

NanoDays at the Highland Road Park Observatory and the Louisiana Arts & Science Museum!

Saturday, March 30, 2:00-6:00 p.m at the

Highland Road Park Observatory

Saturday, April 6, 10 a.m.-3:00 p.m at the

Louisiana Arts & Science Museum

Learn about nanoscale science and technology during a nationwide festival celebrating the science of ultra small matter. Two family friendly events will take place at the Highland Road Park Observatory on Saturday, March 30th, and at the Louisiana Art & Science Museum on Saturday, April 6th, as part of NanoDays, a national event of educational programs about nanoscale science and engineering.



When reduced to the width of a human hair or smaller, ordinary materials often take on extraordinary properties. For example, the iridescent colors in butterfly wings are not created by pigments but instead by tiny patterns on the wings. Similarly, tinted glass in old cathedrals was made by mixing different sizes of gold particles to create a wide variety of colors. But it is just now that we are beginning to

understand these fascinating phenomena and their potential uses in every day life.

Nanotechnology promises advanced information processing and storage, new medical treatments, and much more.

NanoDays will feature several hands-on activities for children of all ages. Visitors will be able to see how big they are compared to nanoscale objects, understand how a Scanning Probe Microscope allows scientists to explore the nanoworld, experience the effect of reducing the size of regular objects, and learn about nanomaterials used in the manufacture of stain-free clothes. Children and adults will also have a chance to build models of nanoscale structures, play with liquid crystals, and make some fluids magically part in the middle by applying magnets to them.

In parallel with the demonstrations public talks will provide overviews of the nanoscale world and the tools that allow us to "see" it. On Saturday, March 30, at 4:00 p.m. in the Highland Road Park Observatory, Dr. Richard Kurtz, Physics Department, LSU, will present **Nanotechnology for improved energy generation, storage and transmission**. On Saturday, April 6th, at 12:00 p.m. in the LASM Dr. John DiTusa, Physics Department, LSU, will present **Nanomagnets as a path to new computers**. Dr. Juana Moreno will display a **Scanning Tunneling Microscope** that measures the surface of objects at the atomic level several times during the day.

Faculty, students and staff from: the LSU Center for Computation and Technology; the Department of Physics & Astronomy; the Department of Chemistry; the Society of Physics Students; and the National Science Foundation-funded Louisiana Alliance for Simulation-Guided Materials Applications (LA-SIGMA) are volunteering their time to make these events a success.



NanoDays, organized by the **Nanoscale Informal Science Education Network (NISE Net.)**, takes place nationally March 30-April 7, 2013, at more than 200 science museums, research centers and universities across the country. For more information please visit LSU Nanoscience & Nanotechnology website (<http://magnet.phys.lsu.edu/nano/>) or contact Dr. Juana Moreno at moreno@lsu.edu. Free admission for students with ID or report card at the LASM. The event at the Observatory is free for all. Come be part of NanoDays!