EXPERIMENTAL EVALUATION OF PERFORMANCE OF MAGNETORHEOLOGICAL ELASTOMERS BUSHES

N. M. PATIL<sup>1</sup>, S. S. GAWADE<sup>2</sup> & S. R. KUMBHAR<sup>3</sup>

<sup>1</sup>P.G. Student, Rajarambapu Institute of Technology, Sakharale, Maharashtra, India <sup>2</sup>Professor, Rajarambapu Institute of Technology, Sakharale, Maharashtra, India

<sup>3</sup>Assistant Professor, Rajarambapu Institute of Technology, Sakharale, Maharashtra, India

**ABSTRACT** 

Present work deals with the study of preparation method of Magnetorheological Elastomer and testing it under different loading conditions by varying applied magnetic field. Micron size iron particles are used for the preparation of MRE bush in order to increase number of iron particles in elastomer matrix. It improves performance of MRE bush. Four different MRE bushes are prepared by using two different compositions and their performances have been studied under different loading conditions and applied magnetic field.

**KEYWORDS:** Curing, MRE, Smart Material, Response Analysis