

FINAL YEAR PROJECT REPORT

MAGNETIC CERAMIC

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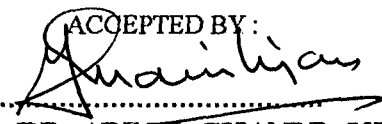
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ABSTRACT

This project paper explained the research and method of processing magnetic ceramic for engineering utilization. The objective of the research is to know the effects of calcined and uncalcined powders in the samples. The chemical used are in the form of powders that consists of MgO, ZnO, MnO₂ and Fe₂O₃. Samples formed from the chemical above is studied by using apparatus such as XRD, SEM and Optical Microscopy and it is divided into two and named as route 1 and route 2. Route 1 is calcined powder and route 2 is uncalcined powder.

The first chapter explained briefly on magnetic ceramic, which consists of explanation on ceramic, magnetic ceramic and application of magnetic ceramic.

The second chapter reviewed about the theories on how magnetic ceramic being produced from the raw material until it turn to a sample called magnetic ceramic.

The third chapter illustrate how the volume of the powder composition is calculated before it is mixed to form the sample.

The fourth chapter is about the experimental procedure that is done to produce the sample of magnetic ceramic and research done on the properties and the microstructure obtained by implementing XRD, SEM and Optical Microscopy.

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