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Nano Institute: from Research to Commercialization

The Institute of NanoMaterials and NanoTechnology (INMT) was inaugurated today (5 September 2003) at the Hong Kong University of Science and Technology (HKUST) to advance the research on nanotechnology and to develop new nanotech products in collaboration with local industries.

The inauguration ceremony was officiated by Mr Tung Chee Hwa, Chief Executive of the HKSAR, and Prof Paul Chu, President of HKUST.

Addressing the significance of the Institute in his opening remarks, President Chu envisioned its important role in helping establish Hong Kong as a design and technology hub for nano-products for the region and the world by saying:

"There is a broad consensus that nanotechnology will revolutionize our way of life in the 21st century. With the setup of INMT, HKUST is ideally positioned to help Hong Kong develop the industrial and service sectors in our economy."



Mr Tung Chee Hwa (right) and Prof Paul Chu unveil the plaque



Dr King Lun Yeung, Associate Professor of Chemical Engineering, displays the nanoparticles that can decontaminate pollutants

The HK\$100 million INMT was established with government and industrial support to achieve critical mid-stream R&D and technology transfers relevant to the economic growth of Hong Kong. In beginning to fulfill this mission, the INMT has already succeeded in transforming nanotechnology into reality with the creation of nanocatalysts to improve indoor air quality. Capable of decontaminating pollutants like carbon monoxide and organic compounds at low temperatures, the nanocatalysts can be easily integrated into air-conditioners or dehumidifiers at very low cost.

Other potential products and processes in the pipeline include eco-friendly micro-fuel cells, nano-electronic displays and integrated manufacturing technologies.

"We're targeting innovative, affordable hi-tech products and manufacturing technologies with relevance to the development of Hong Kong, while seeking collaborations locally, regionally and internationally," says Prof Che Ting Chan, Director of INMT. "We'll also fulfill our significant education role through student training, workshops, seminars, public forums and industrial courses."

Nanotechnology refers to the manipulation of materials at the atomic level; measuring from 1 to 100 nanometers; with one nanometer equal to

one-billionth of a meter. The extraordinary properties of nanostructured materials have led to many novel applications in areas like electronics, biotechnology and information technology.

Through innovation and research, HKUST has established itself as a leader in advancing nanotechnology research. It holds the world's record for fabricating the smallest single-walled carbon nanotube, which has a diameter of only 0.4nm and exhibits superconducting property.

[CE's speech at the inauguration of INMT](#)