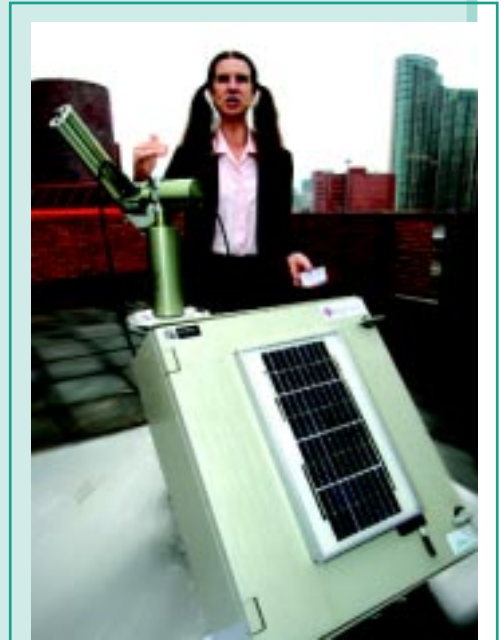


Joining forces with NASA to monitor PRD's air quality

The University has recently entered into a 10-year agreement with the US National Aeronautics and Space Administration (NASA) and become a member of its Aerosol Robotic Network (AERONET). As the first and only AERONET station in Hong Kong and the South China region, the University will collaborate with NASA on the study of air quality in the Pearl River Delta (PRD) region by analyzing the level of aerosols (atmospheric particles) with ground data and satellite images.

According to Dr Janet Elizabeth Nichol, Associate Professor of the Department of Land Surveying and Geo-Informatics (LSGI), the study aims to establish a relationship between satellite images and common pollutants such as Nitrogen Oxides and Sulphur Dioxides, so that the researchers can help regional authorities build up more accurate air quality models and pinpoint the major pollution sources affecting Hong Kong.

Supported by the funding from the Faculty of Construction and Land Use, a satellite monitoring system has been established on campus with the installation of a brand new Sunphotometer. The sophisticated instrument is used to measure the amount of aerosols in the atmosphere and the ground data collected will be uploaded to AERONET for research purposes.



Dr Nichol introduces the newly-installed Sunphotometer, a facility for measuring atmospheric aerosol properties.

World's first study on Chinese head sizes

With \$4.5 million funding from DesignSmart Initiative of the Government's Innovation and Technology Commission, the School of Design has recently embarked on a project "SizeChina.com" which aims to create the world's first comprehensive databank of Chinese head sizes and facial features.

Headed by Assistant Professor Roger Ball, the research team will make use of a state-of-the-art head and face scanner to collect 3D head and face measurements of ethnic Chinese not only in Hong Kong, but also in six different provinces and regions of the Chinese mainland, namely, Beijing, Changchun, Xi'an, Chengdu, Hangzhou and Guangzhou.

According to Mr Ball, many existing consumer products are designed for Caucasians and do not fit Chinese people properly, this research is expected to solve the problem by creating practical, sophisticated design tools for industries that need to create the next generation of perfect fitting consumer products such as helmets, surgical masks and sunglasses.

The project is also funded and supported by leading local industrial partners, including UGS PLM Solutions and Strategic Sports.



Mr Ball uses the 360 degree rotary, non-contact scanning machine (below), costing \$800,000, to measure head sizes and facial features.



Novel treatment for pains

Led by Prof. Christina Hui-Chan, researchers of the Centre for East-meets-West in Rehabilitation have successfully integrated the Chinese and Western approaches to pain management by combining acupuncture with transcutaneous electrical nerve stimulation (TENS).



Ms Serena Yang, a patient suffering from knee osteoarthritis, testifies the effectiveness of receiving the novel treatment at the University's Rehabilitation Clinic prior to and after knee surgery.

The application of TENS through surface electrodes to trigger points is a common modality for treating musculo-skeletal pain in western countries. The novel approach — the use of TENS on acupuncture points, together with exercise therapy — has been proven effective for managing different types of pain associated with various health problems such as knee osteoarthritis, back and neck pain. The results were published in a number of international and indexed journals such as *Clinical Rehabilitation*. Furthermore, the use of surface electrodes instead of needles on acupuncture points can minimize the possible risk of infection, and patients can also learn to apply the modality themselves. ❖



Led by Prof. Hui-Chan, the research team has made great strides in pain management.

Fashion Design Studio helps groom future fashion talents

The Institute of Textiles and Clothing (ITC) officially opened its Fashion Design Studio on 15 May. This 650-square-metre state-of-the-art Studio is well-equipped with four lecture rooms, two pattern construction laboratories, a project laboratory, 85 sets of design cubicles and lockers for students, and a brainstorming area.

The purpose of constructing this Studio is to provide an interactive and stimulating, yet relaxing environment for teaching, student-centred learning and research activities and, in turn, enhance the nurturing of new blood in the fashion design industry. ❖



(From right) Prof. Poon Chung-kwong, PolyU President, Dr Kenneth Fang, Chairman of Advisory Committee on Textile and Clothing Industries, Mr Victor Lo, Chairman of Council and Prof. Xiao-ming Tao, Head of ITC officiate at the opening of the Studio.



"MERECL" — Unveiled at Cyberport

The Multimedia Entrepreneurial Research, Education and Creative Laboratory (MERECL) of the School of Design (SD) was officially opened on 1 March to promote digital entertainment technologies and to provide incubation support for start-up creative industries in the territory.

Being the first research facility set up by a tertiary education institution in Cyberport, MERECL will tap on the rich resources and cutting-edge facilities provided in the Cyberport, especially the Digital Media Centre.

Occupying a net floor area of over 7,000 square feet and well-equipped with high-tech multimedia infrastructure, MERECL aims to develop creative intellectual properties for commercialization; offer specialist training in digital creative skills ranging from motion capture to screen-writing; provide pre-incubation and graduate training facilities to set new digital, design and creative ventures; as well as digital media services to businesses.

Backed by SD's Multimedia Innovation Centre and a strong team of multimedia and design experts, MERECL will focus its operation on "transmedia" ventures and, in turn, facilitate the advancement of the fast-growing and highly competitive digital entertainment industry in Hong Kong and the mainland.



(From left) Prof. Poon Chung-kwong, PolyU President; Mr Joseph Wong, Secretary for Commerce, Industry and Technology; Mr Victor Lo, Chairman of PolyU Council and Prof. Lorraine Justice, Head of SD; officiate at the opening of the MERECL.

Dr Gino Yu, Director of Digital Entertainment and Game Development of SD, introduced to the guests the advanced facilities provided in MERECL.



Research Centre for Professional Communication in English set up

The Department of English recently established the territory's first Research Centre for Professional Communication in English (RCPCE). Headed by Prof. Winnie Cheng, Director of RCPCE, the centre aims to better serve the communication needs of professional communities and deepen the public's understanding of professional communication. The centre will also serve as a platform for academics to pursue applied research and consultancy in professional communication as well as to facilitate joint research between academics and practitioners in this area.

Initially, RCPCE is undertaking several research projects involving a total budget of more than \$2.4 million.



Prof. Winnie Cheng, Director of the Research Centre (fourth from left), and key members of the Centre.

New pact to boost tourism in Huangshan



The School of Hotel and Tourism Management (SHTM) and Huangshan Municipal Tourism Bureau (HMTB) recently signed an agreement to jointly elevate the standard of tourism industry in Huangshan city.

Under this agreement, both parties will jointly develop training programmes, conduct research related to the China tourism market, exchange market intelligence and organize international conferences and tourism events in Huangshan.

The delegation, led by Mr Wu Keming, President of the Research Office of Anhui Provincial Government, and Mr Li Hongming, Mayor of Huangshan Municipal People's Government, also visited PolyU during their stay in Hong Kong in May.

The Memorandum of Understanding was signed by Prof. Kaye Chon, Head of SHTM (right), and Mr Liu Yingwang, Director of HMTB.



Optometrist-volunteers help children in rural Guangxi

About 10 voluntary staff and students from the School of Optometry and the Department of Health Technology and Informatics visited Guangxi in February to offer eye screening service to over a hundred children from two primary schools. The group also visited a leprosy village near Nanning and helped distribute blankets and make some wardrobes for the elderly there. The meaningful project has provided a valuable opportunity for the staff and students to help the needy with their expertise. It has also helped broaden the students' perspectives and enrich their learning experiences.

