

## Columbit-tantalit z pegmatitu pri Ráztočne v pohorí Žiar (stredné Slovensko)

Columbite-tantalite from pegmatite near Ráztočno, the Žiar Mountains (Central Slovakia)

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### Abstract

Accessory columbite-tantalite forms black tabular crystals (0.2 to 2 mm in size) in fine-grained albite-quartz-muscovite parts of granitic pegmatite dike, associated with Hercynian S-type granite, near Ráztočno village in the Žiar Mountains (Tatric Superunit, Central Western Carpathians, Central Slovakia). Columbite-tantalite shows regular oscillatory zoning, generally with increasing Ta/Nb from central to rim parts of crystals. Electron-microprobe analyses reveal dominance of columbite-(Fe) to tantalite-(Fe) with molar ratios  $Mn/(Mn+Fe) = 0.17$  to  $0.25$  and  $Ta/(Ta+Nb) = 0.07$  to  $0.50$ . Rarely were also detected columbite-(Mn) compositions with  $Mn/(Mn+Fe) = 0.66$  to  $0.79$  and  $Ta/(Ta+Nb) = 0.08$  to  $0.17$ . Contents of Ti are low (up to  $0.03$  apfu,  $0.2 - 0.5$  wt. %  $TiO_2$ ), concentrations of W, Sn, Zr, Sc, Mg and Zn are negligible. Secondary microlite replaces the columbite-tantalite along fissures and rims. Studied columbite-tantalite represents a typical example of late-magmatic mineral of less fractionated LCT-suite and beryl-columbite subtype of rare-element granitic pegmatites.

**Key words:** columbite-tantalite, microlite, chemical composition, granitic pegmatite, Žiar Mountains, Slovak Republic