Guide to the Ontogeny of Mineral

■ FRAME-LIKE CRYSTALS OF BARYTE

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Specimens and photos: Boris Z. Kantor

special place within the mineralogical abundance of Cavnik, Romania, belongs to the diversity of baryte crystals and aggregates that this locality is famous for. Extraordinary skeletal crystals were also found there looking like picture frames. Figure 1 shows an overall view and some specifics of the morphology of this baryte.

A lot of mineral crystals exhibit various examples of skeletal growth; some are shown in Figures 2 to 5. However, the crystals consisting of crystal edges alone are truly exotic in the mineral kingdom and deserve a place in the Topomineralogical Reviews by Alexander A Evseev (Evseev, 2004; http://geo.web.ru/druza/).



- 1. Baryte, 12 cm wide. Cavnik, Romania.
- (a) general view;
- (b) close up to frame-like crystals of baryte. Field of view width 7 cm.
- (c) morphology of frame-like baryte. Field of view width 5 cm.





10. Baryte crystal filled with limonite inclusions.3.4 cm wide.



clusions. A frame of transparent baryte formed around the dark core (Fig. 10). Under the ambient condition's influence the difference diminished between the growth rates of the second generation crystal faces so the transparent frame-like baryte got more evenly developed.

Another important change was some diminishing of the feeding solution concentration. It became undersaturated in relation to the small fragments inside the crystal while it remained oversaturated for the large fragments composing the outer framework. Thus the enlarging recrystallization became possible: the tiny fragments dispersed within the limonite inclusions in the initial crystal (Fig. 9a) began to dissolve whereas the transparent framework began to grow (Fig. 9c).

Eventually the limonite particles became free and tipped out under action of their gravity (Fig. 9d). The smaller tabular crystals seen in Fig. 1c inside the frame are the largest fragments of the initial crystal which gained growth resulting from the above changes.

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