

## A major breakthrough in nursing education

A big leap in innovative nursing education was made when the Department of Nursing and Health Sciences officially opened its brand new Nursing Laboratories in November 1998. Prof. Poon Chung-kwong, the President, and Ms. Susie Lum, Senior Executive Manager (Nursing) of the Hong Kong Hospital Authority, officiated at the opening ceremony of the Laboratories.

With the funding of nearly \$10 million from the university reserves, the Nursing Laboratories were established to strengthen the clinical training for the PolyU's nursing students by making use of "virtual reality" and latest information technologies to simulate the hospital setting.

Dr. Thomas Wong, Associate Head of the Department, was excited about the new development. "These innovative and modern facilities enable our nursing students to have hands-on experience and master a high-level of competence before attending their clinical placement. It is always our mission to train

first-class health care professionals by strengthening our clinical education."

Based on a design theme of "From Virtuality to Reality—Innovation in Education", the new Nursing Laboratories provide a range of integrated and sequential clinical training. The teaching of virtual reality is emphasized to facilitate the training of students' informed judgement, clinical reasoning, crisis management and critical thinking.

There are four Nursing Laboratories:

- *Virtual Reality Laboratory*: The lab is equipped with Teleos Voxel Visualizer (T-Vox) and the OR View Surgery for rendering two-dimensional sequential medical data and teaching fundamental trauma management skills.



*A student tries her hand at the advanced CathSim in the Acute Care Laboratory.*



*A lecturer (sitting) teaches students how to take care of patients in critical and high-risk condition.*

- *Advanced Care Laboratory*: A Patient Simulator is installed in this lab for practising clinical reasoning and applying necessary psychomotor skills in the care of patients suffering from critical and high-risk conditions.

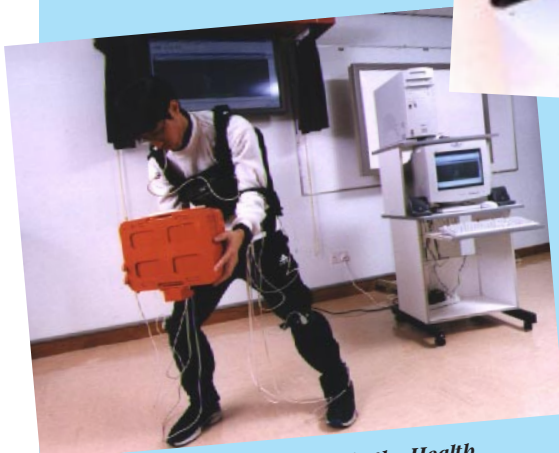
- *Acute Care Laboratory*: The CathSim installed in this lab is used

for practising intravenous cannulation and intravenous therapy.

- *Health Assessment Laboratory*: Health conditions, such as blood pressure and motions, on a real person, can be monitored in this lab.

During the development stage, the Department has regularly liaised with professionals overseas for exchange of ideas and experience. Collaboration in research areas, such as intramuscular injection and pain management, has also been made with overseas virtual reality and simulation centres.

The application of virtual reality has further implications in nursing research activities. Clinical studies can now be conducted in laboratories without causing interruption to the services provided by hospitals.



*The Motion Monitor system in the Health Assessment Laboratory gives a comprehensive analysis of the student's motion.*

## Fine-blanking Technology Centre in operation

The development of research work in Fine-blanking technology in the region reached another milestone last November with the opening of the Fine-blanking Technology Centre on the PolyU campus.

The Fine-blanking Technology Centre was jointly established by the PolyU, the Hong Kong Metals Manufacturers Association and the newly-added member Hong Kong Productivity Council, with the support of the Government's Industry Department.

Located in the Department of Manufacturing Engineering, the Centre has an aim which is fourfold: enhancing technological co-operation; promoting industrial applications of the technology; conducting research and development of the technology; and developing, modifying and promoting the affordable Fine-blanking tooling system.

Technology" in place of expensive equipment. This "Affordable Tooling System" can be used on any conventional presses to assimilate the Fine-blanking process.

Dr. Lee further explained, "It is high time that Hong Kong's manufacturing industry should adopt this Affordable Fine-blanking technology to strengthen their competitiveness as they



**Dr. Lui Sun-wing, Branch Director of The Hong Kong Productivity Council (sitting, right) and Mr. Alexander Tzang, PolyU's Vice-President (sitting, left) sign a Memorandum of Understanding on the donation of a Fine-blanking press to the Fine-blanking Centre.**



*Lion dance is performed to celebrate the auspicious occasion.*

Hong Kong has been relatively slow in adopting Fine-blanking technology in manufacturing compared with other industrial countries due to insufficient technological know-how and expensive equipment. The team of Dr. Lee Tai-chiu, Department of Manufacturing Engineering, together with the Beijing Mechanical and Electrical Institute have developed an "Affordable

move to produce quality and high value-added precision products, especially those precision automotive parts, and electrical and electronic parts. By applying Fine-blanking technology, productivity can be increased, and the production cycle time and component cost significantly reduced."

Capitalizing on the success of the former Fine-blanking Technology Group, the Centre will continue to actively provide the industry with an array of services, ranging from promoting and introducing the technology among the local metals manufacturers, conducting consultancy, production and installation, as well as carrying out various feasibility studies.



## PolyU and NASA pair up on flight mission

Scientists from the PolyU and the United States National Aeronautic and Space Administration (NASA) will embark on a major phase of a global atmosphere study by sending a two-aircraft flight mission over the Pacific Ocean.

The TRACE-P (Transport and Chemical Evolution over the Pacific) project is the second phase of a series of focused aircraft missions, which aims at ascertaining the impact of human activities in Asia on the chemistry of the global atmosphere. The project has been tentatively scheduled to be implemented from February to May in 2001.

"The objective of our mission is to study the chemical evolution of the Asian outflow over the western Pacific and the underlying



*Dr. Robert McNeal (left), NASA's Manager of Tropospheric Chemistry Programme, and Prof. Anson elaborate the forthcoming TRACE-P project.*

processes which determine this evolution. Moreover, the transport pathways for the outflow of chemically and radioactively important gases from eastern Asia to the western Pacific will be investigated," Prof. Michael Anson, Dean of Faculty of Construction and Land Use of the PolyU, said.

Under the PolyU's formal co-operation agreement with NASA, the University acts as NASA's contact point in the

region for co-ordinating atmospheric research as well as monitoring air quality and pollution transport.

## World's fashion technology institutes join forces

The PolyU has recently joined the International Foundation of Fashion Technology Institutes (IFFTI) in a bid to promote greater co-operation among leading fashion institutions worldwide.

The IFFTI was formed at a three-day conference held in New Delhi, India in November 1998. During the conference, representatives of the world's leading fashion technology institutions from Australia, Brazil, China, France, Holland, India, Italy, Japan, the UK and the US, gave presentations on crucial issues related to fashion technology education and the establishment of a foundation for developing human-resources-related educational programmes.

Prof. Edward Newton, Head of PolyU's Institute of Textiles and Clothing, was elected as one of the Vice Chairmen of the IFFTI, with three others from France, the UK and the US. It has been agreed that the IFFTI would organize a conference annually, and the PolyU will host the one in 2001 in Hong Kong.

The major objectives of IFFTI centre on the advancement in design, technology and business for the fashion and related industries through:

- developing an international network;
- promoting discussion and interaction;
- establishing an international framework for accreditation and credit transfer;
- assisting professional development of educators and researchers;



*Prof. Newton (middle) introduces the work of the Institute of Textiles and Clothing to Mr. Kashiram Rana, Minister of Textiles, India (left) as Raymond Au, Associate Professor looks on.*

- providing support and assistance to publicize member institutions' academic programmes and activities;
- promoting and supporting international cultural understanding;
- enhancing a greater understanding of the role and responsibility of the fashion and related industries in the international community.

## New computer system enhances teaching and learning

The official launch of the “LearningSpace” system at the Department of Accountancy last December marked a further advancement of the teaching and learning process of the Department. Ms. Maria Tam Wai-chu and Prof. Poon Chung-kwong, the President, officiated at the launching ceremony on campus.

According to Prof. Joseph Cheung Kwok-leung, Head of the Department and Hang Seng Chair of Accountancy, the Department planned to develop programmes and subjects which involved information technology in both teaching and learning.

Over the past two years several pilot programmes for such purpose have been carried out.

The pilot programme of “LearningSpace” has been implemented in the Department since last September, and is the first of its kind in North Asia. The software provides an interface platform which allows more frequent and unrestricted interaction and communication between teaching staff and students, thus offering an alternative as a virtual classroom.



*Prof. Joseph Cheung thanks Ms. Maria Tam Wai-chu for officiating at the launch of “LearningSpace”.*

## PolyU and Tung Wah Group strengthen clinical training

In Hong Kong, The PolyU is the sole provider of tertiary education in physiotherapy and occupational therapy.

The undergraduates of the Department of Rehabilitation Sciences will have more exposure to non-hospital clinical settings

in 32 rehabilitation and elderly service centres under the Tung Wah Group of Hospitals (TWGHs), following the signing of a Memorandum of Understanding between the two institutions in November 1998.

Moreover, the “Tung Wah Group of Hospitals Physiotherapy and Occupational Therapy Training Scholarships” have been established to enhance the quality of physiotherapy and occupational therapy. The scholarships will enable two full-time students of the Department to work full-time in rehabilitation and elderly service centres under TWGHs for two years after graduation.

Prof. Christina Hui-Chan Wan-ying, Chair and Head of the Department, said that it was essential for students to receive more comprehensive training as the demand for physiotherapy and occupational therapy had been increasing at a very rapid rate. It was therefore crucial for students to gain experience of working in different clinical settings in order to meet the needs of the community. ❖



*The President has a firm handshake with Mr. Albert Cheung, Chairman of the Board of Directors of the Tung Wah Group of Hospitals (left), for the great support extended by Group.*