

**Nanotube Mechanics**  
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We have used home-built tools inside of electron microscopes to measure the mechanics of carbon nanotubes and other nanowires. For example, the tensile loading response of multi-walled and single-walled carbon nanotubes (MWCNT and SWCNT) has been measured in a scanning electron microscope (SEM), and recently we have pioneered new approaches to measuring the mechanical resonance response of nanowires driven by oscillating electrical fields, including of new materials such as of SiO<sub>2</sub> nanofilaments. In this talk, I outline new results obtained by our group while also presenting a broad overview of nanotube mechanics. For downloadable recent articles by the Ruoff group on nanotube mechanics, please see <http://bucky-central.mech.nwu.edu/recentpublications.html>