

Assessment of Mammalian Cell Response Exposed to Nanoparticles

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ABSTRACT

Nanotechnology is the application of nanoscale (1-100nm) phenomena, presumably to develop new techniques and devices that would have far-reaching impact on existing technologies (e.g. medical, aerospace, semiconductor and electronics).

Since nanoscience and nanotechnology are relatively new to the consumer industry, there is a certain unfamiliarity of the effects or exposure to these miniscule particles. Nanoparticles are on the same length scale as life enabling molecules such as DNA, proteins and polysaccharides and therefore, could potentially impact all cells.

Today, these concerns have not been well approached and recently there have been several attempts to address these concerns in scientific and government circles. The goal of this research project is to determine potential hazards associated with nanoparticulate exposure to mammalian cells.

BIOGRAPHY

As a senior here at Montana Tech, Stephanie Schleif plans on graduating in December 2008 with a Bachelor's of Science degree in Environmental Engineering. She came to Montana Tech with her Associates of Arts degree and decided to pursue engineering where the thrill of problem solving gave her motivation. After graduation in December, Stephanie plans on returning to Eastern Washington, to be closer to her family and friends.