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Ultra-thin films of Single-walled Carbon Nanotubes ANDREW G. RINZLER¹, University of Florida, JENNIFER SIPPEL-OAKLEY, (1), ZHUANGCHUN WU, (1), PAMELA DICKRELL², MARK SHEPLAK, (2), W. GREGORY SAWYER, (2) — Recently the fabrication and optical properties of homogeneous, uniform-thickness films of pure, single-walled carbon nanotubes sufficiently thin to be optically transparent were described. We will discuss progress in the fabrication of transparent films in which the nanotubes are aligned along an axis within the plane of the film. The uniformity of these films also provide additional opportunities, both for study of the nanotubes and for their application. We will describe results of electronic transport measurements in the pure and modified films that further distinguish their properties from those of common 3-D and 2-D systems.

Andrew G. Rinzler University of Florida

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¹Physics

²Mechanical and Aerospace Engineering