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PŮVODNÍ PRÁCE/ORIGINAL PAPER

## Pargasite and forsterite phenocrysts from Očová (central Slovakia)

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### Abstract

The new occurrence of pargasite and forsterite phenocrysts was discovered in basalts in the area of a former field near the Očová village, Zvolen Co., Banská Bystrica Region (central Slovakia). Pargasite forms vitreous dark brown to black crystals up to 6 cm in size. Its chemical composition shows dominant Mg<sup>2+</sup> (3.07 - 3.16 *apfu*) followed by Fe<sup>2+</sup> (0.84 - 1.00 *apfu*) and elevated Ti (0.22 - 0.27 *apfu*) at the amphibole crystallochemical C site with the average chemical composition (n = 15)  $^{A}(\text{Na}_{0.58}\text{K}_{0.35})^{B}(\text{Ca}_{1.83}\text{Na}_{0.11}\text{Fe}^{2+}_{0.05}\text{Mn}_{0.01})^{C}(\text{Mg}_{3.12}\text{Fe}^{2+}_{0.92}\text{Al}_{0.62}\text{Ti}_{0.25}\text{Fe}^{3+}_{0.10}\text{V}_{0.01})^{T}(\text{Si}_{5.97}\text{Al}_{2.03})^{V}\text{O}_{22}^{W}[(\text{OH})_{1.99}\text{F}_{0.01}]_2$ . Forsterite crystals have vitreous lustre with greenish to dark yellow colour, reaching up to 16 mm in size. Its chemical composition corresponds to the average endmember formula (n = 15) as  $\text{Fo}_{88.9}\text{Fa}_{12.6}\text{Tep}_{0.2}$ . This find represents an occurrence of unusually large crystals of pargasite associated with forsterite in igneous rocks of the Neogene Poľana stratovolcano.

**Key words:** pargasite, forsterite, chemical composition, Očová, Poľana stratovolcano

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