BOOK REVIEW

K. I. Sztrókay, Gy. Grasselly, E. Nemecz, J. Kiss:

Ásványtani praktikum II. (Mineralogical Practice. Volume II.)

Tankönyvkiadó, Budapest, 1970. 497 pages, 262 figures.

The Mineralogical Practice wants to help and promote the mineralogical instruction going on at the Universities from the practical aspects, too. The second volume appeared earlier than the first one.

The intention of the second volume is to acquaint physical and physico-chemical procedures and instruments generally and regularly used for the determination of minerals.

The arrangement of the material principally is systematized according to the examinational branches depending on the properties of mineral substances, within this we get a description of the certain methods in the order of the work. A summary of the field of application, the limits and restrictions of possibilities are added to every chapter. If only to small extent, we can obtain an insight into the historical antecendents of the development of the respective methods. From first to last the authors adhere to the didactical requirements, therefore after the explanation of the principles of some research methods they sketch the working and manipulation of the apparatus. This part is followed by practice in form of lessons, being never simple recapitulations, but further additions based on the preceding studies. Furthermore, we are provided a particular direction about the preparation of minerals for special examination or analyses and about the most important techniques. We do not say that after studying the book, everybody would perform all methods in the mineral determination, but it is a fact that this manual perfectly meets the most significant problems of instrumental determinative mineralogy.

The volume contains the following main chapters:

Thermal Investigation. This part treats the method of differential thermal, thermal gravimetrical and differential thermal gravimetrical analyses. The principles of the phase equilibrium diagrams were placed here too — in the nature of reason — as a physico-chemical study of the mineral genesis caused by thermal effect.

Optical Investigations of Transparent Minerals. We can follow the main steps of mineral identification by way of the polarizing microscope and its additional equipments through, in the form of description and working thirty-

three lessons up. The author concentrates on the use of the refractometers and the universal stage, too.

Investigation of Opaque Minerals. The chapter is divided into two parts: investigations by the ore microscope and determination of ore minerals by surface analysing methods.

The first part gives searching knowledge about the function and treating of the ore microscope, and lots of examples and lessons make it easy to understand the informations; they also find place to describe the most important technical works of ore sections.

The second part shows the simple *surface etching method* and the *print (contact and electrographical) method* demonstrated by numerous examples based on the most frequent metallic elements and ore minerals.

X-ray Analysis of Minerals. The relatively large extent of this chapter may be justified by the rapid development and widespread application of the method nowadays. Therefore this part explains the fundamental principles and geometry of X-ray diffraction. At the same time the author treats very carefully the practical application of the procedures: gives detailed information about the recording of powdered patterns and about identification of the diagrams.

The usefulness of the book is increased by the great amount of well selected text figures, numerous tables, microscopic photos and a few coloured insets.

We can state, that the volume is not only an excellent textbook for students, but it will become a valuable manual of the young geologists, too.

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