International Conference on Materials Science and Research

November 16-18, 2017 Dubai, UAE

Nanotechnology Challenges and Future

A. A. Ebnalwaled^{1,2}

¹Electronics & Nano Devices (END) Lab, Physics department, Faculty of Science, South Valley University, Egypt ²Egypt Nanotechnology Center (EGNC), Cairo University Sheikh Zayed Campus, Egypt

Nanotechnology is a multidisciplinary field, which covers a vast and diverse array of devices derived from engineering, biology, physics and chemistry. These devices include nanovectors for the targeted delivery of anticancer drugs and imaging contrast agents. Nanowires and nanocantilever arrays are among the leading approaches under development for the early detection of precancerous and malignant lesions from biological fluids. Nanotechnology is being used to make surfaces self-cleaning and stay clean for a long time. Nanotech can be found in cosmetics, sunscreens, clothing and many other consumer products today.

In the next 20 years, nano-technology will touch the life of nearly every person on the planet. The potential benefits are mind boggling and brain enhancing, but it is not without risk.

Nanotechnology poses many great challenges not only to scientists and engineers but also to society at large. Researchers in nanotechnology must do their great efforts to overcomes the challenges and reduce the risks that nanotechnology faces. So in this talk we will review the challenges that face nanotechnology and how we can overcome it.