in the Chair.

The deaths were reported of Prof. Friedrich Rinne on March 12, 1933, an Honorary Member since 1926; and of Mr. Malcolm Roberts on January 13, 1933.

Dr. Gilbert Wilson was provisionally elected an Ordinary Member of the Society.

A letter was received from the XVIth Session of the International Geological Congress asking for delegates to be appointed, and it was decided to ask the President, Prof. C. Gilbert Cullis, and the General Secretary to act as representatives of the Society at the meeting to be held in Washington.

GENERAL MEETING.

Held in the Apartments of the Geological Society, Burlington House, London, W., March 23, 1933, at 5.30 p.m.

Sir John S. Flett, F.R.S., President, in the Chair.

Sixteen Members and two Visitors were present.

The election of Dr. Gilbert Wilson as an Ordinary Member of the Society was confirmed.

The following papers were then read:-

- 1. Biographical notices of mineralogists recently deceased (fifth series): by Dr. L. J. Spencer (p. 337).
- 2. A possible source of error in the determination of symmetry from optical extinction-angles: by Mr. M. H. Hey (p. 367).
- 3. Studies on the zeolites. Part V. Mesolite: by Mr. M. H. Hey (with X-ray measurements by Mr. F. A. Bannister) (p. 421).
 - 4. The dehydration of thomsonite: by Dr. A. E. Mourant (p. 371).
- 5. Note on the occurrence of piedmontite in quartz-muscovite-schist from the Shotover valley, western Otago, New Zealand: by Dr. F. J. Turner (p. 416).

EXCERPT MINUTES OF COUNCIL MEETING.

Held in the Apartments of the Geological Society, Burlington House, London, W., June 15, 1933, at 4.15 p.m.

Sir John S. Flett, F.R.S., President, in the Chair.

The death of Prof. Victor Goldschmidt on May 10, 1933, was announced.

Dr. Stephen Robert Nockolds and Prof. Kunikatsu Seto were provisionally elected Ordinary Members of the Society.

The dates of meetings for 1934 were discussed, and it was decided that these should be held on the following Thursdays:—January 25, March 15. June 14, and November 8.

The list of Officers and Members of Council to be submitted to the Members for election at the next Anniversary Meeting was discussed. Sir John S. Flett and Prof. C. Gilbert Cullis were retiring from the offices of President and Vice-President respectively, and the following Ordinary Members of Council are due to retire: Dr. A. F. Hallimond, Sir Albert E. Kitson, Prof. W. L. Bragg, and Prof. H. H. Read. The President proposed that Sir Thomas H. Holland be asked to stand for election as President, and Sir William H. Bragg as Vice-President. The following were proposed as ordinary Members of Council: previous members, Mr. T. Crook and Dr. W. F. P. Mc-Lintock; new members, Dr. A. K. Wells and Mr. L. R. Wager.

Vacancies in the list of Honorary Members were discussed, and a voting list was drawn up.

Amongst letters received was one from the Geological Society of London, asking for a contribution towards a plaque to be placed on the house at 14 Buckingham Street, London, W. 1, in commemoration of William Hyde Wollaston, F.R.S., who lived there from 1801 to 1825. The Treasurer proposed a donation of two guineas, which was agreed.

The Secretary reported that a very successful excursion was made to Swallowfield Park to see Mr. Arthur Russell's collection of British minerals. This was attended by twenty-four members and guests, and the thanks of the Society were conveyed to Sir Charles and Mr. Arthur Russell.

GENERAL MEETING.

Held in the Apartments of the Geological Society, Burlington House, London, W., June 15, 1933, at 5.30 p.m.

Sir John S. Flett, F.R.S., President, in the Chair.

Thirty Members and three Visitors were present.

The elections of Dr. S. R. Nockolds and Prof K. Seto as Ordinary Members of the Society were confirmed.

The following papers were then read:-

- 1. Minute spheres of nickel-iron in the silica-glass from the meteorite craters at Wabar, Arabia: by Dr. L. J. Spencer (p. 387).
- 2. Portlandite, a new mineral from Scawt Hill, Co. Antrim: by Prof. C. E. Tilley (p. 419).
- 3. Clay minerals and bauxite minerals. A review and classification based on statistical methods: by Mr. S. I. Tomkeieff (p. 463).
- 4. Studies on the zeolites. Part VI. Edingtonite: by Mr. M. H. Hey (with X-ray measurements by Mr. F. A. Bannister) (p. 483).
- 5. On the accuracy of mineralogical measurements: by Mr. M. H. Hey (p. 495).
- 6. On a new barium plagioclase felspar: by Dr. S. R. Nockolds and Dr. E. G. Zies (p. 448).

EXCERPT MINUTES OF COUNCIL MEETING.

Held in the Apartments of the Geological Society, Burlington House, London, W., November 9, 1933, at 4 p.m.

Sir John S. Flett, F.R.S., President, in the Chair.

Mr. Archibald Thomas John Dollar, Lady Agnes Gibbs, Sir Robert Abbot Hadfield, Bart., Dr. Bernard Howard Knight, Dr. John Armstrong Smythe, and Mr. George Vaux were provisionally elected Ordinary Members of the Society.

The death of Dr. F. R. Van Horn on August 1, 1933, was announced.

The General Secretary read the draft Annual Report, which after amendment was approved.

Vacancies in the list of Honorary Members were considered. On a ballot being taken Prof. V. M. Goldschmidt and Prof. P. Niggli were selected subject to confirmation at the General Meeting.

GENERAL (ANNIVERSARY) MEETING.

Held in the Apartments of the Geological Society, Burlington House, London, W., November 9, 1933, at 5.30 p.m.

Sir John S. Flett, F.R.S., and afterwards Sir Thomas H. Holland, F.R.S., President, in the Chair.

Thirty-six Members and seven Visitors were present.

The chairman nominated Mr. A. Broughton Edge and Dr. W. Q. Kennedy to act as scrutineers of the voting-papers for the election of Officers and Council.

The elections of Mr. A. T. J. Dollar, Lady Agnes Gibbs, Sir Robert A. Hadfield, Bart., Dr. B. H. Knight. Dr. J. A. Smythe, and Mr. George Vaux as Ordinary Members of the Society were confirmed.

The elections of Prof. Victor Moritz Goldschmidt of Göttingen and Prof. Paul Niggli of Zürich as Honorary Members were confirmed.

The General Secretary then read the following:—

Annual Report of Council for 1933.

During the session 1932–33 four ordinary meetings have been held and twenty-three papers have been read. Four numbers (139–142) of the Mineralogical Magazine have been issued containing eighteen papers, occupying 214 pages and illustrated with 33 text-figures and 12 plates. These numbers also include 673 abstracts occupying 192 pages.

The Council regrets to announce the death of two Honorary Members. Prof. Friedrich Rinne and Prof. Victor Goldschmidt, and of two ordinary members, Mr. Malcolm Roberts and Dr. Frank Robertson Van Horn. Prof. Victor Goldschmidt, who was in his eighty-first year, was also an ordinary life-member of the Society.

One ordinary member has resigned and eleven have been elected, bringing the total membership on October 31, 1933, to 228, including 7 Honorary Members.

The accounts for the year ending December 31, 1932, showed an excess of assets (exclusive of the Library and stock of publications and Composition Fees Account) over liabilities of £1,146 10s. 10d. The value of the stock invested in the names of the Trustees on December 31, 1932, General Reserve £852 6s. 6d., Composition Fees Account £962 16s. 3d.

The Society's Library has received during the year 147 parts of periodicals and 2 separate copies of papers. The facilities afforded by the Library seem to be little appreciated. Only 12 volumes have been borrowed during the year.

The Nomenclature Committee appointed on November 4, 1930, to co-operate with the Nomenclature Committee of the Mineralogical Society of America held one meeting in London on June 15. Prof. C. G. Cullis, Prof. O. T. Jones, and the General Secretary were co-opted as additional members. The President, the General Secretary, and Prof. Cullis were delegates of the Society to the 16th International Geological Congress held in Washington, D.C., in July, and during

the Congress attended a meeting of the Nomenclature Committee of the Mineralogical Society of America and achieved considerable progress towards agreement. They reported to the Nomenclature Committee of our Society at a meeting held on November 9 in London.

On May 20, 24 members and guests visited Swallowfield Park, near Reading, at the invitation of Sir Charles and Mr. Arthur Russell, and spent a most interesting afternoon inspecting Mr. Russell's unrivalled collection of British minerals.

Mr. S. E. Hollingworth proposed that the Annual Report be adopted. This was seconded by Dr. Gilbert Wilson and carried unanimously.

The scrutineers reported that 68 voting papers for the Officers and Council had been received and that the list nominated by the Council had been approved. The President declared these Officers and Ordinary Members of Council elected for the ensuing year:—

President. Sir Thomas H. Holland, K.C.S.I., K.C.I.E., D.Sc., F.R.S.

Vice-Presidents. Arthur Russell, M.B.E.

Sir William H. Bragg, O.M., K.B.E., M.A., D.Sc., F.R.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. Prof. A. Hutchinson, O.B.E., M.A., Ph.D., F.R.S.

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

Ordinary Members of Council.

F. A. Bannister, M.A. Prof. C. E. Tilley, Ph.D., B.Sc.,

A.I.C., F.G.S.

Prof. P. G. H. Boswell, O.B.E. D.Sc., A.R.C.S., F.R.S.

Prof. H. L. Bowman, M.A., D.Sc., F.G.S.

Dr. L. Hawkes, D.Sc., F.G.S.

Dr. W. R. Jones, D.Sc., F.G.S.

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

J. B. Scrivenor, I.S.O., M.A., F.G.S.

T. Crook, A.R.C.S.I., F.G.S.

Dr. W. F. P. McLintock, D.Sc., F.G.S.

L. R. Wager, B.A., B.Sc., F.G.S. Dr. A. K. Wells, D.Sc., F.G.S.

Sir John Flett then moved that Sir Thomas Holland take the chair.

A vote of thanks to Sir John Flett, retiring President, Prof. C. G. Cullis, retiring Vice-President, and to Sir Albert Kitson, Prof. W. L. Bragg, Dr. A. F. Hallimond, and Prof. H. H. Read, retiring Ordinary

Members of Council was proposed by Mr. M. H. Hey, seconded by Dr. A. W. Groves, and carried unanimously.

A vote of thanks to the Geological Society for the use of their rooms was proposed, seconded, and carried with acclamation.

The new President reminded the members that this year 1933 was the fiftieth anniversary of the amalgamation of the Crystallological Society and the Mineralogical Society, and that it was a subject for congratulation that the Society had among its members one, Sir Henry Miers, who was a member of the Crystallological Society, and one member of the Mineralogical Society, Prof. Henry Louis, elected in 1879 before the two societies came together.

Dr. Stanley Smith exhibited a model for demonstrating the relationship of the systems of symmetry.

The following papers were then read:-

- 1. Shower of meteoric stones in the neighbourhood of the village Kuznetzovo, West Siberia, on May 26, 1932: by Prof. P. L. Dravert (of Omsk), read by Dr. L. J. Spencer (p. 509).
- 2. Silica-glass from the Libyan Desert: by Mr. P. A. Clayton and Dr. L. J. Spencer (p. 501).
- 3. Fictitious occurrences of iron silicide (ferrosilicon): by Dr. L. J. Spencer.
- 4. Notes on the occurrence of wulfenite at Brandy Gill, Carrock Fell, Troutbeck, Cumberland; and of leadhillite at Drumruck mine, Gatehouse of Fleet, Kirkcudbrightshire: by Mr. Arthur Russell.
- 5. On the occurrence of harmotome at several new localities in the British Isles: by Mr. Arthur Russell.
- 6. Some relationships between the reflectivities of sulphide oreminerals: by Dr. F. Coles Phillips (p. 458).
- 7. A critical list of the specific gravities of the sulphides and allied ore-minerals: by Dr. F. Coles Phillips.
- 8. Progressive metasomatism in the flint nodules of the Scawt Hill contact-zone: by Prof. C. E. Tilley and Mr. A. R. Alderman (p. 513).

MINERALOGICAL

ABSTRACT OF RECEIPTS AND PAYMENTS

	GENERAL			PU	R-			
RECEIPTS.	£	8.	d.	£	8.	d.		
By Balances brought forward from 1932—1. At Bankers:								
(a) Current Account	18 185		$\frac{5}{0}$					
2. In Office	0	2	4	203	7	9		
Entrance Fees		•	•		12	0		
Annual Subscriptions—								
1. Current year	166	19	0					
Z. Arrears	8	8	0					
3. Advance	8	11	0	183	18	0		
Sale of Publications—				100	-0	•		
 By Publishers, April 1, 1932-March 31, 1933. Sales at subscription rate £222 0s. 0d. and other sales £29 18s. 0d., less trade discount and commission £65 9s. 4d., and distribution charges £14 0s. 7d. By Custodian of Stock, 1933. £15 19s. 0d., less distribution charges £1 4s. 2d., and cost 								
of back numbers purchased £0 16s. $4d$.	13	18	6	186	6	7		
Advertisement Fees, £17 18s. $1d$., less commission £3 11s. $7d$.				14	6	6		
Interest on Investments as received—								
1. £640 3½ % War Loan 1952, Inscribed Stock 2. £105 4 % Consolidated Loan 1957, Inscribed	22	8	0					
Stock	4	4	0					
Stock	4	0	0	30	19	0		
Deposit Interest	•			1	13	7 6		
Transfers from other accounts— From Composition Fees Account, being In-								
terest on Investments				34	2	6		

£667 0 5

SOCIETY

FOR THE YEAR ENDING DECEMBER 30, 1933

POSES ACCOUNT.

PAYMENTS.		£ s.	d.	£	8.	d.
To Printing and distributing the Minerald Magazine Nos. 140-143 inclusive (O University Press)—						
1. Printing	. 9	266 1				
2. Illustrations	•		$\begin{array}{ccc} 9 & 0 \\ 6 & 6 \end{array}$			
4. Distribution Charges	•	$\frac{24}{12}$ 1				
5. Postal Wrappers (renewal of stock) .		2		0.40	10	c
Printing and distributing notices of Meeting other annual miscellaneous printing	s and			$\frac{342}{15}$	10	6
Miscellaneous Printing, &c. (not annual)-						
I. Treasurer's Notices		0.1	6 6			
2. Notices of Excursion, printing and post	age .	2		_		
Expenses at Meetings	-			2	16	6
1. Operator of lantern		2	2 0			
2. Porter		1				
3. Tea		2 1	0 6	_	10	
~	1.00		•		12	6
Care of Stock of Publications, J. Mugford, A Editor's Honorarium	nnual Fee	•	•	1 50	1	0
Librarian's Honorarium		:		5	ŏ	ŏ
Stationery				2	8	6
Postage—						
1. Hon. Secretary		1	3 0			
2. Editor		0 1				
3. Librarian		0				
4. Hon. Treasurer (not charged)	•	0	0 0		19	9
Donation towards Memorial Plaque in mem				_		_
W. H. Wollaston, F.R.S		•		2	$\frac{2}{10}$	0
Bank charges, cheque book, and other sman	items .	•	•	U	10	*
Balance, December 30, 1933—						
1. At Bankers:		10.1				
(a) Current Account (b) Deposit Account	•	$\begin{array}{c} 16 \ 1 \\ 220 \end{array}$				
2. In Office	• •	0 1	-			
2. In Onice	• •			237	7	4
				£667	0	5
Examined and compared with vouchers and	found cor	rect.				
*	HALLIM)	A 314		
	AWKES			Auditor	s.	
January 8, 1934. F. N.	ASHCRO	FT, I	Ion.	Treasu	rer.	

BALANCE

							D ЕСЕМВЕТ			
Liabiliti	ES.			£	8.	d.	£	s.	d.	
To Annual Subscriptions received	in a	dvano	e							
1. Received in 1932 for 1934				0	14	3				
2. Received in 1933 for 1934				7	10	0				
3. Received in 1933 for 1935				1	1	0				
						_	9	5	3	
Sundry Creditors—										
Messrs. Wightman & Co							2	14	6	

Excess of Assets over Liabilities				. 1151	11
				£1163	

COMPOSITION FEES ACCOUNT

Receipts.	£	8.	d.	£	8.	d.
By Composition Fees received as per last Account.	1128					
Composition Fees received during year	10	10		1139	5	0
lncome—						
Interest on Investments as received—£975 $3\frac{1}{2}$ % War Loan 1952, Inscribed Stock .				34	2	6
				£1173	7	6

SHEET

30.	1933.
vv.	TOOO

Assets.	£	8.	d.	£	8.	d.
By Balances—						
General Purposes Account: 1. At Bankers:						
$\begin{array}{cccc} (a) \ \text{Current Account} & . & . & . & . \\ (b) \ \text{Deposit Account} & . & . & . & . \\ \end{array}$	$\begin{array}{c} 16 \\ 220 \end{array}$	$\begin{array}{c} 14 \\ 0 \end{array}$	$\frac{3}{0}$			
2. In Office	_0	13	1	237	7	4
Sundry Debtors						_
1. Publishers, (Oxford University Press):						
(a) For sales of Publications, April 1–Dec. 30, 1933	25	0	1			
(b) For advertisement Fees, April 1-Dec. 30, 1933	17	11	0			
2. For other sales	0	12	0	_	_	
Investments at Broker's Valuation—				. 43	3	1
1. £640 3½ % War Loan 1952, Inscribed Stock at 101½ %	648	0	0			
scribed Stock at 109½ % 'ex' div 3. £100 4 % Funding Loan 1960-90, In-	114	14	3			
scribed Stock at 112%	112	0	0			_
Annual Subscriptions in Appear actions to I to meeting				$\begin{array}{c} 874 \\ 6 \end{array}$	14	$\frac{3}{0}$
Annual Subscriptions in Arrear, estimated to realize Entrance Fees in Arrear	•	•	•	2	2	0
	•	•	•			
				£1163	12	8

Note.—The value of the Library, that of the unsold Stock of Publications, and the cash at Bankers and Securities allocated to the Composition Fees Account are not included in the above assets.

January 16, 1934.

F. N. ASHCROFT, Hon. Treasurer.

YEAR ENDING DECEMBER 30, 1933.

,							
PAYMENTS.		£	8.	d.	£	8.	d.
To Investments as per last Account—							
£975 3½ % War Loan 1952, Inscribe	d Stock						
valued by Brokers at £987 $3s$. $9d$. (1)	$01\frac{1}{2}\%$).	1128	15	0			
Investments made during year	4 /0/	0	0	0			
5 v					1128		
Income transferred to General Purposes At Bankers, Dec. 30, 1933—		•	•		34	2	6
Current Account					10	10	0
					£1173		
Examined and compared with Vouchers	and found	correc	t.			=	
	F. HALL HAWKE N. ASHCI						
-		,					