



**4^{ème} Colloque du Programme International
de Géoscience (PICG638) à ALGER**

**Alger les 28 et 29 Octobre 2019
USTHB, Alger
Suivi par une Excursion, du 30 Octobre au 02
Novembre**

**Géodynamique et Minéralisation des
Formations Paléoprotérozoïques pour un
Développement Durable**

**Parrainé par L'UNESCO et organisé par
l'Agence du Service Géologique de l'Algérie (ASGA)**

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New reconsidération of the Ouled Maallah geological map based on biostratigraphic data

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The present map is part of the geological map of Sidi M'hamed Benali at 1/50,000 whose surveys were made by Brives (1857), Perrodon (1957) and Welter *et al.* (1959). The contours of the geological formations are modified and samples taken for new dating purposes. The sector concerned by this study is located in the Dahra massif including part of the northern margin of Chelif plain, extending between the wadis Er Razzaz in the West and Tarhia in the East. Their geological series is characterized by a basement of Cretaceous sandy marls with carbonates and blackish levels; the Cenozoic formations are there represented by mio-plio-quadernary deposits. These localities are well known for their hydrocarbon indices (Ain Zeft) and their mining potential (gypsum-selenite).

Many detailed sections in the Ouled Maallah mounts illustrate the geometric arrangement of the mio-pliocene sedimentation which is marked by a brittle and plicative tectonics (anticline and syncline, folds). These structures are observable since the mouth of the Chelif river, near Mostaganem, to Tenes agglomeration (Derder *et al.*, 2011, Maghraoui *et al.*, 2002). This locality offers a Pliocene transgressive and discordant marine marl series on a pleated massive gypsum-selenite which has acquired its important morphologies during the Messinian and before the beginning of the Lower Pliocene age.

The preliminary data were obtained from the field prospection using biostratigraphic calibration methods, focusing on marine deposits (planktonic foraminifers, calcareous nannofossils).

The pliocène samples have revealed from bottom to top a complete succession of planktonic foraminifera's markers (Belkebir *et al.*, 1996). The same samples subjected to the analysis of the nannofossils revealed the presence of important biostratigraphic markers having to change the previous geological attributions.

These data allow us to reconsider the geological map of this locality and to clarify the well-known mineralization in the region of Ouled Maallah.

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