Introduction to nanotechnology

Technology



1. OINTRODUCTION The objective of this study is to research and discover the development, characterization, and function of nanotechnologies in the globe in the present and future. In this study, we will defined the basis of nanotechnologies in wide spectrum such as the advantages, disadvantages, background, history, future investigation, society, ethic, environmentand many more. Furthermore, our group would also like to emphasize on the significant cause and effect of nanotechnologies toward the advancement of human civilization in the recent time and toward the future.

In addition, create awareness and wide perspective view toward engaging main issues such as moral ethical in our society. 2. OBACKGROUND Nanotechnologies have been use in wide field medical, astronomy, environment, industrial and many more. From the way we communicate, to the methods used to diagnose and treat our illnesses, to the speed with which our computers process data, this newtechnologypromises to enhance our lives in almost limitless ways. Therefore we would like to discuss some of the main issue and further permeate in the breakthrough of nanotechnology. What is a nanotechnology? In the scale of Nano in the prefix of nomenclature is extremely small, which you cannot see through your naked eyes. Microscope will be needed in order to observe object more clearly. Nanotechnology currently is being used to improve existing products and processes, for an example, by strengthening the material used in golf clubs and bicycle frames, creating stain and water repellant clothing and producing wear-resistant paints and coatings. One developing area in nanotechnology is that of self-assembly, whereby materials will be able to grow themselves.

One of my theories that I would like to discuss is about the space innovation. Such innovations will not only increase productivity, but also will create new materials in a process known as "dynamic self-assembly." The universe is so big that it blows up our mind to try to image how big it is. Human can somehow find a way to explore the universe by the advancement of nanotechnologies. For an example to shoot a robot to a star then it will eventually manufacturing itself and produce much bigger colonies. After a rapid production in certain stages complete civilization.

They will often shoot more of them self to other star and repeating process again and again. In the longer term, however, nanotechnology is likely to result in completely revolutionary toward the society. Promising uses of nano scale particles may include the cleanup of heavily polluted sites, which we will have to consider as well. Nanotechnology is more effective diagnosis and treatment of cancer and other diseases, lighting that is twice as energy efficient as what is currently available, cleaner manufacturing techniques and much smaller and more powerful computers.

Research indicates that nanotechnology even may help create an alternative fuel to power our automobiles. In the sum of all our research and study I would appropriately consider nanotechnologies of in fact the greatest tool toward humanity next stages of revolution. •What is the history of nanotechnology? The term " nanotechnology" was coined in 1974 by Norio Taniguchi (1912-1999) at the University of Tokyo. It includes a number of technologies that deal with the miniaturization of existing technology down to the scale of a nanometer (one-billionth of a meter) in size, about the size of molecules and atoms.

Potential effects of nanotechnology include microcomputers capable of storing trillion of bytes of information in the size of a sugar cube; portable fluids containing nanobots that are programmed to destroy cancer cells; and airborne nanobots that are programmed to rebuild the thinning ozone layer and many more. Scientist today have claimed that nanotechnology was in fact humanity greatest advantages as well as humanity greatest treat if without appropriate and further observe in its major consequences in life and either we will be consume by our ownfailuretoward the disaster that it can cause to us. Facts about nanotechnologies? As we all know our body consist billion of cell and it is systematically and orderly organized that congregate it specific function. Inside our cell it comprises of billion of atom which consists of major element such as carbon, oxygen and hydrogen that appropriately linked together will itself and form specific function and feature. The advancement of nanotechnologies can systematically combine fuse billion compound, atom and element to distinctively form a new cell which about our concern is against the law of nature and moral ethic.

This is due to the fact that we can create a life into the world is forbidden and prohibited in many societies around the world. In some fact I would like to discuss, about the discovery aboutscience. Scientist today has claim that we no longer live in one universe but millions of verse which coexist in the ocean of verses and there's may be have some planetary civilization that we wouldn't might known.

There are many extraordinary and fascinating fact about science including bend through light forming an invisible matter; dimensional world that coexist; in certain fact which claimed that the world we're living is like a matrix which we are just like a hologram that wouldn't exist at all and in fact there are mysterious forces keep pulling us for what we believing; small teleport machine which can teleport in atom size particle and maybe a human in few decade to come. There is many potential and credibility toward the advancement of nanotechnologies development.

In some fact that I would like to consider is about human enhancement. Nanotechnologies in human enhancement have use to improve human ability such as physical and mental. In some fact that this method have been use in some development country toward the future born generation to trigger the potential of human ability which exited beyond try fold. We will further penetrate and discuss more deeply toward this issue in my relevant discussion. Would human enhancement technologies hinder moral development?

Many believe that "soul-making" is impossible without struggle (Hick, 1966), and achievements ring hollow without sacrifice or effort (President's Council on Bioethics, 2003); so if technology makes life and competitions easier, then we may lose opportunities to feed and grow our moral character. Nanotechnology was in fact use toward some method to enhance human ability. Nowadays humanity can create powerful drug which enhance human performance. We can discover in the sport area which drug have been used such as steroid to increase athletic performance.

Beyond the future we might been able to create indeed more powerful drug which provide human massive of strength. Beyond the future, we might be able to prolog our life for 10 year, 100years or maybe 1000 years. As we know that brain is the primary source which control our aging as certain

hormone are secreted. The method behind this is nanotechnology is so small that it can flow through our vein and it can be transfer to the human brain to alter our brain chemical processes which control our aging. •What is the futurist predict about the future in nanotechnologies?

In the future, as technology becomes more integrated with our bodies, we can expect neural implants of the kind we mentioned above that effectively puts computer chips into our brains or allows devices to be plugged directly into our heads, giving us always on access to information as well as unprecedented information processing powers. New and future virtual reality programs are able to much better simulate activities, for instance, to train law enforcement officers and soldiers in dangerous situations so that they can respond better to similar events in the real world.

The advancement of nanotechnologies have enhance human beyond it limitation. One of the main concerns causes the earth to be populated. Also in one of the possibilities is the exploitation and abuse toward this technology. People such as a villain, criminal and hacker will approximately use this for the purpose such as to manipulate people. Other than that what I want to discuses is one of the greatest treat toward the society.

One of the biggest concerns toward our society is to have greater awareness about this matter or else humanity which living peacefully today can be destroyed by our own creation. 3. OCONCLUSION As is the case with most emerging areas of risk, nanotechnology challenges us with many unknowns. These challenges are further complicated by the fact that few risk related prediction have been made scientifically confirmed. If they are not currently exploring its potential, they are likely to do so in the very near future.

Because insurers play such a critical part in enabling new and beneficial technologies, it is crucial in development in many sectors such as manufacturers, the government, scientists and regulatory agencies to identify and quantify nanotechnology's risks. Public response to this new technology, as well as the politician, elitist, and scientist response will afford upon how much accurate information is available. Therefore we as a responsible person must unite and aware toward this greatest issue which effect globally, in order to construct better future for generation to come.