STUDIES ON THE PERMIAN-JURASSIC CARBONATE SEQUENCES OF TALEA ORI, CRETE, GREECE

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The microfacies types, the diagenetic features and the porosity of the Permian-Jurassic carbonate sequence of Talea Ori, Crete in the area of Sisses-Aloides have been studied. This study verifies a sequence of diagenetic episodes with various evolution stages of the carbonatic platform.

We propose a depositional model of those sediments where the Stromatolitic dolomite formation is controlled by synsedimentary tectonics.

Tectonic episodes interrupt the development of stromatolite two times. In the first step, on top of the homocline ramp, ooids banks and balts formed under high energy intertidal conditions. In the second step, the stromatolite development was abruptly interrupted by debris flows originated by probable uplift of the surrounding intertidal areas. Once reinstalled the normal stable conditions, the growth begun again with shallow intertidal facies of stratified stromatolites in thick layers indicating continous subsidence of the basin. The lower-seated Plattenkalk formation corresponds with a sedimentation at a subtidal platform with strong transgressive features.

APPLICATION OF SCHREINEMAKER'S METHOD TO A METAMORPHIC AREA LOCATED AT THE NORTHERN FLANK OF THE MENDERES MASSIF - WESTERN TURKEY

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In the study area, the rock succession of the Menderes Massif is comprised of gneisses at the base and schists at the upper levels. The trend of progressive metamorphism, from garnet - mica schists at the top of the sequence to the sillimanite-garnet gneisses at the bottom was drawn on a simplified P/T diagram after the Schreinemakers' method. The metamorphic trend beginning by "almandine + chlorite + muscovite" paragenesis passes through the fields where "staurolited + almandine + quartz (+biotite)", "almandine + staurolite + kyanite + sillimanite (+biotite)" and "alman-