Conclusions

Considering the paleocurrent study, petrography based on the field observation and laboratory techniques including thin section analysis a broad generalized idea can be reconstructed regarding the history of sedimentation of Bhandar sandstones of Upper Vindhyan age in the Bhopal district of Madhya Pradesh.

The Petrography of Bhandar sandstone reveals that the sediments belong to a provenance which must have mediums grade metamorphic rock, some granitic rocks and perhaps some older sediments. The nature of the rock shows a textural and mineralogical maturity which is an indicative of a distant provenance, which should have undergone a long cycle of chemical weathering.

The nature of cross bedding and ripple marks rule out the possibility of wind being the agent of transportation of sedimentation. The residues also must have been carried by water. The paleocurrent indicates that sediments were transported in a regular fashion from south-west towards north-east.
Environmental conditions of deposition is responsible to produce the different types of sedimentary rocks which are quite different in nature. The sedimentary rock is the product of its provenance and dispersal history. The lithology, petrography, structures, and texture of the rocks of Bhopal area show that these rocks were deposited in a shallow agitated marine environment which could be either inner narratic or on tidal flats. The whole sequence belongs to a typical orthoquartzite or platform facies.