

ELECTRON MICROSCOPICAL INVESTIGATION OF THE SHAPE AND SIZE OF HALLOYSITE FROM DIFFERENT OCCURRENCES IN THE WESTERN CARPATHIANS, SLOVAKIA

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In geological scientific literature the shape and size of different minerals is frequently used to various applications. Relation between the length and width of minerals gives an often useful information e.g. about its genetic conditions of formation and development. Dimension of shape and size of minerals offers to gain conclusions for evaluation in connection with their eventual environmental risk. Needle shaped and acicular forms of halloysite yield an effective possibility for the study of this relation.

Because halloysite is not a rare mineral in the West Carpathian region, occurrences of halloysite from different localities of Slovakia is treated in the works of numerous authors (ČÍČEL, 1960; KRAUS, 1989; LINTNEROVÁ, 1995, 1996; RADZO, 1987; ŽÁKOVÁ, 1988; and others).

In the foregoing years halloysites were studied from the viewpoint of growth mechanism (GERTHOFFEROVÁ & ŠUCHA, 1992), mineral particle size distribution (GERTHOFFEROVÁ & KRAUS, 1979), their transformation and stability under weathering conditions (DUBÍKOVÁ, 1998), assemblage minerals (NOVOTNÁ *et al.*, 1993; ŠAMAJOVÁ & FEJDI, 1995) and comparing home and foreign localities (GIESE, 1988; LINDQVIST & ALVIOLA, 1995; and others).

The investigation of halloysite is a part of our wider programme. In the last years, essential intention of the investigation of halloysite was to present fundamental data and survey of size and shape on separated minerals from individual deposits.

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