

Kala-Chitta Range – A highly deformed fold and thrust belt of Hill Ranges, NW Himalayan Fold and Thrust Belt, Pakistan.

Muhammad Awais

MS Geology Scholar at National Centre of Excellence in Geology (NCEG), University of Peshawar.

Abstract

The Kala-Chitta Range is a part of Hill Ranges of Northern Pakistan. It is intensely deformed fold and thrust belt occupying very significant position in the NW Himalayan Fold and Thrust Belt in Pakistan. It is bounded to the north by Hissartang Thrust separating it from Attock-Cherat Ranges and to the south by Main Boundary Thrust (MBT) (Yeats and Hussain, 1987). The Kala-Chitta Range is highly folded and faulted sedimentary terrain. There are small scale “S” and “Z”-shaped drag folds, concentric folds, anticlines, synclines, duplexes and a regional synclinorium. The style of faulting in the area is thrust faulting with southward vergence. The area is composed of reidel shear fractures implying Himalayan deformation. The structural trend of the structures is east-west showing that the stresses are north-south directed. This deformation is caused by successive north-south compressional stresses which started since the collision of Indian plate with Eurasian plate till date.

References

Yeats, R. S. and Hussain, A. (1987). Timing of structural events in the Himalayan foot hills of NW Pakistan. Geol. Soc. Am. Bull., Vol. 99, p. 161-176.