BOOK REVIEW

NOMOGRAMME ZUM MINERALBESTIMMEN MIT RÖNTGENSTRAHLEN. TEIL I. MARTIN MEHMEL. 13 plates. Deutschen Mineralogischen Gesellschaft, *Berlin*, **1939,** Price 5.0 R.M.

These nomograms are the first of a series planned to cover the entire field of minerals, and include the following: quartz, diaspore, hydrargillite, böhmite, halite, calcite, aragonite, dolomite, augite, hornblende, muscovite, biotite, glauconite, kaolinite, halloysite, metahalloysite, montmorillonite and feldspar. The nomograms are charts on which are plotted log. sin α (α of the Bragg equation) for the lines of the powder photographs of each mineral. Four degrees of relative intensity are indicated by the height of the lines. The charts are printed on graph paper, and are perforated so that they can be separated and used individually or mounted.

Separate charts are given for each mineral for the K_α radiation of Cu, Cr and Fe. Since the values of sin α have the same ratios for the different wave-lengths, their plotted logarithms are exactly superposable, differing only in their location on the scale. It might be pointed out that the interplanar spacings for each line of the powder pattern are the reciprocals of sin α, and hence the logarithms of these spacings, in reverse order, are also superposable on any of the three charts, providing they are plotted on the given scale.

L. S. RAMSDELL

PROCEEDINGS OF SOCIETIES

MINERALOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND

Officers and Council for 1940. President, Mr. Arthur Russell; Vice-Presidents, Prof. C. E. Tilley, Dr. W. Campbell Smith; Treasurer, Mr. F. N. Ashcroft; General Secretary, Dr. G. F. Claringbull; Foreign Secretary, Sir Thomas H. Holland; Editor of the Journal, Dr. L. J. Spencer; Ordinary members of Council, Dr. G. F. Herbert Smith, Dr. F. C. Phillips, Sir Lewis L. Fermor, Prof. H. L. Bowman, Dr. H. F. Harwood, Mr. G. E. Howling, Dr. W. F. P. McLintock, Dr. J. Phemister, Prof. H. Simpson, Mr. F. A. Bannister, Mr. S. I. Tomkeieff, Dr. S. R. Nockolds.

At the Anniversary Meeting on November 9th, Mr. Arthur Russell, President, in the Chair, the following papers were read:—

(1) *Crystallography of aramayoite.* By Dr. HARRY BERMAN and Mr. C. W. WOLFE.

Crystals of aramayoite adequate for morphological measurement were found on specimens from the type locality in Bolivia. The considerable number of forms on the crystals leads to an obvious lattice not in agreement with the previously proposed unit cell derived from x-ray measurements by Miss Yardley. The authors have, however, found an x-ray lattice yielding the smallest cell consistent with all the reflections and in agreement with the crystal form development.

The following are the crystal and x-ray constants determined:

$a=0.8753$	$a_0=7.76$ Å	$\alpha=100°22'$
$b=1.0000$	$b_0=8.79$ Å	$\beta=\ 90°00'$
$c=0.9406$	$c_0=8.34$ Å	$\gamma=103°54'$

(2) *Tektites and silica glass.* By Dr. L. J. SPENCER.

In a collection of 84 chemical analyses of authenticated tektites, taken from the literature, only 36 give data for specific gravity and refractive index. These are plotted on diagrams, the silica ranging from 68 to 80%. They are compared with the data for Darwin glass (SiO_2 86–90%), glass (SiO_2 69–98%) from meteorite craters, and the silica-glass (SiO_2 98%) from the Libyan Desert.

(3) *Some australite structures and their origin.* By MR. GEORGE BAKER (communicated by Dr. F. L. STILLWELL).

Peculiar grooves and flutings on several, large, core-like australites with pronounced flaked equatorial zones are regarded as "bubble tracks" produced in flight upon molten tektite glass by hot accompanying gases.

Flaking of the equatorial zones of the australites is considered to have developed from a cutting action during flight by the frictional resistance of the atmosphere. Core-like australites formed by this process are shown to be distinct from others derived after they arrived on the earth's surface, from button and lens-shaped australites. A general definition of cores, based on their mode of origin, is advanced.

(4) *The Boxhole meteoritic iron, Central Australia.* By Dr. C. T. MADIGAN, with chemical analysis by Dr. A. R. ALDERMAN.

Fragments of iron from the Boxhole meteorite crater, which was discovered by the author in 1937, are very similar to those from the Henbury craters (about 240 miles to the SW), showing twisted surfaces, a medium octahedrite structure, and the same chemical composition (Ni 7.80%).

NEW YORK MINERALOGICAL CLUB, INC.

American Museum of Natural History, New York City. Meeting of October 18, 1939.

The meeting was called to order by President Lee with 64 members and guests present. Mr. Allen Northup announced for the Excursion Committee that the Fall Excursion would take place on Election Day and the members would go to the trap quarries in Paterson, N. J.

The evening was devoted to the exhibition of specimens collected by club members during the summer and to their collecting experiences. Mr. Herbert Gray showed Nova Scotia zeolite specimens and one finely crystallized magnetite. Mr. Purfield Kent exhibited some excellent one to two inch topaz crystals on matrix from Trumbull, Conn. Mr. Merton McKown showed New Hampshire pegmatite and St. Lawrence Co., N. Y. specimens. Mr. James Morton told of his extensive collecting trip to California, with stops at Skaggs Springs for napalite and curtisite; Tick Canyon in Ventura Co., where he found howlite, priceite, ulexite and colemanite; Riverside, for phillipsite, foshagite, crestmoreite and other minerals; and, on his return, at Bisbee where he obtained tyuyamunite, shattuckite and many other minerals.

Mr. O. Ivan Lee reported the discovery of pyramidal crystals of wulfenite on a feldspar specimen from Grafton, N. H. Mr. A. N. Goddard described several of his recent trips and told of obtaining good quartz over chrysocolla from Globe, and unusually large fluorite crystals from Clay Center, Ohio, with cubes up to 14 inches on an edge.

F. H. POUGH, *Secretary*