

The Mineralogical Society's Centenary Year, 1976

PREPARATIONS for the Centenary began in 1972 under the Chairmanship of the then President, the late Dr. R. W. B. Nurse, and continued through the term of office of his successor, Prof. E. A. Vincent. It was an extremely difficult time for raising money, with an alarming rate of inflation and grave financial uncertainty in the country. An appeal to numerous firms and organizations engendered much goodwill, but the actual cash response was understandably modest. In these circumstances, the generosity of the following donors is all the more appreciated, and the Society extends to all of them its grateful thanks:

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The total sum resulting from the appeal was £1255, which was of invaluable help in financing the Centenary celebrations. It is right to acknowledge, however, that it would have been impossible to mark the occasion in a fit and proper fashion without the generous support of the Royal Society, which invited our Society to join it in organizing the two-day Discussion Meeting described below. The Royal Society provided travel grants for the overseas speakers at this meeting and is publishing the proceedings in full (other than the Presidential Address, printed herein, and Hallimond Lecture, to appear in a later issue). Mention must also be made of a generous gift of \$400 from a Life Member, Mrs. Katharine Mather of Vicksburg, Mississippi, which helped to meet the cost of printing Dr. Campbell Smith's History of the Society (*Mineral. Mag.* **40**, 429-39), which was issued as a separate to those attending the celebrations in April.

The actual centenary of the inauguration of the Society at the Scientific Club, 7 Savile Row, fell on Tuesday, 3 February; but February is an awkward month for conferences, so the occasion was marked by a special Anniversary Meeting, held at the British Museum (Natural History). After the official business, which included Professor Vincent handing over as President to Sir Kingsley Dunham, the evening took on a domestic flavour with Dr. Campbell Smith, our Senior Past-President and a veteran of the 1926 Jubilee celebrations, drawing on his intimate knowledge of the archives to reveal the teething troubles of the Society in its early years. He was followed by Dr. Hey, also a Past-President, noting the landmarks in the century-long development of the Magazine, which he himself had edited for 20 years; and by Dr. J. R. Cann enlarging on its very first paper, surprisingly enough one by Marshall Hall on the still pertinent topic of ocean-floor basalt. Lastly, Mr. P. G. Embrey introduced the diverse and fascinating exhibits that were on view during an excellent buffet supper. Among those present at this meeting was Miss Mary Porter, co-equal senior Member with Dr. Campbell Smith, both having been elected in 1910.

The principal Centenary celebrations took place from Tuesday, 6 to Thursday, 8 April and were centred on the Royal Society's apartments at Carlton House Terrace. The Clay

Minerals Group held its annual Spring Meeting on the Tuesday, beginning with a historical review by Mr. R. H. S. Robertson of the development of clay research in Great Britain. He was followed by Prof. G. W. Brindley, Founder-Chairman of the Group and now an Honorary Member of the Society, who spoke on current and future trends in clay mineralogy. Other contributors were Dr. S. W. Bailey (on current crystallographic work on phyllosilicates), Dr. R. C. Mackenzie (on inorganic gels in soils), Dr. A. C. D. Newman (on the structure of Al-montmorillonites), Dr. C. V. Jeans (on clay mineral/lithological relationships), and Dr. W. B. Jepson and Mr. J. H. P. Watson (on magnetic separation of kaolins). A display had been assembled by the Secretary, Mr. J. A. Bain, of publications, records, and other mementoes of the Group's 29 years of existence.

The Wednesday and Thursday were taken up with the Discussion Meeting held under the auspices of the Royal Society, with the over-all theme *Mineralogy: Towards the Twenty-first Century*, and including the Presidential Address and the Hallimond Lecture. About 200 people attended. To set the scene, as it were, the President had been prevailed upon to review progress in mineralogy—in the widest sense—over the 50 years since 1926, thus bringing up to date the Jubilee Address of his predecessor Prof. W. W. Watts. This formidable commission he discharged with his inimitable flair. But so great have been the expansion and diversification of the science in this last half-century, that such a task of comprehension and compression was only possible with the ready cooperation of some 30 Members, who generously provided briefs on their own particular subjects. For the Centenary Hallimond Lecture, presented the following morning with consummate skill, Prof. J. V. Smith took as his title *Mineralogy of the Planets: a voyage in space and time*, a topic admirably in keeping with the theme of the meeting. The Presidential Address is printed in this number of the Magazine, and the Hallimond Lecture will appear in a later number.

The Discussion Meeting could not cover every facet of mineralogy in the time available, but the programme of six sessions summarized below was designed to be as representative as possible. Each session lasted 1½ to 2 hours. Papers by more than one author were presented by the first-named; the titles given are those of the published papers.

Marine mineralogy (Chairman: Dr. S. H. U. Bowie)

Composition of silica phases in deep-sea cherts and porcelanites, by Dr. S. E. Calvert.

Low-temperature metasomatic garnets in marine sediments, by Mr. A. J. Easton, Dr. D. Hamilton, Dr. D. R. C. Kempe, and Dr. S. M. F. Sheppard.

Authigenic silicate minerals and the magnesium budget in the oceans, by Dr. H. Elderfield.

The mineralogy and crystal chemistry of deep sea manganese nodules; a polymetallic resource of the twenty-first century, by Prof. R. G. Burns and Dr. Virginia M. Burns.

Experimental petrology (Chairman: Prof. W. S. MacKenzie)

Reconstruction of rock coding paths from kinetic data on the Fe²⁺, Mg exchange reaction in anthophyllite, by Prof. F. A. Seifert.

Problems of iron gain and loss during experimentation on natural rocks; the experimental crystallization of five lunar basalts at low pressures, by Prof. M. J. O'Hara and Dr. D. J. Humphries.

The activities of components in clinopyroxene and garnet solid solutions and their application to rocks, by Dr. B. J. Wood.

Determination of specific component activities in tholeiitic melts: principles and techniques, by Dr. J. Nolan.

Geochemistry (Chairman: Prof. D. K. Bailey)

Sedimentary geochemistry: environments and processes dominated by involvement of an aqueous phase, by Dr. C. D. Curtis.

High-temperature properties of silicate liquids: application to the equilibrium and ascent of basic magma, by Prof. I. S. E. Carmichael, Dr. J. W. Nicholls, Dr. F. J. Spera, Dr. B. J. Wood, and Dr. S. A. Nelson.

Extraterrestrial mineralogy (Chairman: Dr. S. O. Agrell)

Two major igneous events in the evolution of the Moon, by Prof. G. M. Brown.

The mineralogy of iron meteorites, by Prof. V. F. Buchwald.

Electron microscopy of some stony meteorites, by Dr. J. R. Ashworth and Dr. D. J. Barber.

Mineralogical aspects of ores (Chairman: Mr. R. Phillips)

Sediments, ores, and metamorphism: new aspects, by Prof. E. F. Stumpfl.

Uranium mineralization of the Witwatersrand and Dominion Reef Systems, by Mr. P. R. Simpson, Mr. J. F. W. Bowles, Mr. C. C. Rundle, Dr. T. J. Shepherd, and Dr. N. J. Snelling. (Note: this is published as three separate papers).

Environmental mineralogy (Chairman: Prof. R. A. Howie)

Medicine and mineralogy, by Dr. J. C. Gilson.

Nature and range of mineral dusts in the environment, by Prof. D. R. Bowes, Prof. A. M. Langer, and Dr. A. N. Rohl.

Nature and paragenesis of asbestos minerals, by Dr. A. A. Hodgson.

The use of an analytical electron microscope in the analysis of mineral dusts, by Dr. F. D. Pooley.

These papers, together with the resulting discussions, are being published by the Royal Society, both in its *Philosophical Transactions, Series A*, and as a hard-bound book.

The first of three social events of the April celebrations was a reception on the Tuesday evening in the Mineral Gallery of the British Museum (Natural History) at the invitation of Sir Frank Claringbull, Director of the Museum and a Past-President of the Society. He and Dr. A. C. Bishop, Keeper of Minerals, received some 150 guests, amongst whom were Mr. Philip Spencer, Mrs. Penelope Barman, and Mrs. Sylvia Anderson, all children of the late Dr. L. J. Spencer, Editor of the Magazine from 1900 to 1955.

The Centenary Dinner was held on the Wednesday in the Geological Museum, by kind permission of the Director, Dr. Austin Woodland, and the Curator, Mr. F. W. Dunning. After being received by the President and Lady Dunham and by Dr. and Mrs. Woodland, the 132 diners were seated at thirteen round tables arranged in the gem collection area. At the conclusion of the dinner, Prof. J. V. Smith proposed the health of the Society, to which the President replied. Amongst those present from this country were six Past-Presidents: Dr. Campbell Smith, Dr. James Phemister, Prof. Hawkes, Sir Frank Claringbull, Dr. Hey, and Prof. Vincent. Members and guests from overseas included Prof. Stumpfl from Austria, Prof. and Mrs. van Tassel from Belgium, Prof. and Mrs. Buchwald and Dr. J. R. Wilson from Denmark, Prof. W. L. Brown, Dr. Calas, Dr. Cesbron, Dr. Girault, and Dr. Roux from France, Prof. and Mrs. Carapezza from Italy, Dr. Iiyama from Japan, Prof. and Mrs. Seifert and Dr. Pentinghaus from Germany, Dr. Kühnel and Dr. van der Veen from the Netherlands, Dr. Ann-Marie Brusewitz from Sweden, Dr. Herak from Yugoslavia, and from the United States Dr. and Mrs. S. W. Bailey, Prof. Brindley, Prof. Burns, Prof. Carmichael, Prof. and Mrs.

Frueh, and Prof. J. V. Smith. Messages of goodwill were received from, amongst others, the Mineralogical Society of America, the Belgian Mineralogical Union, the (British) Palaeontographical Society, the Italian Society of Mineralogy & Petrology, the Swiss Mineralogical & Petrographical Society, the Mineralogical Society of the U.S.S.R. (both from its headquarters in Leningrad and its Moscow branch), and from the Danish Geological and Metallurgical Societies, on whose behalf Prof. Buchwald presented a handsome plate of the Cape York iron meteorite.

Before dispersing at the conclusion of the Discussion Meeting on the Thursday, participants attended an informal reception at the invitation of the President and Council of the Royal Society. On the following day, some twenty participants availed themselves of the opportunity to visit the famous Whitefriars Glassworks and the alumina-ceramic factory of Andermann & Ryder; the visits were arranged by Dr. P. S. Rogers. During the meetings at Carlton House Terrace, Mrs. Horne escorted a few accompanying members to places of special interest in the City, West End, and Greenwich.

Some mention must be made of subsequent meetings to complete this account of the Society's Centenary Year. A reunion meeting with the Société française de Minéralogie et de Cristallographie was held at Cambridge on Saturday, 19 June. It was arranged by Dr. N. F. M. Henry and was attended by forty-three British and seventeen French, including accompanying members. Twelve papers were presented on various aspects of *Experimental Mineralogy*. The scientific sessions took place in the Department of Mineralogy & Petrology, where the Russell Society (from Leicester) had mounted a display of over 120 fine specimens of calcite, baryte, and fluorite from British localities. Most participants stayed overnight at St. John's College and were entertained to a memorable dinner in Hall, where toasts in the spirit of the Entente cordiale were exchanged between Monsieur Georges Deicha, Vice-President of the S.F.M.C., and Sir Kingsley Dunham. A reception offered by the College before dinner provided a link with the early days of the Society, for the guests had the honour of being received by Sir Harold Jeffreys, the doyen of British geophysicists, whose College Fellowship overlapped that of T. G. Bonney, one of our Founder-Members and the President in 1883-5.

General meetings of the Society on 3 June and 11 November were respectively on *Volatiles* and the *Automation of Mineralogical Measurements*, themes excluded through lack of time from the Royal Society programme. Each of the three Groups held one further meeting during the year on the following themes: *Advances in Analytical Techniques* (Clay Minerals Group, 12 November, at Rothamsted Experimental Station); *Archaean Geochemistry* (Geochemistry Group, 23 November, a joint meeting); and *Current Research on Fluid Inclusions and on Mineral Deposits* (Applied Mineralogy Group, 14-17 December, a joint meeting at Durham).

The Society was pleased to accept a generous invitation from the Geological Society to participate in a whole-day meeting on 24 November at its apartments in Burlington House. This was arranged on behalf of both Societies by Dr. B. F. Windley assisted by Dr. J. Tarney. With the theme—the *Crust-Mantle Boundary*—stirring memories of that very first paper on ocean-floor basalt, the meeting was a fitting conclusion to our Centenary celebrations. The Geological Society financed the overseas speakers and plans to publish the proceedings in a special issue of its Journal.

Some 124 contributions were presented during the Centenary Year at the ten meetings chronicled above. This brief record may indicate to our successors what sort of topics were to the fore at this milestone in the life of the Mineralogical Society, which exists not so much for the benefit of its Members, but rather in the words of its constitution, 'to advance the knowledge of Mineralogy'.

J.E.T.H.