NCN Nanomaterials

Nanomaterials have a structure whose size is on the scale of 1-100nm. Materials with this size characteristic can have unique chemical, electrical, optical, thermal and structural properties. A classic example is the variance of the color of gold particles with respect to particle size. Nanomaterials can consist of particles, quantum dots, nanorods, nanotubes, as well as other composites and nanostructured materials.

This page is a starting point for nanoHUB users. It lists a few resources developed or recommended by the NCN Nanomaterials team. You can find other resources by browsing through the list with the tag <u>nanomaterials</u>, or by using the nanoHUB search box to locate other resources. Resources for specific materials are available: <u>nanocomposites</u>, <u>nanoparticles</u>, <u>quantum dots</u>, <u>nanorods</u>, <u>nanotubes</u>, <u>nanostructure</u>.

Selected Resources

- <u>NCN Nanomaterials: Tutorials</u>
- <u>NCN Nanomaterials: Courses</u>
- <u>NCN Nanomaterials: Research Seminars</u>
- <u>NCN Nanomaterials: Simulation Tools for Education</u>
- <u>NCN Nanomaterials: Simulation Tools for Research</u>

Special Inititatives

- Excellence in Computer Simulation
- Introduction to VEDA: Virtual Environment for Dynamic AFM
- Modeling and Simulation of Materials
- Overview of Computational Nanoscience

Recommended Links

- Northwestern University Materials Research Science & Engineering Center
- <u>Materials Computation Center, University of Illinois, Urbana-Champaign</u>
- Purdue University Birck Nanotechnology Center
- Frontiers in Scanning Probe Microscopy