## Government Zirtiri Residential Science College



## **Department of Geology**

## A Report On

## GEOLOGICAL FIELDWORK AT KOLASIB, MIZORAM

Funded by:

Rashtriya Uchchatar Shiksha Abhiyan (RUSA), GZRSC



Duration of field trip: 18<sup>th</sup> to 19<sup>th</sup> October, 2019.

Number of teachers: 2 (Dr. C. Zoramthara, Dr. C. Lalmuankimi)
Number of students: 9 (6 male and 3 female from V Semester)

Purpose of Field trip: As one of the North Eastern States of India, Mizoram is diverse from mainland India, not just in culture, religion and society but also in term of Geologic and tectonic setting. Mizoram consists of North-South trending mountains with deep gorges leading to river valleys, with meandering paths governed by complex structural alignments and severe weathering and erosion. This combination of natural activities leads to rapid evolution of landscape with human development contributing to the cause. In light of this, the Principal (Prof B. Zoliana) and RUSA Co-ordination Committee, GZRSC funded Geology department for geological fieldwork at Kolisib, Mizoram which is located at 78 Kms from Aizawl, the capital of Mizoram.

Vanchengpui is a village on the Northern part of Mizoram located between N22.2246 latitude and E 92.6760 longitude. A thick succession of Tertiary rocks in the Kolasib district of Mizoram is represented by the Middle and Upper Bhuban Formation, and the Boka bil Formation of Surma Group of rocks, and also the Tipams. The sandstones in this area are typified by its soft and friable nature because of its low degree of induration and compaction. The sandstones of the study area are associated with alternating bands of shale/mud with varying thickness from one place to another. Wave ripples, parallel beddings, cross-beddings, wavy, flaser, lenticular beddings and sole marks like flute caste and load caste are the common Primary sedimentary structures readily observed in the sandstones of the study area. Mud clasts of varied shapes and sizes, and leaching of iron ores are also some of the common sedimentary features found in the sandstones other than the primary sedimentary structures. Quartz, feldspars and micas are the major minerals constituting the bulk mineralogy that can be identified megascopically.

Detailed programme is given below:

Date	Time	Programme
18.10.2019	7:00 a.m 8:00 a.m 9:00 a.m. 10:00 a.m. 10:00 a.m To 3:30 p.m To 6:00 p.m	<ol> <li>Departure from Aizawl</li> <li>Roadside fieldwork</li> <li>Tea and snacks at Bualpui</li> <li>Arrival at Kolasib</li> <li>Detailed field investigation         <ul> <li>a) Area measurement using GPS</li> <li>b) Tape survey using tape extensometer</li> <li>c) Measurement and recording of structures</li> <li>d) Geological survey of surrounding area</li> <li>e) Preparation of litholog</li> <li>f) Lithological survey</li> <li>g) Collection of samples from Surrounding areas</li> <li>h) Collection of samples from Lungkhawdur</li> <li>i) Measurment of water and soil temperature</li> </ul> </li> <li>6. Lunch</li> <li>7. Geological field work and collection of samples in and around Kolasib town.</li> </ol>
19.10.2019	10:00 a.m 2:00 p.m. 5:00 p.m.	<ol> <li>Geological field work and collection of samples in and around Rengtekawn.</li> <li>Depurture from Kolasib</li> <li>Arrival at Aizawl</li> </ol>

(Dr. C.ZORAMTHARA)

Head, Dept. of Geology