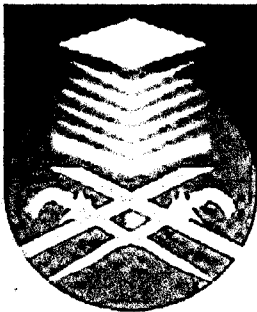


SOLAR POWERED PORTABLE HANDPHONE CHARGER

**This is presented in partial of fulfillment for the award of the
Bachelor of Electrical Engineering (HONOURS)
UNIVERSITY TECHNOLOGI MARA MALAYSIA**



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ACKNOWLEDGEMENT

In the name of Allah, Most Gracious, Most Merciful All praise and thanks are due to Allah, and peace and blessings be upon His Messenger.

I would like to express my most sincere gratitude and appreciation to my great supervisor, Prof. Dr Ahmad Maliki Bin Omar who has patiently guided and advised me through countless discussions during the preparation of this study.

Special thanks to my beloved family for their support, patience and endurance shown over the accomplishing of this study, and not forgetting my course mates in EE220 B. Eng. (Hons) Electrical. May Allah S.W.T bless your kindness.

And last but not the least, may Allah, Beneficent Lord of Mercy save us all from the evil inclinations for our souls and make us hate disbelief, transgressions and sins, and may He endear to our hearts faith and good works.

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ABSTRACT

This project is about to develop a Portable Handphone Charger that creates an output to charge a hand phone. The Portable Handphone Charger consist of four main parts, that is solar panel, charger controller circuit, storage device (rechargeable battery) and cigarette plug for output port. Generally, Portable Handphone Charger project focuses on the theories, designs, programming and performs a monitoring on voltages, current and control the excessive limit of the battery.

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CHAPTER 1

INTRODUCTION

Each day more solar energy falls to the Earth than the total amount of energy the planet's 5.9 billion inhabitants would consume in 27 years. While it's neither possible nor necessary to use but a small portion of this energy, it's hardly begun to tap the potential of solar energy [1].

In all its vastness, the sun still remains somewhat of a mystery to human. The sun provides Earth with light and energy. The sun provides an incomprehensible amount of energy every minute of the day. There are more advantages of solar energy can be receive when the human harness it.

By using solar energy, human can generate the electrical power. This process is called photovoltaic technology. Photovoltaic cells (solar panel) are used to convert the sunlight directly into electricity. The electricity that produced by solar panel can be used same as traditional electricity sources [2, 3]. Table 1.1 shows the comparison between the major types of energy technologies, namely fossil, nuclear, wind, hydro, wave and marine current. The comparison about the capital cost, running cost and environmental impact.