

## **A MOSSBAUER STUDY OF UNUSUAL GOLDEN COLOUR MICA FROM HIGH HEAT PRODUCING GRANITE OF MALANI IGNEOUS SUITE, NORTH-WEST, INDIA**

K.L. Shrivastava<sup>1</sup>, Virendra Gaur<sup>1</sup>, S. Ram<sup>2</sup> and R.P. Tripathi<sup>2</sup>

<sup>1</sup> *Department of Geology, JNV University, Jodhpur, India*

<sup>2</sup> *Department of Physics, JNV University, Jodhpur, India*

*Email: klsgeology@yahoo.co.in*

### **Abstract**

Mossbauer study of an unusual golden coloured mica from the high heat producing granite, Malani Igneous Suite has been performed at 300<sup>0</sup> K. Result shows presence of the unique four Fe<sup>3+</sup> doublets for the first time ever in any mica. The four Fe<sup>3+</sup> doublets occur probably because of the presence of a mixed type of octahedral layers, one like that in the common mica and the other containing impurities.

*Keywords:* Mossbauer, Golden Mica, High Heat Producing Granite, Malani Igneous Suite