K-12 Nanotechnology Education
Georgia Institute of Technology
What’s all the Buzz About?

The Georgia Tech NNIN Education and Outreach Office has as its mission to provide educational programs for young people, teachers, undergraduates, graduate students, adult professionals and the general public. Our goals are to ensure a nano-literate public in Georgia and to encourage students to pursue education and careers in science, technology, engineering, or mathematics, and particular in nanotechnology. Approaches to reaching these goals include:

### Elementary-Middle School Teacher Workshop
Workshops can be from two to four hours and often include the following activities. Workshops can be arranged by contacting joyce.palmer@mirc.gatech.edu
- Intro to Nano and Nanotechnology
- The Scale of a Nanometer
- Number Line Activity
- How Small are Atoms?
- Fun with CO2
- A Look at Kids Zone
- Magic Sand
- Lotus Effect
- Magnetism and Nanotechnology
- NanoProducts
- Smart Memory Alloys

### Middle-High School Teacher Workshop
Workshops can be from two hours to two days and often include the following activities. Workshops can be arranged by contacting joyce.palmer@mirc.gatech.edu
- Intro to Nano and Nanotechnology
- Nano Demo
- Size Matters
- How Small is Small
- Nanoproducts
- Testing of Nanoproducts
- How do we “see” objects at the “nano” size?
- Magic Sand
- CSI Lotusville
- R.A.N. Reading and Analyzing Nanotechnology
- NanoSystems in Nature
- What does Magnetism have to do with Nanotechnology?
- Self-Assembly
- Mixtures and Nanotechnology

### Visits to the Microelectronics Research Center by School Groups
School groups interested in visiting MiRC can fill out and email or fax form that is located at http://www.mirc.gatech.edu/education/schedule.php. A sample agenda for a group visit may include:
- PowerPoint introduction to Nano and Nanotechnology
- Cleanroom Tour
- Research Lab Tour
- AFM Demo
- Tabletop Demos such as magic sand, ferrofluid, edible chips, buckyballs, nanoproducts
- Talks by Nano Industry Guests

### Visits to School by Educational Outreach Staff
Visits to school may be arranged by contacting joyce.palmer@mirc.gatech.edu. Visit to school may include visit to a series of classes, or talking to a larger portion of the school. Visit may include:
- PowerPoint intro to Nano and Nanotechnology
- Demo of Tabletop AFM and how AFM works
- NanoProducts Activity
- Demos over magic sand, ferrofluid, lotus effect, smart memory alloys

### Exploring Nanotechnology Camp
Students in grades 9-12 are introduced to unique properties at the nano scale and given an opportunity to explore how nanotechnology is impacting fields such as energy and biotechnology. Information about camp can be found at http://www.ceismc.gatech.edu/