

**FINAL YEAR PROJECT REPORT
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DEPARTMENT OF CIVIL ENGINEERING
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SHAH ALAM**

**LABORATORY TESTING OF MALAYSIAN ROCKS
ACCORDING TO ISRM SUGGESTED METHODS**

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SYNOPSIS.

The purpose of the study is to tabulate data of engineering properties of Malaysian rocks by carrying out a series of laboratory tests as recommended by ISRM suggested method. The ultimate objective is to obtain rocks properties and Laboratory Field Index as recognised by ISRM.

Since most engineering properties test such as physical properties, hardness and abrasiveness, sound velocity, tensile strength, shear strength, point load index, Schmidt rebound hardness etc, are rather elaborate and time consuming and involve tedious specimen preparations, an attempt is made to correlate index properties of rocks to their engineering properties.

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1.0 INTRODUCTION

Rock mechanics is a young subject in comparison with related engineering science. Rock properties has no fundamental mechanical properties in the sense of material constants characteristic of particular rock. There are standard tests of various types which will give indices of rock properties such as point load index, uniaxial compression etc for the comparison with other rocks tested under similar condition. It is useful to classify or characterize the rock material in order to design structure in the rock.

Series of "Suggested method"(Brown 1981) prepared by committees of ISRM is to provide basic information on the physical properties, mechanical properties and dynamic properties of rock material.

In spite of the numerous construction projects that have been carried out in past decade, and those that presently progress throughout the country, little data or information on the engineering properties of Malaysian rocks have been published such as written up by Dr. Ibrahim Komo and T.C Bong which are available to general public especially in the perspective of engineering properties.