

**LETTERS OF THE WORKING GROUP ON MANGANESE
FORMATION OF INTERNATIONAL ASSOCIATION
ON THE GENESIS OF ORE DEPOSITS**

**PROGRESS REPORT ON RESEARCH IN MANGANESE ORE DEPOSITS
OF ROMANIA (1956—1970)**

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Large scale investigations on manganese ore deposits began in Romania in 1954. The production of manganese jumped from 59130 t. in 1948 to 389921 t. in 1955. Since the first comprehensive report delivered by V. IANOVICI in 1956 at the first Symposium on manganese deposits (6), more than 20 papers were published in this country concerning the mineralogy, petrology, geochemistry and structure of Romanian manganese ores.

As a result of a first series of investigations, the mineralogical composition of the ores was established. The primary ores are metamorphic, being synchronous with the crystalline schists of the Carpathians; they consist of manganiferous carbonates rhodonite, bustamite, pyroxmangite, tephroite, knebelite, spessartinite, dannemorite, Mn-anthophyllite, jakobsite, piedmontite; secondary ores of the oxydation zones consist of neotokite, hisingerite, manganite, coronadite, cryptomelane, hausmannite, pyrolusite. Optical constants were accurately determined for a part of these minerals [D. RĂDULESCU, H. SAVU, L. PAVELESCU, R. DIMITRESCU etc.].

A further development of the same investigations was the determination of the constitution of minerals representing isomorphous series in various deposits. Jakobite, pyroxmangite, spessartinite, and bustamite from the Sebes Mts [L. PAVELESCU], as well as Mn-carbonates (rhodochrosite-ponite), rhodonite, pyroxmangite and spessartinite from Iacobeni [G. POPA] were analysed.

The chemical composition of the ores was the object of numerous investigations. The geochemistry of the deposits was interpreted by means of graphical statistics in a first period [M. SAVUL, V. IANOVICI, C. DRĂGHICI], afterwards analytical statistic methods being extensively used by V. IANOVICI, AL. DIMITRIU and POPA.

As a result, the primary genesis of a large part of the metamorphosed deposits is now understood as being sedimentary — volcanogeneous.

Structural research was carried out by R. DIMITRESCU in the Iacobeni area, where shear-folding was substantiated by petrofabric analysis.

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