

Kalcitovo-dolomitová geotermometria aplikovaná na stanovenie podmienok metamorfózy karbonátov z lokality Pliešovce (Slovenská republika)

Calcite-dolomite geothermometry applied to determination of metamorphic conditions of the carbonates from locality Pliešovce (Slovak Republic)

PETER RUŽIČKA

Katedra mineralógie a petrológie, Prírodovedecká fakulta, Univerzita Komenského v Bratislave, Ilkovičova 6, Mlynská dolina, 842 15 Bratislava, Slovenská republika; e-mail: peter.ruzicka@uniba.sk

RUŽIČKA P (2018) Kalcitovo-dolomitová geotermometria aplikovaná na stanovenie podmienok metamorfózy karbonátov z lokality Pliešovce (Slovenská republika). Bull Mineral Petrolog 26(2): 188-195. ISSN 2570-7337

Abstract

Application of the calcite-dolomite solvus geothermometry is focused on determination of the metamorphic conditions of the Middle Triassic carbonates from the locality Pliešovce (Slovak Republic). The metacarbonates represent a Mesozoic cover of the Southern Veporic. The temperature conditions of recrystallization have been calculated on the basis of the microprobe chemical analyses of the coexisting calcite and dolomite. The calcite-dolomite pairs were used for temperature calculation with respect to Mg-content in the calcite coexisting with the dolomite. Interpretation of the metamorphic evolution of the carbonates is based on the calcite-dolomite solvus geothermometry. The calculated average temperature of the regional Alpine metamorphism in the carbonates reached 361 °C and 395 - 403 °C according to various calibrations, respectively.

Key words: calcite-dolomite geothermometry, marble, Pliešovce, Slovak Republic

Obdrženo 11. 11. 2018; přijato 18. 12. 2018