

## **【N-13】**

# **Growth of carbon nanotubes on metal substrates using plasma-enhanced chemical vapor deposition**

Serng-Yerl Park, Hyun Suk Kim, Ji Hoon Yang, Sang Hyun Moon, Youngjin Lee,  
Rae Jun Park\*, and Chong-Yun Park

Center for Nanotubes and Nanostructured composites, Department of Physics, University of  
Sungkyunkwan, 300 Chunchun, Suwon, Korea

\*ITL Inc.

Carbon nanotubes have a lot of attractive properties for application of various field. Especially, high aspect ratio and ability of high electron transport can make carbon nanotubes to electron field emitter. Vertically aligned carbon nanotubes on metal substrates were synthesized by plasma-enhanced chemical vapor deposition at 500~600°C with gas mixture  $C_2H_2$  and  $NH_3$ , their structure was investigated by scanning electron microscopy and transmission electron microscopy.