SURFACE MODIFICATION OF CARBON NANOTUBES*. M. Krysak, B. Parekh, G. Takacs*, Department of Chemistry and Center for Materials Science and Engineering,

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Single-walled carbon nanotubes (CNTs) were surface modified with photo-oxidation using UV low pressure Hg lamps (λ = 253.7 and 184.9 nm) and vacuum UV emission downstream from an Ar microwave plasma (λ = 106.7 and 104.8 nm). X-ray photoelectron spectroscopy was employed to analyze the oxidized surface and investigate Cu-C and Cu-O-C bonding when the conductor Cu was sputter deposited onto untreated and oxidized CNT surfaces. Preliminary results of the photo-oxidation of multi-walled CNTs in a paper form will also be presented.

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