

SEDIMENTARY MODEL OF CARBONIFEROUS LIMESTONES OF CENTRAL ALBORZ (NORTH IRAN)

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The Lower Carboniferous strata in all of investigated areas of central Alborz has been specified by a regressive sequence. Lithology in company with fossils are three kinds of main environment which from open sea toward to shore consist of: open shelf, oolitic shoals and lagoon.

Open shelf: In all sequences investigated, limestone deposition was interrupted by black shales interbedded. This interruption occurred in a cyclic pattern. Interruptions of limestone are most likely related to climate which arise from perturbation of the Earth's orbit. This in turn, has been caused change in sea level and fluctuations in the volume of polar ice.

Oolitic shoals: Deposited sediments in this environment composed of bioclastic and oolitic grainstones which have isolated lagoon from open shelf. These oolites with radial-fibrous structure reflect a moderate agitation environment.

Lagoon: In lagoon can isolate three subenvironments:

External lagoon: It is situated among oolitic shoals. Lithology is composed of wackestone to mudstone. Fossils are usually found in margins and actually decrease toward nucleus of lagoon.

Oolitic shoals: Lithology has been formed by oolitic bioclastic grainstones. oolites with fibrous microstructures formed in the shallow water environment.

Internal lagoon: Micritic sediments probably has been formed in a shallow environment, in this environment circulation has been limited and the temperature and salinity has been changeable.