

08/04/2002

Checking Air Quality Anytime, Anywhere

Hong Kong's first mobile air pollution monitoring platform was inaugurated today at the Hong Kong University of Science and Technology (HKUST). The platform will allow researchers to map air pollutant concentrations in real-time, throughout different areas of Hong Kong.

The Mobile Real-time Air Monitoring Platform (MAP) was developed by HKUST with a grant of HK\$12.3 million from The Hong Kong Jockey Club Charities Trust. Prof Paul Chu, President of HKUST, and Mr Paul Cheng, Steward of The Hong Kong Jockey Club, jointly officiated at the Inauguration Ceremony.

A powerful research tool to monitor air pollution, MAP is a specially fitted-out van designed for continuous measurements of air pollutants, and is ideal for inaccessible locations such as tunnels and bus depots.



Dr Chak K Chan (left), Dr Ming Fang and the MAP.

"Unlike fixed air monitoring stations which give stationary data, MAP is mobile and real-time. It is capable of conducting measurements wherever it goes and as it goes, providing time-series data on the distribution and dynamics of air pollutants," says Dr Ming Fang, Project Manager and Director of the Institute for Environment & Sustainable Development. He is working with Dr Chak K Chan, Principal Investigator and Associate Professor in the Department of Chemical Engineering, on air pollution research in Hong Kong.



MAP is equipped with advanced air monitoring facilities.

A state-of-the-art monitoring platform, MAP is equipped with advanced facilities, including a Fourier transform infrared spectrometer to measure volatile organic compounds; an elemental carbon analyzer; an SO₂ analyzer; a NO_x analyzer; an electric low pressure impactor to study particle size distribution; an automatic weather station and a global position system.

MAP's mobility also opens the way for the study of cross-border air pollution problems. The project team plans to launch a large-scale scientific expedition to monitor air pollutants from Hong Kong to Beijing, in collaboration with mainland authorities and research institutions.

In addition to environmental research, MAP also serves as an innovative educational tool. To promote environmental awareness among secondary school students, a summer internship program will be launched to provide hands-on experience for selected secondary school students. MAP will also be open for public visits and demonstrations.