Diatomites are among the most common and abundant upper Miocene deposits of the Mediterranean basin, where they usually occur associated in a rhythmic succession with marls, laminated clays or sapropels. The diatomitic sedimentation took place mostly between 7 and 6 million years ago. Despite several stratigraphic and geochemical aspects of the Upper Miocene diatomites have been investigated in detail in the last few years, the paleoceanographic context and taphonomic features that favoured their massive accumulation is poorly known. Moreover, the possible link between Upper Miocene Mediterranean diatomites and the approximately coeval biogenic bloom recorded in the world ocean has not been defined, as well as the role of the continental ecosystems in the silica supply. Finally, the nature and diversity of the abundant paleobiological content of the Upper Miocene diatomites have been only marginally investigated.

The goal of this project is to contribute to the knowledge of the Upper Miocene Mediterranean diatomites and of their paleobiological content, in order to interpret their sedimentological, paleoceanographical and paleoenvironmental significance.