MINERALOGICAL SOCIETY (LONDON)

A meeting of the Society was held on Thursday, October 7th, 1948, in the apartments of the Geological Society of London, Burlington House, Piccadilly, W.1 (by kind permission). The following papers were presented:

(1) ON THE OCCURRENCE OF ANATASE IN SEDIMENTARY KAOLIN

By Dr. G. Nagelschmidt, Mr. H. F. Donnelly, and Mr. A. J. Morcom.

The occurrence of anatase in sedimentary kaolins from Georgia, U.S.A., is described on the basis of chemical, x-ray diffraction and electron microscope studies. The anatase is of a size comparable to kaolinite which forms the chief constituent of the clays, but there is a slight tendency for it to be concentrated in the smallest size classes.

(2) A LIST OF CATALOGUES OF METEORITE COLLECTIONS

By Dr. L. J. Spencer

A skeleton working list, compiled some years ago, has been found useful. Now that a Commission on Meteorites has been set up by the International Geological Congress, the list has been extended and it is offered for publication.

(3) CLINOZOISITE FROM CAMADERRY MOUNTAIN, GLENDALOUGH, CO. WICKLOW By Mr. R. W. Johnston (communicated by Prof. C. E. Tilley).

The clinozoisite is found with albite as veins within the amphibolite of Camaderry Mountain.

The zoned crystals display a range of optical properties which have been recorded before from other localites, but which are not usually associated with clinozoisite. The crushed material was separated into two fractions which represent the inner and outer portions of the zoned crystals. These two fractions have been investigated chemically and optically. The results, illustrated by diagrams, are compared with similar occurrences from the literature.

(4) AN OPTICAL AND X-RAY EXAMINATION OF THE BASIC SLAG MINERAL, SILICOCARNOTITE By Dr. D. P. Riley and Mr. E. R. Segnit.

Blue pleochroic crystals of silicoarnotite from several sources were examined optically and by x-ray methods and shown to be orthorhombic a=10.1, b=6.7, c=15.4 Å, space group probably *Pnnn*, optics $\alpha || b, \beta || a, \gamma || c$. The axial ratios a:b:c=1.51:1:2.30 agree with those determined goniometrically by Miers, 1.5023:1:2.2943. The crystals exhibit a considerable variety of habit, the most common habits being prismatic, plates (001), and blades (101) elongated along [010].

(5) Two Olivines From South African Melilite-Basalts

By Dr. Morna Mathias.

Two olivines from the Spiegel River and Klaasvoogds melilite-basalts of the Cape Province are analysed. Optical properties for the olivines are given. These show excellent agreement with the chemical results. The olivines belong to the forsterite-fayalite series, and do not contain significant amounts of Ca_2SiO_4 . The presence of nepheline, leucite, analcime, apatite, and zircon in the Klaasvoogds melilite-basalt is described for the first time.