A LAW FOR NANOTECHNOLOGY IN MALAYSIA

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ABSTRACT

"A Law for Nanotechnology" is the title for this project paper. This project paper is about nanotechnology, where at the first place we were discussing on that there is a need for us to have law on nanotechnology. This is because; nanotechnology development can be seen everywhere and it can be said that there are high potential risks of nanotechnology that might affect human and the environment.

In order to prove this statement, we have discussing on what nanotechnology is all about at the second chapter of this project paper. Then, we also look into the development of nanotechnology in foreign countries such as the United States of America and the United Kingdom. We also discussed on the development of nanotechnology in Malaysia itself on how far Malaysia has developed in this new technology. In addition, in chapter three, we have focused on the usage and the adverse effects of nanotechnology. In this chapter, we have laid down examples of products, which can bring benefits as well as examples of products, which can give harm to the people and environment.

It can be said that though nanotechnology does give benefits, but there are still the possible adverse effects when people used this technology. So, in chapter four, we have analysing the available Malaysian laws, which may be applied to deal with the potential adverse effects of nanotechnology. We have also made our references to the foreign laws such as the laws in the United States of America and the laws in the Switzerland, which we think can be used as a guideline if we wanted to enact law on Nan technology.

In conclusion, we agreed that the available Malaysian laws are not sufficient to deal with the Nan technology. Therefore under chapter five, we have given several recommendations on what should be included in the law of nanotechnology.

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CHAPTER 1: INTRODUCTION

1.0: Introduction

"But I am not afraid to consider the final question as to whether, ultimately in the great future we can arrange the atoms the way we want; the very atoms, all the way down!" –

Richard Feynman, There's Plenty of Room at the Bottom.[1]

Ever since the days of the Greeks and Democritus, man has believed that when dividing up matter we will eventually reach a point where we can divide no more because we have found the essential unit of matter, then referred to as the atom. [2] Eventually in 1959 Feynman gave a lecture at the California Institute of Technology called "There's Plenty of Room at the Bottom" where he observed that the principles of physics do not deny the possibility of manipulating things atom by atom. He suggested using small machines to make even tinier machines, and so on down to the atomic level itself. He also postulated the idea you could write the entire Encyclopedia Britannica on the head of a pin.[3] This is called nanotechnology.

Nanotechnology is about building things one atom at a time, and in doing so constructing devices with unprecedented capabilities.[4] In a precise definition, nanotechnology is the science and technology that enables one to understand measure, manipulate, and manufacture at the atomic molecular level which aimed at creating materials, devices and systems with fundamentally new molecular organizations, properties and functions.[5]

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[1] http://cnx.org/content/m14504/latest/
[2] http://filebox.vt.edu/users/jhannon/Nano/history.html
[3] http://www.kheper.net/topics/nanotech/nanotech-history.htm
[4] http://www.kheper.net/topics/nanotech/nanotech-history.htm
[5] U.S Nanotechnology Research and Development Act 2003