

Abstract Submitted  
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**Synthesis and characterization of conducting polymer inserted carbon nanotubes** A. JEONG CHOI, YOUNG WOO NAM, YUNG WOO PARK, Department of Physics and Astronomy, Seoul National University — The carbon nanotubes filled with the photo-conducting polymer poly(*N*-vinyl carbazole) and the conducting polymer polypyrrole were prepared by polymerizing the monomers inside the nanotubes using the supercritical carbon dioxide. The endohedral nanotubes were characterized by HRTEM and  $^1\text{H}$  NMR, which confirmed that the inserted material was indeed the conducting polymer [1]. I-V characteristics of the polymer inserted carbon nanotubes are presented.

[1] Johannes Steinmetz, Soyoung Kwon, Hyun-Jung Lee, Edy Abou-Hamad, Robert Almairac, Christophe Goze-Bac, Hwayong Kim, Yung-Woo Park,, Chem. Phys. Lett., **431**, 139 (2006)

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