

The Center for the Advancement of Nanotechnology (NanoCenter)

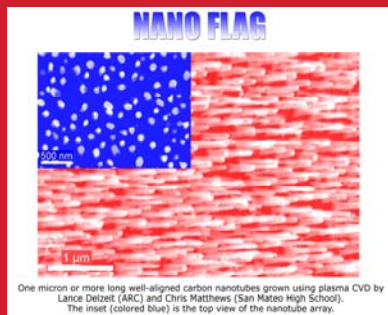
Donald F. Averill Applied Technology Training Center
San Bernardino Community College District
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(909) 382-4001 Fax - (909) 382-4003



Free Technician's Training in Nanotechnology

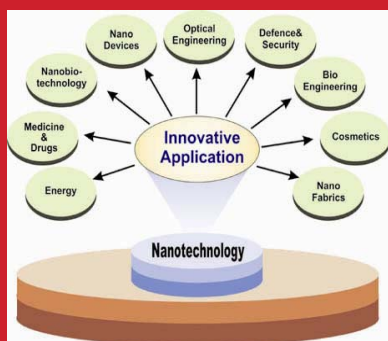
Nanotechnology is the science of manipulating materials at the atomic level to design and manufacture new and better materials and products. One nanometer equals one billionth of 1 meter. A sheet of paper is about 100,000 nanometers thick. Due to quantum mechanical effects at the nanoscale, the physical properties of materials change as well as rules of manufacturing. The Donald F. Averill Applied Technology Training Center (ATTC) of the San Bernardino Community College District won a \$2 million competitive grant for Nanotechnology from the U.S. Department of Labor in January 2009. The overall goal of this grant project is to advance the economic development opportunities of Nanotechnology by providing a pipeline of trained workforce and bring about job development and wealth creation in our region. The Nanotechnology training program will consist of 90 hours of hands-on training that introduces participants to nanocharacterization, micro and nanofabrication, materials characterization, device characterization, electronic devices and optoelectronic devices. The Nanotechnology training will be mostly conducted at ATTC and some components of the hands-on training will be held at the Bourns College of Engineering Student Clean Room (Labs) at University of California - Riverside.

Nanotechnology will revolutionize how we manufacture products...



One micron or more long well-aligned carbon nanotubes grown using plasma CVD by Lance Delzeit (ARCC) and Chris Matthews (San Mateo High School). The inset (colored blue) is the top view of the nanotube array.

Nanotechnology is not a single technology, it is an enabling technology..



One of our goals is to train and educate our future workforce in this emerging and high growth industry... tomorrow's jobs!



PARTICIPANT'S MINIMUM QUALIFICATIONS

You must provide proof that you have attained either one of the following minimum prerequisites:*

- Associate degree in Engineering Technology, Engineering, Biotechnology, Physics, Material Science, Chemistry, Bio-Engineering, Biology, Life Science or related field; **OR**,
- A minimum of 1-year completion of studies **and** 1-year of work experience directly related to any of the fields listed above; **OR**,
- High school diploma or equivalent **and** a minimum of two years work experience directly related to any of the fields listed above. English comprehension and knowledge of entry level math are required.

*Prerequisites may be waived upon request in writing to the Project Director citing reasons why the minimum requirements should be waived. The Project Director will make the determination and if acceptable provides appropriate recommendation to the instructor for waiver consideration.

NEW TRAINING SCHEDULE: January 9—March 1, 2012

(Schedule subject to changes. Registration information: Please go to www.attctraining.org)

PARTICIPANT MUST ATTEND ALL SIX COURSES (15 HOURS EACH) TO COMPLETE TRAINING.
You must register for one section only in each course (Section A or B).

NTT01-12: Intro to Electronic Devices

January 9, 10, 11, 12 and 17
Section A: 2:00 p.m. - 5:00 p.m.
Section B: 6:00 p.m. - 9:00 p.m.
Room: ATTC Room 119

NTT02-12: Intro to Micro/Nano Fabrication

January 18, 19, 23, 24 and 25
Section A: 2:00 p.m. - 5:00 p.m.
Section B: 6:00 p.m. - 9:00 p.m.
Room: ATTC Rm. 119 and UCR Lab Facility

NTT03-12: Intro to Optoelectronic Devices

January 26, 30, 31, February 1 and 2
Section A: 2:00 p.m. - 5:00 p.m.
Section B: 6:00 p.m. - 9:00 p.m.
Room: ATTC Rm. 119

NTT04-12: Intro to Nano Characterization

February 6, 7, 8, 9 and 13
Section A: 2:00 p.m. - 5:00 p.m.
Section B: 6:00 p.m. - 9:00 p.m.
Room: ATTC Rm. 119 and UCR Lab Facility

NTT05-12: Intro to Device Characterization

February 14, 15, 16, 21 and 22
Section A: 2:00 p.m. - 5:00 p.m.
Section B: 6:00 p.m. - 9:00 p.m.
Room: ATTC Rm. 119 and UCR Lab Facility

NTT06-12: Intro to Materials Characterization

February 23, 27, 28, 29 and March 1
Section A: 2:00 p.m. - 5:00 p.m.
Section B: 6:00 p.m. - 9:00 p.m.
Room: ATTC Rm. 119 and UCR Lab Facility

This project was funded \$2,000,000 (65.4% of its total cost) from a grant awarded under the President's Community-Based Job Training Grants, as implemented by the U.S. Department of Labor's Employment and Training Administration. "The San Bernardino Community College District is an equal opportunity employer/program" and "auxiliary aids and services are available upon request to individuals with disabilities."

Questions and Future Training Schedules? Visit us at www.attctraining.org
Phone: 909-382-4001 E-mail: info@attctraining.org