

OUTLINE OF NATURAL ZEOLITE MINERALS OCCURRING INSIDE THE TAKAMATSU CRATER DISTRICT IN SHIKOKU, JAPAN

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Recently we found a new locality of small size zeolite minerals in the hydrothermally altered volcanic tuff inside the Takamatsu crater district in Shikoku, Japan. The purposes of this study are to elucidate the geological significance as a special locality and to define the standard value of this occurrence. We find some small size zeolite minerals occurring in the vein-lets of the whitish wall rock inside the Takamatsu Crater. By the analytical results using XRD and SEM, we determined some zeolite minerals, which look like mordenite or gismondine. Additionally, by the water quality purification using our outside experimental facilities with 15m pool, we have elucidated that these natural zeolites are clearly effective to adsorb ammonium ions and to remove colitis germs. This study area is still now on geologically discussions and we have investigated for more than ten years to elucidate the genesis or the formation process of this area. We have considered the occurrence of this area as follows that; firstly there occurred a lot of active volcanic formations and then much of small mountains were formed around, secondly they were suffered by an extra-terrestrial matter such as a falling of iron meteorites, and finally the surface of those mountains were weathered and eroded by wind and rain. There might be a catastrophe like an active volcanic eruption or earthquake.

References:

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