

Geographic History of the Purple Mountain and Kasumigaura Lake and the Life Carried on to the Future

SHIBAHARA, Toshitsugu^{1*}

¹Mt. Tsukuba Area Geopark Council

Mount Tsukuba is located in the northeast of Kanto Plain. From the distance, the mountain looks like a single peaked mountain which is a rare view in Kanto area. The mountain is called "Shiho", meaning a purple mountain, since the color of the mountain surface looks purple in the evening reflected by the setting sunlight.

The crest has steep double peaks constructed of solid gabbros which were intruded and risen approximately 75 million years ago.

The mountainside (declive) and the base of the mountain (piedmont) are covered with debris of gabbro and weathered debris of granite.

The gentle curves of the mountain skirts make its mountain shape beautiful. Additionally, as the northeast tip of Kanto Plain, the surrounding regions centering the Kasumigaura Lake make the scenic beauties of "Suigo" with broad platforms and lowlands formed by the 4th period of the sea level change.

Therefore, blessed with the "geological inheritance", the Mount Tsukuba is renowned as we have an expression, "Mt. Fuji in the west, Mt. Tsukuba in the east." So, the mountain has been regarded as the landmark of Kanto. Also, even competing with Mt. Fuji, which has just been approved as one of the World Heritages, the mountain worship and many Japanese traditional culture and art have originated in this area.

The activities typified by the water transport in Kasumigaura Lake, stone manufacturing and pottery, have had developed its own style independently even though the region was located near Edo (Tokyo). It is particularly worth noting that they supported the modernization of Japan. Inada granite was used for architectures such as the Diet Building, Bank of Japan and Nihon-bashi Bridge in the Meiji Era.

In the modern age, Tsukuba Science City is established on the platform at the base of Mount Tsukuba. The area is vitalized from both inside and outside Japan and has started to create the future.

Evaluating the features of this area-the nature, the history and people's activities-from the geological and geographical points of view, each element may not seem to relate to each other. However, once you change your perspectives, you can find fascinating, charming and attractive aspects in them.

So, in Tsukuba Area Geopark, we view every geographical and geological feature of this area as a series of the eternal history and rediscover the value of the geological features of this area, share it with people inside and outside of the region and carry on to the future.