

Abstract Submitted  
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**Electrical properties of electrospun polyaniline-polyethylene oxide nanofibrous membranes filled with single-walled carbon nanotubes<sup>1</sup>**  
YUNG WOO PARK, BIBEKANANDA SUNDARAY, AJEONG CHOI, Seoul National University — Highly conducting nanofibrous composite of well-oriented single-walled carbon nanotubes (SWNTs) in polyaniline (PANI) and polyethylene oxide (PEO) have been fabricated using electrospinning. The room temperature electrical conductivity show nearly four orders enhancement with highest (11.89wt %) loading of SWNT, from their polymer blend counterpart. The temperature dependent conductivity results are fitted with the variable range hopping in addition to the fluctuation assisted tunneling conduction model. Results on coaxial electrospun polymer nanofibrous composites with SWNTs will be reported.

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