

**THE DESIGN AND DEVELOPMENT OF A PORTABLE MINI
ANECHOIC CHAMBER FOR ANTENNA MEASUREMENT**



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Tuan,

**PERMOHONAN MENDAFTAR PROJEK PENYELIDIKAN BAGI TUJUAN
PENGESAHAN JAWATAN**

Merujuk kepada perkara di atas, saya ingin membuat permohonan untuk mendaftarkan projek penyelidikan yang telah dilakukan dengan pembiayaan sendiri. Tujuan pendaftaran ini bagi memenuhi syarat pengesahan jawatan ahli projek yang terlibat di dalam menyelesaikan penyelidikan tersebut. Maklumat tentang projek yang ingin didaftarkan adalah seperti berikut:

Tajuk : Design and Develop A Portable Mini Anechoic Chamber for
Antenna Measurement
Ketua Projek : Mohd Zamri Bin Jusoh.
Ahli Projek : Tuan Haji Hasnain Bin Abdullah @ Idris dan Norizan Binti Ahmed.

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ABSTRACT

A mini anechoic chamber is developed with a wall that can absorb the microwave energy thus preventing any internal reflection. Interference is removed and no external wave can enter the chamber due to its shielding properties. The challenge in this project is to design a good absorber that can absorb the microwave energies without affected by the environment. Three major elements are to be considered; the absorbing cone, which is made of polystyrene, carbon that coats the cone and special paint that joins the carbon and the cone together. The design is focused on a pyramid shape, the easiest way to construct as compared to the others. The frequencies are expected to operate at 3 GHz to 10 GHz only due to its equipment limitation. The results obtained will be compared to other commercial absorber.

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