

Opening of NCNT (National Center for Nanomaterials Technology) in Korea

NCNT (Dir. Prof Yoon-Ha Jeong of POSTECH) in Pohang, which is located 180 miles to the south of capital city Seoul, Korea, had opening ceremony on May 30, 2007 to commemorate its full operation of semiconductor / display materials and equipment technology development starting June, 2007.

President of Korea, Moo-Hyun Roh, Minister Young-Ju Kim of Commerce, Industry and Energy, Chairman Gu-Taek Lee of POSCO, Dr. Chan-Mo Park (President, POSTECH), Dr. Meyyappan (Chair, IEEE NTC), Governor of Gyeongbuk Province and Vice-Chair of National Assembly attended the ceremony.

President Roh said, "Technology innovation is the most important factor in enhancing the competitiveness of Korea, and NCNT is expected to do that." He added, "NCNT will be a model for provincial development, and for the continued growth of nation, local development with diverse functions is very critical. From this respect, I congratulate opening of world class nanotechnology center in Pohang."

Dr. Meyyappan said, "I heard last week that per capita spending on nanotechnology research, which is a measure of nanotechnology spending relative to the size of the country, Korea ranks number one in the world. What is happening here at POSTECH and this great, new facility are testimony to the Korean dynamic attitude and optimism."

The 25,000 ft² clean room has been installed with 4nm-drawing Electron Beam Lithography System, Aberration(Cs)-Corrected High Resolution Transmission Electron Microscope(HR-TEM) with 0.1nm resolution, 3-Dimensional Atom Probe(3DAP) for atomic tomography, OLED Evaporating System, and other processing equipments for sub 45nm process technology and equipments development. Neighboring Pohang Accelerator Lab(PAL) will be involved in sub 20nm semiconductor technology development with Extreme UltraViolet Lithography. With both facilities, researchers and engineers can develop new technology that requires advanced lithography tools.

The center will support commercialization of new equipment and materials technologies developed jointly with industry. The first material will be optical film for display. Besides the development activities, it will perform equipment and materials evaluation, benchmarking, standardization of the evaluation and certification in the long run. Its joint R&D activities are participated by major semiconductor and display manufacturers, equipment and materials companies.

NCNT Pohang has been awarded to POSTECH as major contractor to MOCIE (Ministry of Commerce, Industry and Energy) Nanotechnology Infrastructure Cluster Project in July 2004. The consortium consists of 112 institutes including local governments, industry (Samsung Electronics, LG Electronics, Joosung Engineering, DMS), academia (Kyungpook Univ., Yeungnam Univ.), and research institutes (RIST, Research Institute of Science and Technology, Pohang). The number has increased to 136 now. This 5 year project will spend 120 million dollars for nanotechnology R&D, nano experts training and commercialization of new technology.

For the details of R&D activities and facilities, you can visit the website, <http://www.nano.or.kr/english/index.asp>.



From left to right

Dr. Sung-Wook Park (Hynix Semiconductor Inc., R&D Dir.), Dr. Meyyappan (NTC Chair), Dr. Chan-Mo Park (President of POSTECH), Minister Myung-Jae Park (Admin & Internal), Mr. Kwan-Yong Kim (Provincial Gov.), Mr. Moo-Hyun Roh (President of Korea), Minister Young-Ju Kim (Commerce, Industry and Energy), Mr. Sang-Deuk Lee (Vice-Chair of National Assembly), Prof Yoon-Ha Jeong (Dir. NCNT)



NCNT, Pohang, Korea