

## The Reconstruction of Paleoenvironment Aptian Sediments of the Massive Serdj, North Central Tunisia

**Authors :** H. Khaled, F. Chaabani, F. Boulvain

**Abstract :** This paper focuses on the studied of Aptian series that crops out at the Jebel Serdj in the north central Tunisia. The study series is about 590 meters thick and it is consisting of limestones, marly limestones associated with some levels of siltstones and marls. Two sections are studied in detail regarding lithology, microfacies, magnetic susceptibility and mineralogical composition to provide new insights into the paleoenvironmental evolution and paleoclimatological implications during this period. The following facies associations representing different ramp palaeoenvironments have been identified: mudstone-wackestone outer ramp facies; skeletal grainstone- packstone mid-ramp facies, packstone-grainstone inner-ramp facies which include a variety of organisms such as rudists and ooids and mudstone-wackestone coastal facies rich with miliolidea and orbitolines. The magnetic susceptibility ( $X_{in}$ ) of all samples was compared with the lithological and microfacies variation. We show that high values of magnetic susceptibility are correlated with the distal facies.

**Keywords :** Aptian, Serdj Formation, geochemical, mineralogy

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