

PROCEEDINGS OF SOCIETIES

MINERALOGICAL SOCIETY (LONDON)

A meeting of the Society was held on Thursday, November 6, 1947, in the apartments of the Geological Society of London, Burlington House, Piccadilly W. 1 (by kind permission). The program included an exhibit of a new two-circle optical goniometer by Mr. E. S. Marsh on behalf of Unicam Instruments, Ltd., Cambridge. The following papers were read: (Kindly furnished by G. F. Claringsbull, General Secretary).

- (1) *The occurrence of an orthorhombic, high temperature form of Ca_2SiO_4 in the Scawt Hill contact zone, and as a constituent of slags.*

By Professor C. E. Tilley and Mr. H. C. G. Vincent.

An orthorhombic (pseudohexagonal) form of Ca_2SiO_4 occurs as a mineral phase associated with larnite, gehlenite, or spurrite assemblages at Scawt Hill. As a solid solution it is recognized as a major constituent of a group of spiegeleisen slags.

- (2) *Earlier stages in the metamorphism of siliceous dolomites.*

By Professor C. E. Tilley.

Talc is recognized as a member of the series of index minerals characterizing the increasing decarbonation associated with the progressive thermal metamorphism of siliceous dolomite. In this series talc forms the initial phase and gives place with rising temperature to tremolite, two stages in the production of which are indicated. Illustrations are drawn from the outer aureole of the Beinn an Dubhaich granite of Skye.

- (3) *Note on the occurrence of anatase in some fireclay deposits.*

By Dr. G. W. Brindley and Dr. K. Robinson.

Although chemical analyses of fireclays generally indicate a few per cent of TiO_2 , the mineralogical form in which TiO_2 occurs is seldom given. A number of references to the observation of rutile needles suggests that rutile is the form in which the titania usually occurs. X-ray powder photographs, however, show that anatase is commonly present and rutile either absent or present in smaller quantities. The investigations have been confined to fireclays from the Millstone Grit series of Central Scotland and from the Coal Measures of Yorkshire. Sedimentation tests show that the anatase is present as very fine particles of the order of one micron.

- (4) *An improved polarizing microscope. III. The slotted ocular and the slotted objective.*

By Dr. A. F. Hallimond and Mr. E. W. Taylor.

- (5) *Biographical notices of mineralogists recently deceased. (Eighth series).*

By Dr. L. J. Spencer.

Previously published triennially, these have now been in abeyance since 1939. The present list is, therefore, much longer than usual and covers the period 1939-47. A selection has been limited to 87 lives, ranging in age from 26 to 90, with an average of 68.9 years. This year (1947) the Society has lost three past-Presidents.