



# Nano-Link

## Nano-Link EDUCATOR WORKSHOP

Nano-Link: Center for Nanotechnology Education provides educators like you with nanoscience content that can be easily integrated into traditional classes. Nano-Link believes that educators, armed with fun activities and good background knowledge can ignite interest and excitement in students – not only for nanoscience but for STEM and science careers as well. We offer 6-8 hour Educator Workshops that will teach you about nanotechnology, it's fundamental concepts AND 6 to 8 of our topic specific activities. You will leave the workshop with new knowledge, ideas, and the confidence to bring this emerging technology content to your students.

Topics covered in a typical workshop:

- + Introductions and Logistics
- + Nanotechnology Overview & Why is nano important?
- + Size & Scale
- + Scientific Methods Activity
- + Size Dependent Properties
- + Surface Area-to-Volume Ratio Activity
- + Structure of Matter: Cross Link and Polymer Activities
- + Discussion – what's going on with those polymers and water
- + Tool & Instrumentations
- + Models and Simulations – Overt and Covert Assumptions
- + Forces and Interactions
- + Why does salt dissolve in water?
- + Cohesive and Adhesive Force
- + Superhydrophobic Activity
- + Self-Assembly - Aspirin Calculation – hyper vs reality
- + Crystal Structure
- + Thin Films Activity
- + Quantum Effects - Quantum Physics and Quantum Dots
- + Sunscreen Activity
- + Major concepts and correlation to traditional science
- + Critical Thinking
- + Nano Infusion Project

