BACHA KHAN UNIVERSITY, CHARSADDA, PAKISTAN
Name: Fawad Alam
Email : azlan877@yahoo.com
Qualification: BS Geology



Depositional Environment of the Lockhart Limestone in Biostratigraphic and Sequence Stratigraphic Context from Chichali Nala, District Mianwali, Punjab, Pakistan

The early Eocene Margala hill limestone of the Kala Chitta ranges represents a latest Eocene foraminiferal dominated unit of the low latitude tethyan carbonate platform benthic community. The latest Eocene stage is dominated by the nummulities sp. Assilina sp., operculina sp., lockartia sp., and alveoloina sp. Larger foraminifera with subordinate dasycladacean green algae indicating shallow benthic zone 8-11(SBZ8-11). The 40-meter-thick margala hill limestone is composed of nodular limestone of grey color with conformable lower contact with patala formation and upper contact with chorgalli formation in chak dalla section district attock district. The latest Eocene foraminiferal dominated unit is composed of six microfacies types grouped into 3 microfacies including mudstone, mud-wackestone and packstone. the microfacies types indicates lagoonal, inner ramp and inner ram to middle ramp setting for the environment of deposition. Microfacies analysis also yields a second order sequence (i.e, DMH 1) of the Ypresian which is composed of a third order transgressive system tract and five vertically stacked para-sequences of fourth/fofth order showing reyrogradation.