

# **THE DESIGN OF A MINI HYDRO GENERATOR**

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A thesis submitted in a partial fulfillment of the requirement of the  
award of Bachelor Engineering (Hons) (Mechanical)

FACULTY OF MECHANICAL ENGINEERING

UNIVERSITITEKNOLOGI MARA (UiTM)

MAY 2010

## ACKNOWLEDGEMENT

First and foremost, in the name of Allah, The Almighty and The Most Merciful, peace be upon His Messenger, Prophet Muhammad S.A.W and his companion. I am forever thankful and I would like to express my greatest gratitude for His divine inspirations and guidance towards the completion of this project.

Next, I would like to thank my project advisor Mr. Mohd Azzeim B. Mat Jusoh for his time and interest towards my project His guidance and help has Always inspired me to go further towards the completion of my project.

I would also like to give my personal thanks to my colleagues, or should I say, brothers in arms, Ashraf Khan B. Nasir Khan and Zubli Quzairov B. Zubli for their never ending support and encouragement. Thanks to you all I was able to complete the project and be where I am today. The friendship we had is a treasure more valuable than everything in this world, for that, I am forever indebted to you.

For my parents, siblings and friends, I would like to express my deepest gratitude. Your continuous support and encouragement has always made me determined and focused towards achieving my goal. Your encouragement has also made me to be persevere through all the hardship in the making of the project.

Thank you, all of you.

## ABSTRACT

Renewable energy is a common issue that has been discussed continuously since the past few decades. Attaining and developing new ideas to create and restore energy to be used and at the same time not affecting the environment are one of the biggest hurdles that the issue tries continuously to overcome. Along the way, there are many inventions and ideas that have been stumbled upon to generate these renewable energies. The basic design of the project is in fact a system whereby energy is produced by the principles of generating electricity by using kinetic energy. In this design, the system is initiated by fluid flow of the water in the pipeline thus causing a movement of rotation of the water turbine. As the turbine rotates, this will turn the shaft that is attached to an electrical generator. This will result in the change of the kinetic energy of the turbine be turned into the electrical energy produced by the rotation of the shaft inside the electrical generator. The energy produced will be stored in a battery for mobility and convenience of usage. As an aspect of design, the current result has exceeded initial aim based on wattage and voltage capacity. With potential as big as this, the project promises a future in its functionality and application in the near future.

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