

Education Resources Mentioned by Participants

NanoKids at Rice University

http://cohesion.rice.edu/naturalsciences/nanokids/mission.cfm?doc_id=3039

NanoSense, SRI International

<http://nanosense.org>

NASA Ed. Tech Media Group

<http://www.ipt.arc.nasa.gov/>

Nanohands, Denmark (nanovolkswagon?)

Course on nano that uses science fiction – Purdue U.

<http://web.ics.purdue.edu/~bross/373/373schedule.htm>

Hands-on

A Drop to Drink

http://www.exploratorium.edu/xref/exhibits/a_drop_to_drink.html

Self-assembly with Legos

http://www.physics.unc.edu/classes/fall2004/phys006d003/Lego_Self_Assembly_Pamphlet_Final.pdf

<http://mrsec.wisc.edu/Edetc/LEGO/magbrick.html>

Ontario Science Center–memory wire, property of materials, visceral exhibitions

<http://www.strangematterexhibit.com/>

The Franklin Institute, Philadelphia–Material Matters floor

<http://www.fi.edu/tfi/info/demos2.html>

AFM Model using pen plotter

Diluting Kool-Aid (SEPUP)

<http://www.nap.edu/readingroom/books/rtmss/3.10.html>

NanoZone, Lawrence Hall of Science

<http://www.lawrencehallofscience.org/exhibits/nanotechnology.html>

Self-assembly layer model with bubbles. Blow out bubbles all one same size; they will space themselves out in one layer to achieve lowest energy. Teaches self-assembled mono layers, and about low energy states: if you pop an a bubble in the middle, all others will rearrange. Shows you can't manipulate one atom.

Foams on the cutting edge

<http://www.memagazine.org/backissues/january99/features/foams/foams.html>

Pockets that hold water – coatings (NanoTex)

<http://www.nano-tex.com/>

Nano arts at UCLA

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

Paper model of virus (cm \rightarrow 10^6) powers of 10
Order objects on a line according to size

Life in moving fluids course (Steven Vogel)

<http://www.tufts.edu/as/tampl/cbl/en25/>

<http://www.pupress.princeton.edu/titles/5523.html>

Virtual

MRSEC Exploring the NanoWorld

<http://mrsec.wisc.edu/Edetc/>

Molecular Workbench, Concord Consortium

<http://workbench.concord.org/>

Molecular Stepping Stones, Concord Consortium

<http://molo.concord.org/database/browse/stepping-stones/>

Background on biotech and nanotech needs for high school

Other self-assembly demos

<http://www.math.udel.edu/MECLAB/Projects/SelfAssembly/selfassembly1.htm>

LEGO AFM

<http://mrsec.wisc.edu/Edetc/OLD%20LEGO/LEGO/MFM/>

http://www.physics.unc.edu/~falvo/NUE/LEGO_AFM_WEBPAGES/web_files/nanoworld.html

AFM simulator

http://www.nanoscience.com/education/newsletter/fall03/Nanoadvisor_Fall03.pdf

Narrative

Mystery of Sick Puppy (PBL) – middle HS

<http://ced.ncsu.edu/nanoscale/nanoteched.htm>

“Jack-Jack” in Incredibles DVD extra

Powers of 10 movies, such as Molecular Expressions tutorial at

<http://micro.magnet.fsu.edu/primer/java/scienceopticsu/powersof10/>

Mr. Tompkins Universe (Gamow)

<http://www.cambridge.org/uk/popsci/catalogue/0521630096/>

Alice in Quantum Land

<http://www.peterussell.com/SCG/Alice.html>