spectrum. However, all the isotopic counterparts could not be identified.

As regards the degree of depolarization, it has been observed that for totally symmetric vibrations, the values lie between 0 and 6/7. For many vibrations, however, the degree of depolarization could not be precisely determined.

ACKNOWLEDGEMENT

The authors are thankful to Dr. I. S. Singh for helpful discussion. One of them (S. R. S.) is extremely grateful to Prof. Jacob Samir, Head of the Department of Inorganic and Analytical Chemistry, The Hebrew University of Jerusalem, Israel, for the facilities and award of a fellowship to work in his laboratory.

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A NOTE ON THE OCCURRENCE OF BENSTONITE, A CARBONATE OF CALCIUM AND BARIUM FROM THE CARBONATITE COMPLEX AT JOGIPATTI, NEAR SAMALPATTI, DHARMAPURI DISTRICT, TAMIL NADU

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ABSTRACT

Benstonite, a carbonate of calcium and barium has so far been reported from two other localities in the world, *viz.*, from Argansas, U.S.A. (Lippman, 1962) and Längbam, Sweden (Sandius, 1963). This paper deals briefly with the mineralogy and petrogenesis of a new occurrence from Jogipatti, India. Benstonite at Jogipatti is related to the carbonatites in which it occurs in a massive form. From the field data it is concluded that the formation of benstonite took place at high temperature, although it is generally postulated that the introduction of barium is an indication of late low temperature activity. However in the area under consideration, benstonite is associated with coarse black pyroxene and white feldspar which are usually high temperature minerals.

IN 1968, during the course of a detailed field examination of the carbonatite occurrences near Koratti, the authors recognised several other satellite bodies of carbonatites out of which the occurrence near Jogipatti drew special attention in that they came across a massive light yellow carbonate which looked rather different from the other carbonate minerals usually associated with carbonatites. This mineral has subsequently been identified as benstonite.

Jogipatti is a small village situated about 1·5 kilometres north of Samalpatti R.S. lying on the Tirupathur-Salem Broad Gauge Section of the Southern Railway. It falls in Uttangarai Taluk of Dharmapuri District in the State of Tamil Nadu (*Survey of India Toposheet* 57 L/7).

The principal rocks encountered in the area are syenites in which occur carbonatites, pyroxene pegmatites and veins of quartz barytes.

The syenites are mostly made up of alkali feldspar with a few ferromagnesium and other accessory minerals. The carbonatites occur as small lenses within the syenites. About seven such bodies were noticed in the field. The dimension of the individual bodies varies widely. They are generally elongated in