

NANO KOREA 2015

July 1~3, Coex, Korea

Meyya Meyyappan

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EDUCATION

Clarkson University, New York	Ph.D.	Chemical Engineering	1984
Aston University, Birmingham U.K.	MS	Process Analysis and Development	1978
Madras University, India	BS	Chemical Engineering	1976

PROFESSIONAL ACTIVITIES

- IEEE Distinguished Lecturer, Nanotechnology Council of the IEEE, 2002-Present.
- IEEE Distinguished Lecturer, Electron Devices Society, 2008-Present
- IEEE Electron Devices Society, Vice President for Educational Activities, 2010-2013.
- IEEE Electron Devices Society, ADCOM Member, 2010-2015.
- IEEE Nanotechnology Council ADCOM Member, 2011-Present.
- IEEE Nanotechnology Council Fellow Committee, 2011-2013.
- IEEE Nanotechnology Council Fellow Committee Chair, 2014-Present.
- Founding Editor, Materials Research Express, Institute of Physics Publication, 2013-.
- IEEE Nanotechnology Magazine, Managing Editor, 2007-Present.
- Member, Editorial Board, Nanotechnology, IOP Publishing, 2002-Present; Section Editor for Electronics and Photonics, 2009-Present.
- Member, Advisory Board:
 - Stanford University, Material Science Dept.
 - Purdue University, Mechanical Eng. Department
 - U. of Illinois, Chicago, Electrical Eng. Department

AWARD AND HONORS

- Dr. Meyyappan is a Fellow of the Institute of Electrical and Electronics Engineers (IEEE), Electrochemical Society (ECS), American Vacuum Society (AVS), Materials Research Society (MRS), Institute of Physics (IOP), American Institute of Chemical Engineers (AIChE) and the California Council of Science and Technology.
- For his contributions and leadership in nanotechnology, he has received numerous awards including: a Presidential Meritorious Award; NASA's Outstanding Leadership Medal; Arthur Flemming Award given by the Arthur Flemming Foundation and the George Washington University; IEEE Judith Resnick Award; IEEE-USA Harry Diamond Award; AIChE Nanoscale Science and Engineering Forum Award;

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Distinguished Engineering Achievement Award by the Engineers' Council; Pioneer Award in Nanotechnology by the IEEE-NTC; Sir Monty Finniston Award by the Institution of Engineering and Technology (UK); Outstanding Engineering Achievement Merit Award (2014) by the Engineers' Council; IEEE-USA Professional Achievement Award. For his sustained contributions to nanotechnology, he was inducted into the Silicon Valley Engineering Council Hall of Fame in February 2009.

- For his educational contributions, he has received: Outstanding Recognition Award from the NASA Office of Education; the Engineer of the Year Award (2004) by the San Francisco Section of the American Institute of Aeronautics and Astronautics (AIAA); IEEE-EDS Education Award; IEEE-EAB (Educational Activities Board) Meritorious Achievement Award in Continuing Education.

MAIN SCIENTIFIC PUBLICATION

- K. Kim, T. Rim, C. Park, D. Kim, M. Meyyappan and J. S. Lee, "Suspended Honeycomb Nanowire ISFETs for Improved Stiction-free Performance," *Nanotechnology*, Vol. 25, 345501 (2014).
- J. Zhao, M. Shaygan, J. Eckert, M. Meyyappan and M. H. Rummeli, "A Growth Mechanism for Free-Standing Vertical Graphene", *Nano Letters*, Vol. 14 (6), pp. 3064-3071 (2014).
- J. W. Han, J. S. Oh, M. Meyyappan, "Cofabrication of Vacuum Field Emission Transistor (VFET) and MOSFET" *IEEE Transactions on Nanotechnology*, Vol. 13 (3), pp. 464 – 468 (2014).
- R.K. Gupta, A. Periyakaruppan, J.E. Koehne and M. Meyyappan, "Label-free Detection of C-reactive Protein using a Carbon Nanofiber based Biosensor", *Biosensors and Bioelectronics*, Vol. 59, pp.112 – 119 (2014).
- K. Davami, M. Shaygan, N. Kheirabi, J. Zhao, D.A. Kovalenko, M. H. Rummeli, J. Optiz, G. Cuniberti, J.S. Lee and M. Meyyappan, "Synthesis and Characterization of Carbon Nanowalls on Different Substrates by Radio Frequency Plasma Enhanced Chemical Vapor Deposition," *Carbon*, Vol. 72, pp. 372 – 380 (2014).
- B. Jin, T. Y. Lim, S. Ju, M. I. Latypov, D. H. Pi, H. S. Kim, M. Meyyappan and J.S. Lee, "Investigation of Thermal Resistance and Power Consumption in Ga-doped Indium Oxide (In_2O_3) Nanowire Phase Change Random Access Memory," *Applied Physics Letters*, Vol. 104, 103510 (2014).

RESEARCH INTERESTS

- Growth, characterization of CNTs, graphene and inorganic nanowires; application development in electronics, optoelectronics, sensors, energy generation and storage and instrumentation.