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Field Report

A fieldwork report on the Tertiary Stratigraphy of Kachchh, Gujarat

(15th Dec 2019 to 27th Dec 2019)



By
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M.Sc I

Submitted to

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CERTIFICATE

This is to certify that Ms. Namita Sinku Class- M.Sc.-I UID No- 198416 has successfully carried the compulsory field work at Kachchh in Gujarat State from 16th December, 2019 - 25th December 2019 as a part of the curriculum.

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ABSTRACT

The Kachchh sedimentary basin is situated in the western margin of the India continent. It shows records of rocks belonging to the Middle Jurassic to Recent. According to Biswas 1992 it is a pericratonic rift basin which is punctuated by several stratigraphic breaks. These sediments of Cenozoic are well exposed in the western part of the Kachchh mainland. The outcrop area is highly fossiliferous and this Cenozoic succession is accessible. The chronological units are studied by interpreting detailed field maps and litho bio-stratigraphic correlation. These maps are aided by recognised time boundaries and bio-stratigraphic horizons. Again the litho-stratigraphic information is integrated with sequence stratigraphy of the Cenozoic succession basin. Along with biostratigraphic classification of unconformities are also identified. Each sequence along with its extent, boundaries, and sedimentary fill enable us to get details of the depositional environment and understand the architecture of the Kachchh basin. The area around which we worked in the district of Kachchh include Matanomadh, Naredi, Harudi, Lakhpatt Fort, Khari and Bermoti. The study area fell under toposheets: 41A/10, 41A/11, 41A/14, 41A/15 and 41A/16. Extensive field work were conducted to study the tertiary sedimentary basin of the Kachchh. The sediment and litho log were generated to analyse the terrains. The stratigraphic sequence begins with Matanomadh Formation at the base consequently overlain by Naredi Formation, Harudi Formation, Fulra Limestone Formation and Maniyara Formation during Paleogene (areas we visited). Followed by Khari Nadi Formation, Chhasra Formation and Sandhan Formation during Neogene.