

## **Coarse Aeolianites: Sand Sheets And Zibar-Interzibar Facies From The Mesoproterozoic Cuddapah Basin, India**

**BISWAS, ANANYA.** University of Calcutta, Calcutta, India

The Mesoproterozoic arenaceous sequences of the Egalapenta Member of the Cuddapah basin, India is laterally extensive over hundreds of metres in and around the Krishna Gorge situated near the northern limit of the basin. The lithofacies is dominated by a volumetrically significant coarse-grained facies assemblage. Sheet-like sand bodies with coarse-grained, high index wind-ripples, granule ripples, gently dipping curved or irregular erosional surfaces, low-angle cross-stratifications and normal to inversely graded horizontal laminations characterise aeolian sand sheets. The facies is closely associated with medium- to coarse-grained sandstones with low-relief climbing bedforms devoid of slipfaces, multiple packages of low-angle wind-ripple laminae separated by numerous truncation surfaces.

The intimate association of the sand sheets with medium- to coarse-grained sandstones comprising slipfaceless bedforms and other aforesaid attributes suggest the presence of zibar-interzibar facies. Depending on the angle of climb, migration of zibars and interzibars produced two depositional sequences which include: (i) amalgamated medium to coarse interzibar facies but devoid of zibars, and (ii) both interzibar and zibar facies. On the basis of grain-size, aeolian sand sheets and zibar-interzibar facies appear as a token representation of 'very coarse-', and 'coarse sand ergs'. Well preserved aeolian sand sheets and zibar-interzibar facies reflect a spectrum of aeolian systems within the Egalapenta Member which marks the closing phase of Cuddapah sedimentation.