

SOIL MINERALOGY—A DISCUSSION OF MINERALOGY IN ITS APPLICATION TO SOIL STUDIES. FREDERICK A. BURT. vii+82 pages, 6 figures and 4 tables. D. Van Nostrand Co., Inc., *New York, 1927.*

In this small book of 82 pages the author, who has had considerable teaching experience in agricultural and engineering colleges, has attempted to fill a need for an elementary text for students of soils.

After introductory chapters dealing with the physical properties of minerals, the elements of soil minerals, and general principles covering the weathering of minerals, the major portion of the text is devoted to a description of 66 minerals which occur in soils. The effects of some of these minerals, harmful or beneficial to plant growth, are also referred to in some instances. Short tables are likewise included to illustrate the relative weathering resistance and volume changes of minerals during alteration, as well as for the determination of minerals.

The book should prove helpful to beginners in a short course on soil mineralogy, although a somewhat more adequate discussion of soils would have extended considerably the usefulness of this text.

W.F.H.

PROCEEDINGS OF SOCIETIES

PHILADELPHIA MINERALOGICAL SOCIETY

Academy of Natural Sciences, January 3, 1929

A stated meeting of the Philadelphia Mineralogical Society was held on the above date with the president, Mr. Trudell, in the chair. Forty-five persons, including twenty-six members, were present. The following were proposed by Mr. Cienkowski for junior membership: Messrs. Vincent Kleyla, Herbert Kurtz, William Leavitt, Harry Pollock, Lamar Witmer, Robert Morris and Alexander Flemeý.

A symposium on "quartz" constituted the program of the evening, under the direction of Mr. Charles Toothaker. Mr. Toothaker exhibited a fine series of crystals and introduced the subject with remarks on the general properties of the mineral, and its crystal forms. Mr. Boyle exhibited quartz from Hybla, Ontario, showing cracks developed by proximity to radioactive minerals. Mr. Trudell and Mr. Frankenfield exhibited specimens showing inclusions, both of other minerals and of liquids and gases. Messrs. Boyle and Biernbaum contributed remarks on the colors, and their causes, in amethyst and smoky quartz, and other varieties of this mineral. Mr. Gordon spoke on the members of the system SiO_2 ; α quartz, β quartz, α tridymite, β tridymite, α cristobalite, β cristobalite, and glass, and their stability.

The chair appointed judges to examine the exhibits made by the junior mineralogists of specimens gathered during the past year. First, second, and third prizes were awarded to Messrs. Day, Squiers, and Gottshalk, respectively.

SAMUEL G. GORDON, *Secretary*

PHILADELPHIA MINERALOGICAL SOCIETY

Academy of Natural Sciences of Philadelphia, February 7, 1929

A stated meeting of the Philadelphia Mineralogical Society was held on the above date with the president, Mr. Trudell, in the chair. Forty-nine persons were present including thirty-three members. Upon favorable recommendation of the council the following were elected junior members: Messrs. Vincent Kleyla, William Leavitt, Harry Pollock, Lamar Witmer, Robert Morris, Alexander Flemeay, and Herbert Kurtz. The names of the following were proposed for junior membership: Messrs. Frederick Becker and Rolin Harrold.

Dr. George Rosengarten addressed the Society on "*The Inside of a Crystal.*" The general nature of matter and light were discussed briefly, introductory to an exposition of the use of X-rays in the determination of the structure of crystals. Various methods were outlined, and charts and a model of a halite crystal were used to illustrate the lattice structure. A lively discussion of the subject followed.

Mr. Oldach reported on two trips to the recently abandoned French Creek iron mines. Dr. Cajori reported on a trip to Portland, Conn., where specimens of beryl were obtained.

SAMUEL G. GORDON, *Secretary*

THE MINERALOGICAL SOCIETY (ENGLAND)

Mineralogical Society, January 15, 1929. Dr. G. T. Prior, F.R.S., President, in the chair.

Prof. A. HOLMES and Dr. H. F. HARWOOD: *The tholeiite dikes of the north of England.* The suite of tholeiite dikes in the north of England, bounded on the north by the Acklington dike and on the south by the Cleveland dike, form an outlying part of the Mull swarm. To the Salen, Brunton and Talaidh types already recognized in Mull the authors add Cleveland and Acklington types, and anorthite-bearing varieties of each. Chemical and mineral analyses are presented, and from a comparative study of the evidence it is shown that there are many features in the series as a whole which are not in accordance with the theory of crystallization-differentiation.

Mr. A. RUSSELL: *On the occurrence of gold at Hope's Nose, Torquay, Devonshire.* A detailed description is given of a remarkable occurrence of crystallized arborescent gold in calcite, in Middle Devonian limestone at Hope's Nose, where it was discovered by Professor W. T. Gordon in 1922. Specimens many of which are extremely beautiful have since been obtained from five distinct veins. The gold varies in color from a bright rich gold to almost silver-white, and has a silver content of only 1.89 to 8.41 per cent.

Mr. H. E. BUCKLEY: *Crystallography of some organic compounds.* Collected records of goniometric measurements on crystals of various organic compounds.

W. CAMPBELL SMITH, *General Secretary*