



**Susana ADDO NTIM**

**Home Country**  
**Ghana**

**Degree**  
**PhD in Environmental**  
**Science**

**Expertise**  
**Environmental Science**

**Research Focus**  
**Nanotechnology Methods**  
**for Water Treatment**

**Host University**  
**New Jersey Institute of**  
**Technology, United**  
**States**

**Fellowship Awarded**  
**2009**

Susana Addo Ntim was born in Akropong Akwapim, a small town in eastern Ghana. She was raised along with her brother and sister by her mother, a high school teacher and, after her mother's untimely death, by her aunt.

After representing her high school at a science and mathematics clinic for girls, Susana decided to pursue a career in science. In 2001 she won the Bentil Prize for Promising Women Scientists from the Ghana Science Association. In 2002 she graduated with a Bachelor of Science degree from Kwame Nkrumah University of Science and Technology. In 2006 she received her MSc in marine estuarine environmental science from the University of Maryland Eastern Shore and since 2007 she has been working toward her PhD at the New Jersey Institute of Technology in Newark, United States.

Her research focuses on using nanotechnology for water treatment. Susana is looking at generating clean water using novel carbon nanotube-based nanocomposites. She is specifically focusing on a nanocomposite system comprised of nanoparticles immobilized on multi-walled carbon nanotubes that can carry out a wide range of diverse functions, from water disinfection to the removal of specific pollutants. Susana's preliminary data has shown that such immobilization is possible, and synergistic activities combining carbon nanotubes and tetragonal zirconia have been demonstrated for the de-fluoridation of water. Of particular interest to her is the application of this approach to arsenic removal from water. The nanocomposite system she is researching has promise for arsenic removal under many different conditions, and may present an efficient, cost-effective technology for water purification.

When she completes her doctoral studies, Susana plans to teach at Kwame Nkrumah University of Science and Technology in Ghana.