


VOL. 24. NO.8 JANUARY 21, 2004

- :: Home
- :: News
- :: Campus
- :: People
- :: Voices
- :: Closeup
- :: Briefs
- :: Contact Us
-  Search Archive
- :: UCLA HOME

'COOL' MOLECULES**Art and science blend in 'nano' exhibit**

BY CYNTHIA LEE
UCLA TODAY STAFF

Nanotechnology, the stuff of scientists' dreams and science fiction nightmares, has entered another realm. Call it the fun zone.

That's what Tracey Castillo, 10, found as she entered "nano," a new exhibition at the Los Angeles County Museum of Art (LACMA) created by UCLA faculty and graduate students from disciplines as diverse as media arts, chemistry, architecture and English.

"This is sooo cool," said Castillo as she embraced a "molecule" the size of an exercise ball rolling around in a darkened space while illuminated projections of buckyballs floated on a nearby wall and graphite molecules glowed on the floor. "I like this kind of science."

Watching from outside, UCLA media artist and professor Victoria Vesna beamed. "This really warms my heart," she said as she watched students from Hancock Park Elementary School play in the Inner Cell, the main installation.

"Nano" was created by Vesna, chair of Design | Media Arts, and nanoscientist James Gimzewski, professor of chemistry, in collaboration with N. Katherine Hayles, a scholar of electronic literature and professor of English, and their graduate students. It is housed in futuristic structures of interlocking triangles designed by architecture faculty Sharon Johnston and Mark Lee.

Open free in the Boone Children's Gallery until Sept. 6, the exhibit challenges visitors' senses, plays with their perceptions of scale and tantalizes their imagination about life forms at a billionth of a meter.

The exhibition was previewed Dec. 11. "This is going to blow your mind," marveled Andrea Rich, president and director of LACMA. "I'm going to have to come over here every day until I can understand it myself."



Photo by Todd Cheney UCLA Photo

Victoria Vesna (left), chair of Design | Media Arts, and chemist Jim Gimzewski of the California NanoSystems Institute explain molecular models to students from Hancock Park Elementary School during the opening of "nano" at LACMA's Boone Gallery.

In the Inner Cell, visitors create “gravity waves” as they walk over glowing molecules on the floor. There are interactive exhibits on quantum tunneling, atom manipulation, a nano-sand mandala and 3-D crystals that visitors can build digitally and manipulate using special tools.

Underlying the dazzling interactive computer animation and funhouse ambiance are some serious metaphors for complex scientific principles, such as Heisenberg’s theory of uncertainty in quantum mechanics, if visitors really want to delve into it.

“I don’t expect kids to understand all the science behind it, but I think they might be inspired by it,” Gimzewski said.

“First of all, they should just have fun with it,” said Hayles, the Charles Hills Professor of Literature who worked with graduate students on the text component. Around the installations are quotations from novelists and scientists that show how nanoscience has rocked their worlds. Hayles has also edited essays in the first book-length critical study of the relationship of nanotechnology to literature, art and culture. “NanoCulture: Implications of the New Technoscience” is set to be published by Intellect Press in April.

Quietly monitoring the computer technologies embedded in “nano” were bleary-eyed graduate students who worked yearlong on the project and round-the-clock before opening day.

“If we really are going to be the third culture merging science and art, then we need to do this,” said Andrew Pelling, a Ph.D. student in nanoscience, who converted the data he gets from “feeling” cells with a scanning tunneling microscope into sound that visitors hear. “There is no distinction between scientist and artist anymore. We’re one. We are completely intermeshed.”

Go to: <http://nano.arts.ucla.edu/>.