

1. Resume

1) Personal Data

- Name in full : Young Hee Lee
- Date of birth : July 28, 1955
- Sex : Male
- Position : Professor
- Address : Department of Physics, Sungkyunkwan University, Suwon, 440-746, Korea
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2) Educational background

- 1976 to Feb. 1982 : B. S. in Physics, Chonbuk National University, Korea,
 - 1982 to Feb. 1986 : Ph. D. in Physics, Kent State University, U. S. A.
- Ph. D thesis: Classical and Quantum Computer Simulation Studies:
Molecular Dynamics of the Kerr Effect in CS₂ and Green's Function Monte Carlo
Calculation of the Electronic Correlation Energy in Atoms(thesis advisor: Michael A.
Lee)

3) Research interests

- Dispersion of CNTs in various solvents, chirality separation
- Transport properties, optoelectronic properties, gas adsorption
- Functionalization of carbon nanotubes by hydrogen and fluorine atoms
- Purification by gas phase and liquid phase reactions, dispersion of nanotubes in various solvents
- Nanoprobe fabrication and nanomanipulation
- Electronic devices: field emission displays, electron sources, gas sensors
- Hydrogen storage using QCM, gravimetric methods
- Fuel cell: catalyst dispersion and bipolar plate with CNTs
- Supercapacitors and secondary batteries

4) Work History

- 2001. 03. - Present : Professor in Physics, Sungkyunkwan University , SKKU fellow
- 1987 - 2001. 02. : Assistant Professor - Full Professor in Physics,
Jeonbuk National University
- 1996 - 1997 : Visiting Professor in Physics, Michigan State University, U. S. A.
- 1993 - 1993 : Visiting Researcher, Zurich IBM Research Center, Switzerland
- 1989 - 1990 : Visiting Professor in Physics, Iowa State University
(Ames National Laboratory), U.S.A.
- 1982 - 1986 : Teaching Assistant in Physics, Kent State University, U. S. A.

5) Publications and patents

- Science 1, Nano Letters 1, Physical Review Letters 7, Journal of American Chemical Society 8, Advanced Materials 7, Applied Physics Letters 19
- August, 2007, total number of SCI citations: over 6,230
- Hirsch factor: 35

Domestic / International	Papers		Patents		Presentation		book
	Domestic (SCI)	International (SCI)	Domestic (registered)	International (registered)	Domestic (invited)	International (invited)	
	40 (20)	193 (171)	62 (26)	28 (6)	276 (44)	296 (72)	5

2. Scientific Achievement summary (less than half page)

- Fabrication of field emission displays (FED): First demonstration of CNT-based FED
(W. B. Choi, D. S. Chung, J. H. Kang, H. Y. Kim, Y. W. Jin, I. T. Han, Y. H. Lee, J. E. Jung, N. S. Lee, G.-S. Park, and J. M. Kim, 'Fully sealed, high-brightness carbon-nanotube field-emission display', Appl. Phys. Lett. 75(20), 3129-3131 (1999) : citation numbers: 513)
- The best record of capacitance using SWCNTs
(K. H. An, W. S. Kim, Y. C. Park, D. J. Bae, Y. C. Choi, S. M. Lee, D. C. Chung, S. C. Lim, and Y. H. Lee, 'Supercapacitors using single-walled carbon nanotube electrodes', Adv. Mater., 13(7), 497-500 (2001) : citation numbers: 102)
- Separation of semiconducting carbon nanotubes by using nitronium ions
(K. H. An, J. S. Park, C. M. Yang, S. Y. Jeong, S. C. Lim, C. Kang, J. H. Son, M. S. Jeong and Y. H. Lee, 'A Diameter-Selective Attack of Metallic Carbon Nanotubes by Nitronium Ions', J. Am. Chem. Soc. 127(14), 5196-5203, (2005) : citation numbers; 23)
- Finding a new phenomena of superelongation of CNT aggregates in LC medium under external field
(Seok Jin Jeong, Kyung Ah Park, Seok Ho Jeong, Hee Jin Jeong, Kay Hyeok An, Chang Woon Nah, Didier Pribat, Seung Hee Lee, and Young Hee Lee, 'Electroactive Superelongation of Carbon Nanotube Aggregates in Liquid Crystal Medium', Nano. Lett., 7(8), 2178-2182, (2007)

3. Main awards

- 1997. 05. Award from Foundation of Korea Science and Technology for
‘The Best Paper in Physics’,
- 1997. 06. Award for 'Man of Jeonbuk National University' in 50th Anniversary
in Science
- 1999. 09. Award for 'Man of Jeonbuk State', in Academia and public press.
- 2004. 09. Award for Fellow of Sungkyunkwan University
- 2005. 04. Academic Award from Korean Physical Society
- 2005. 12. Nominated as ‘The Eleven National scholars’, by Ministry of Education
- 2006. 08. Nominated as ‘The Most Respectable Scientists & Engineers’, by Ministry
of Education
- 2007. 09. Award for Fellow of Sungkyunkwan University

4. Brief description of collaborative work during your stay here

- Several lectures on CNT applications
- Joint research works on Al/CNT composites
- Joint research works on CNT mass production
- Consulting general ideas regarding CNT synthesis and applications

5. Tentative schedule (starting date and duration)

July 8, 2008 – August 7, 2008 (1 month)