

PolyU - KCRC Smart Railway Research Laboratory Opening

06 June 2007

The PolyU-Kowloon Canton Railway Corporation (KCRC) Smart Railway Research Laboratory was established specifically for the research and development of photonics sensors, transducers, sensing networks and optical multiplexing technologies with the objective to revolutionize the operation and safety of transportation systems. The new facility was officially opened on June 2007 by Mr James Blakes, Chief Executive Officer of KCRC, and Prof. Poon Chung-kwong, PolyU President, at a special ceremony held at the university campus. The PolyU-KCRC Laboratory is directly linked to the "satellite" Laboratory located at Ho Tung Lau Depot at FoTan KCRC's Railway Station. All fibre-optics sensors installed on the East Rail are connected to the fibre-optic sensor based real-time railway condition monitoring system in Ho Tung Lau Depot. This system incorporates optical sensory nerves running from Tsim Sha Tsui to Fanling, more than 26 km, of the East Rail, permitting the conditions of the East Rail tracks and cars to be monitored continuously. In addition to the real-time railway condition monitoring system, the PolyU-KCRC Laboratory is also developing several fibre-optic sensor systems to monitor the operating conditions of critical components, and structural integrity on wagons.

