# NEWPORT INTERNATIONAL JOURNAL OF RESEARCH IN EDUCATION (NIJRE)

Volume 1 Issue 1 2021

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## **Promoting Sustainability of Eco-Friendly Environment**

Ezea Eunice Ukamaka M.

### **Department of Educational Foundation University of Nigeria Nsukka**

#### ABSTRACT

An environment that is ecologically friendly is a place where the natural environment is not damaged by the daily use of technology or otherwise. The use of nanotechnology in the aspect of computers involves reducing the electricity and environmental waste while making use of it. People use, and often waste resources like electricity and paper; the society needs to become aware of this waste and further take measures to combat it. This paper analysed the need to promote a sustainable eco-friendly environment. It concluded that in order to enhance the handling and maintenance of a sustainable green environment, there is need to ensure the application of a few products to the daily use of LCD screens which include lint-free antistatic wipes and swaps, dirt removal and display cells enhancement fluid.

Keywords: Development, ecological, nanotechnology and Environment

#### INTRODUCTION

The development and deployment of Nanotechnology is critical to our economy and society because it has led to major breakthroughs in information technology and computers, medicine and health, manufacturing and transportation, power and energy systems, and national security. Nano-engineering is the fundamental theory, engineering practice, and leading-edge technologies in analysis, design, optimization, and fabrication of Nano scale structures, devices, and subsystems. The studied Nano scale structures and devices have a dimension in nanometers. To support the nanotechnologies, basic and applied research and development must be performed. Studying nanostructures, one concentrates one's attention on the atomic and molecular levels, manufacturing and fabrication, control and dynamics, augmentation and structural integration, application and large-scale system synthesis, et cetera.

It is essential to design novel Nano devices such as Nano transistors and Nano diodes, Nano switches and Nano logic gates, in order to design Nano scale computers with Tera-scale capabilities. It is obvious that nanotechnology drastically change the fabrication and manufacturing of materials, devices, and systems through:

- Virtual prototyping (design cycle, cost, and maintenance reduction)
- Improved accuracy and precision, reliability and durability.
- Higher degree of efficiency and capability, flexibility and integrity, supportability and affordability, survivability and redundancy.
- Improved stability and robustness.
- Higher degree of safety.
- Environmental competitiveness.

Advancing miniaturization towards the molecular level with the ultimate goal to design and manufacture Nano computers has a great number of unsolved problems. These problems include environmental impact which does not support an Eco-friendly environment and health risks.

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#### Nanotechnology as an IPO system

The nanotechnology makes use of a nano-electromechanical system studied using the quantum theory. The largescale nanotechnological system can integrate processor (multiprocessor) and memories, high performance networks and input-process-output (IPO) systems. In particular, the system can integrate these capabilities:

- many chips controlled by ICs;
- high performance processors;
- multi-level memory and storage that support archives;
- high performance communication networks.

The IPO system is a machine with ability to receive data, process the data and give results (Information). To do this, there is a critical need for coordination across a broad range of hardware and software. For example, development of new programming languages and compilers, performance and debugging tools, operating system and resource management, etc, are needed. A machine with this capability is the Computer system, but what is its impact on the environment.

Impacts on the environment.

The computer manufacturing processes and computer waste are depleting natural resources and polluting the environment. When computers are discarded in landfills, they release toxic materials and potentially dangerous levels of lead, mercury, and flame retardants. Most importantly our everyday use of the computer also reduces the Eco-friendly environment we are to live in.

#### **Eco-friendly Environment**

An environment that is ecologically friendly is a place where the natural environment is not damaged by our daily use either by the use of nanotechnology or otherwise. The use of nanotechnology in the aspect of computers involves reducing the electricity and environmental waste while making use of it. People use, and often waste resources like electricity and paper; the society has become aware of this waste and is taking measures to combat it.

#### **Eco-Friendly Environment Suggestions**

- Do not leave the computer running overnight.
- Turn off the monitor, printer, and other devices when not in use.
- Use paperless methods to communicate.
- Recycle paper.
- Buy recycled paper.
- Recycle old computers and printers.

#### Experiment on Waste Products From The Use Of Nano-Technology (Computer Lcd Screen)

The aim of this experiment was to know how possible it is to expand the life of computer LCD screen and improve its protection. The LCD is an aspect of nanotechnology that uses transistors for the display of colours, The LCD (Liquid Crystal Display) uses a liquid compound to present information on a display device. The LCD monitor and LCD screens produce colors using the active matrix technology also called Thin Film Transistor (TFT) that is viewable from any angle. A newer type of this technology is the oLED. This work was on the production of a cleaning agent that biologically gets rid of organic wastes left off on screens after use and extend the life of the display cells, This product seeks to establish the natural and synthetic potential of vinegar extract and hydrogen peroxide to be used for the cleaning and polishing of LCD / LED screens of computers.

Thus, since LCD screens are available in all computing devices, organic wastes on these screens are found to be massive which brings about an environment detestable to the green environment. A research work was initiated to review the existing methods of dirt removal and recommend modifications to extend the life of this technology and save the environment. This is the where we introduce a biological cleaning kit that biologically removes dirt and produce a thin film (new layer) that covers our TFT screens and makes it dirt and dust resistant; this uses the optical brightening technology to enhance the display from the display cells and optimize it durability. Results show that over time, the computer systems collect dust –even in a clean environment and collect organic waste on screens. Built-up dust and dirt can block display cells reflection which can cause it to die off from its own reflection. By cleaning your computer screen regularly, you can help extend its life. This preventive maintenance task requires a few basic products which is environment friendly.

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#### CONCLUSION

In order to enhance the handling and maintenance of a sustainable green environment, there is need to ensure the application a few products to the daily use of LCD screens which include lint-free antistatic wipes and swaps, dirt removal and display cells enhancement fluid, etc.

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Ezea Eunice Ukamaka M. (2021). Promoting Sustainability of Eco-Friendly Environment. *NEWPORT* INTERNATIONAL JOURNAL OF RESEARCH IN EDUCATION (NIJRE) 1 (1):1-3.

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