

Speaker Profile



Contact Details

Organization Name:

Northeastern University

Address:

Department of Mechanical and Industrial Engineering
Northeastern University
265 Snell
Engineering Building
Boston, MA 02115

Phone:

(617) 373 4843

Fax:

(617) 373 2921

Email:

jungy@coe.neu.edu

Website:

Name Yung Joon Jung

Title Assistant Professor

Institute Department of Mechanical and Industrial Engineering
Northeastern University

Education

-**Rensselaer Polytechnic Institute:** Ph.D. in Materials Science and Engineering (2003)

-**Inha University:** B.S. in Metallurgical Engineering (1999)

Professional Experience

-**Assistant Professor** (08/05-Current)

Northeastern University, Boston, MA, USA

-**Post-Doctoral Research Associate** (08/03- 07/05)

Rensselaer Polytechnic Institute, Troy, USA

Interconnect Focus Center-New York program: Controlled growth and application of organized carbon nanotube structures as interconnect materials in future semiconductor devices and systems

-**Visiting Researcher** (05/02-12/02)

NTT Basic Research Laboratories, Atsugi, Japan

NEDO program: Nanointegration through semiconductor nanostructures and self-assembly of single-walled carbon nanotubes using various nano-fabrication techniques and chemical vapor deposition method

Research Interest

-Controlled synthesis, modification, and integration of one-dimensional nanomaterials (carbon nanotubes and nanowires)

-Fabrication and Engineering of heterostructured nanomaterials

-Direct applications of organized nanotube/nanowire building blocks for functional flexible polymer-carbon nanotube devices and systems

Recent selected publications

"Aligned Carbon Nanotube-Polymer Hybrid Architectures for Diverse Flexible Electronic Applications"

Y.J.Jung, S. Kar, S. Talapatra, C. Soldano, G. Viswanathan, X. Li, Z. Yao, F.S. Ou, A. Avadhanula, R. Vajtai, S. Curran, O. Nalamasu, and P. M. Ajayan, **Nano Letters** 6 (3), 413 -418 (2006)

"Controlled Synthesis of Hierarchically Branched Carbon Nanotubes via Rationally Designed Porous Templates"

G. Meng, Y.J. Jung, A. Cao, R. Vajtai, and P.M. Ajayan, **PNAS**, 12(20), 7074 (2005).

“Modification of Suspended Single-Walled Carbon Nanotube Networks using Ga Ion Irradiation”

Y. J. Jung, Y. Homma, R. Vajtai, Y. Kobayashi, T. Ogino, and P. M. Ajayan, *Nano Letters*, 4(6), 1109-1113 (2004)

“Mechanism on Selective Growth of Carbon Nanotubes on SiO₂/Si Patterns”

Y. J. Jung, B. Wei, R. Vajtai, P. M. Ajayan, Y. Homma, K. Prabhakaran, and T. Ogino, *Nano Letters*, 3(4), 561-564 (2003)

“Organized Assembly of Carbon Nanotubes”

B. Q. Wei, R. Vajtai, Y. Jung, J. Ward, Y. Zhang, G. Ramanath and P. M. Ajayan, *Nature*, 416, 495 (2002)