

FACIAL DEVELOPMENT OF UPPER PERMIAN GYMNOCODIACEAN LIMESTONES OF CHIOS ISLAND (AEGEAN SEA, GREECE)

FENNINGER, Alois

Institute of Geology & Paleontology, University of Graz, Austria

e-mail: alois.fenninger@kfunigraz.ac.at

The uppermost part of the "Nappe Unit" in the northeastern part of Chios contains Gymnodiacean limestones, belonging to the *Neoschwagerina*-zone, are well exposed in the Marmaro Bay area.

At the cliff of eastern Marmaro Bay five lithostratigraphic units can be distinguished:

1. *Multithecopora* thickets
2. "Lower marl" horizon
3. Richthofeniid-Microbial-Sponge Buildup
4. "Upper marl" horizon
5. Gymnodiacean meadows

The up to 30 m thick unit 5 will be discussed in detail. This unit starts with regularly bedded limestones containing numerous oncoids followed by horizons with scaphopodes and *Skolithos* ichnofossils and alternate with marl intercalations rich in foraminifera of *Glomospira* type. The limestones contain abundant miliolid foraminifera, whereas fusulinids are very rare.

The most striking fossils in the middle part of the sequence are large mollusks and bellerophontids. The uppermost part is dominated by Gymnodiaceans.

Unit 5 represents a low energy lagoonal to coastal environment. The last one is indicated by thin bedded calcrete intercalations.