

For immediate release
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UST APPLIED RESEARCH PROJECTS WIN ITDC FUNDS

The Hong Kong University of Science and Technology has been awarded grants totaling over HK\$25 million by the Industrial and Technology Development Council (ITDC) to fund four applied research projects. These projects center on liquid-crystal-display, electronics packaging, 'smart-card', and multi-media CD-ROM technologies, all of them areas where advanced input could boost the competitiveness of Hong Kong's high-end industries.

Hong Kong has already developed a major LCD industry, accounting for 20% of the world's LCD production volume. However, in terms of revenue, Hong Kong has only a 3% share of the world's LCD market. "Development of New LCD Products and Technologies" project leader, Professor Hoi Sing KWOK, Director of the Center for Display Research, says their project will be instrumental in helping Hong Kong companies overcome a substantial technology barrier upgrading their industry by shifting to higher-end and higher value-added display products.

"Controlling the separation of two materials at the interface is the single most expensive problem in the electronics packaging industry and accounts for millions of dollars of added costs," says project leader of the electronics packaging project, and Director of the Technology Transfer Center, Dr Matthew M F YUEN, "and these costs have hitherto been passed on to the electronics industry and the consumer." This project will provide the industry with the software and computer simulations necessary to assure the viability of IC packages at the design stage, as well as methodologies and guidelines for predicting delamination problems in new packages.

Security is the primary concern in all 'smart-card' applications, and the main objective of the third project is to develop generic authentication technologies for just this purpose. The project leader, Dr Dit-Yan YEUNG, from the Department of Computer Science, says that the project will develop an application-programming interface (API) to provide integrated biometrics and cryptographic technologies for Java-based smart cards. These will be backed up by seminars and training courses, and a web-based resource center will also be set up to serve the local smart card industry.

The fourth project will enable garment-related companies to further understand and implement the grading system for the three-dimensional pattern concept. The grading system will enable companies to enhance their skills in using fabrics to produce a variety of garment lines.

Note to Editors:

Please direct enquiries to Mr King Cheng at 2358-6305 or email pamedia@ust.hk.