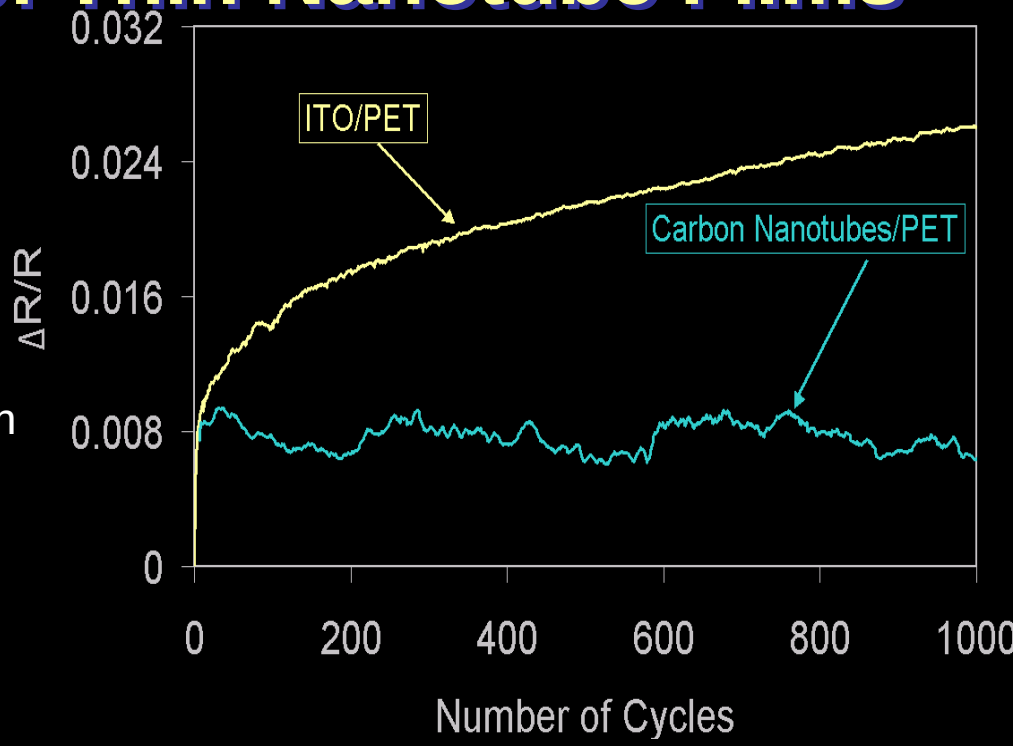
Electromechanics of Thin Nanotube Films

Josee Vedrine and Gregory Crawford
Brown University
NSF MRSEC Center



- Eikos manufactures conducting films based on nanotube networks dispersed in polymer films. They are currently developing them for flexible flat panel display applications. We have been cooperating with them for approximately one year.

- Normalized resistance measured as a function of the number of cycles for conducting ITO and carbon nanotube films for 1,000 cycles. Carbon nanotube films outperforms ITO with minimal increase in resistivity with increasing deformation.

- SEM micrographs of ITO carbon nanotubes after 100,000 cycles.