

## Fluidní systémy v záhnědách z dutinových pegmatitů od Krásněvsi (strážecké moldanubicum)

### Fluid systems in smoky quartz from pocket pegmatites from Krásněves (Strážek Moldanubicum)

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#### Abstract

Fluid systems in smoky-quartz from pocket pegmatites from two sites in the vicinity of the Krásněves village (Moldanubicum) were studied. Aqueous systems without gases and aqueous inclusions with gaseous compounds occur in the studied crystals of smoky quartz. The two-phase (L+V) aqueous inclusions without gaseous components contain systems H<sub>2</sub>O-NaCl, H<sub>2</sub>O-NaCl-FeCl<sub>2</sub> and/or H<sub>2</sub>O-NaCl-MgCl<sub>2</sub>. Aqueous inclusions with the gaseous components are two-phase (L+V) displaying formation of a clathrate phase on cooling and three-phase (L1+L2+V) with an aqueous solution, liquid CO<sub>2</sub> and gaseous CO<sub>2</sub>. Crystals of smoky quartz from KRS-quarry originated from high-temperature (Th = 241 - 371 °C for primary and pseudosecondary fluid inclusions) and low-salinity (2.7 - 5.6 wt. % NaCl eq.) fluids. Mixing of solutions differing in temperature (high-temperature/medium-salinity and low-temperature/medium-salinity) occurred at the locality KRS-field, where the homogenization temperatures for primary and pseudosecondary inclusions range 163 - 398 °C and salinity varies from 0.4 to 10.1 wt. % NaCl eq. The position of isochores of primary fluid inclusions in P-T space suggests that the composition and density of the fluid are consistent with previously published P-T estimates of pegmatite crystallization and the formation of pocket pegmatites.

**Key words:** Strážek Moldanubicum, Krásněves, pocket pegmatites, smoky quartz, fluid inclusions, microthermometry, P-T conditions

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