



Nanotechnology Workshop for Community College Educators

May 10-11, 2016

Research Triangle Nanotechnology Network (RTNN, www.rtnn.org)

Monteith Research Center, North Carolina State University

Day 1 –Nanotechnology Overview

Nano and Science Curricula, Nano-Fabrication and –Characterization, Nano-Applications

8:30 am – 8:45 am	Breakfast and Introduction to RTNN
8:45 am – 10:15 am	Introduction to nanotechnology and how it fits into science curricula
10:15 am – 10:30 am	Break
10:30 am – 11:00 am	Introduction to Nanofabrication
11:00 am – 12:00 pm	Nanotechnology Characterization Tools X-ray Diffraction (XRD) X-ray Photoelectron Spectroscopy (XPS) Small-angle X-ray Scattering (SAXS) Optical Characterization Techniques
12:00 pm – 1:00 pm	Lunch
1:00 pm – 2:45 pm	Nanotechnology Applications – Presentations from NC State, UNC, and Duke research laboratories
2:45 pm – 3:00 pm	Break
3:00 pm – 4:00 pm	Nanotechnology Characterization Tools Electron microscopy Scanning probe microscopy
4:00 pm – 4:30 pm	Tour of NCSU Nanofabrication Facility (NNF)
4:30 pm – 5:00 pm	General discussion/Q&A

Day 2 – Hands-on Component

Characterization and Analysis of Samples provided by RTNN Research Laboratories

9:00 am – 9:30 am	Breakfast and Recap
9:30 am – 10:45 am	Rotate through characterization lab in NC State's Analytical Instrumentation Facility
10:45 am – 12:00 pm	Rotate through characterization lab
12:00 pm – 1:00 pm	Lunch
1:00 pm – 2:15 pm	Rotate through characterization lab
2:15 pm – 3:30 pm	Analyze data, prepare presentations
3:30 pm – 4:30 pm	Present data to group
4:30 pm – 5:00 pm	General discussion/Q&A/Review