

Congregation: *Sunny smiles*



Sunny smiles beamed from the faces of PolyU graduates and their parents and friends on the warm winter day of 1 December.

It was the day when the University sent forth more than 9,600 graduates in our 12th Congregation, held at the Hong Kong Coliseum. It was also the first time that the ceremony was presided over by the University's own Honorary Graduate **Mr Donald Tsang Yam-kuen**, in his capacity as Chief Executive of the HKSAR and Chancellor of PolyU. The morning session of the ceremony was presided over by **Dr Roy Chung Chi-ping**, Deputy Chairman of the University Council.

*12th
Congregation*



*Mr Tsang
presiding over the
Congregation for
the first time.*

During this memorable occasion, PolyU awarded 79 Doctor of Philosophy, 15 discipline-based Doctor's degree, 3,515 Master's degree, 3,705 Bachelor's degree, 218 postgraduate diploma and certificate and 2,107 sub-degree awards. The University also celebrated our first cohort of graduates on four postgraduate programmes, namely the Master of Science in Construction Law and Dispute Resolution, Master of Corporate Governance, Master of Design, and Master of Design in Advanced Practices.

In particular, more than 730 out of a record high of 904 students who have completed their academic pursuits at PolyU's outposts on the Chinese mainland made a special trip to Hong Kong to attend the Congregation.

Distinguished trio honoured

The University bestowed honorary degrees on three notable individuals in recognition of their outstanding achievements and contributions at the Congregation.



Dr Chow addressing the Congregation.

an orthopaedic surgeon by profession, is noted for his professional accomplishments and extensive experience in hospital administration. Dr Chow is also active in voluntary and community work. In 2001, he was honoured by the SAR Government with the Silver Bauhinia Star in recognition of his outstanding contribution to the development of sports for the disabled.

To the University, Dr Chow has always been a much valued adviser and close friend. He was Chairman of the Advisory Committee of the Department of Rehabilitation Sciences from 1992 to 1999, and served on the PolyU Council from 1998 to 2004. In He was named Fellow of the University in 2004/05.

Tan Sri Frank Tsao Wen-king, Founder and Group Chairman of IMC Group of Companies, was conferred the Honorary Degree of Doctor of Business Administration. With Dr Tsao at the helm, IMC thrives in shipping, logistics, mining, engineering, offshore oil and gas and real estate. The group owns and manages over 80 vessels and has more than 5,000 employees across the globe.



A solemn moment for Dr Tan Sri Tsao.

Dr York Chow Yat-ngok, Secretary for Health, Welfare and Food of the Hong Kong SAR, was conferred the Honorary Degree of Doctor of Social Science. Before assuming his present position in October 2004, Dr Chow,

Dr Tsao's commitment to the maritime industry is reflected in the many offices he has held in key organizations such as the Hong Kong Shipowners Association and the Hong Kong Maritime Industry Board. He has also served as Chairman of the Advisory Committee of PolyU's Department of Logistics since 1999 to further maritime education.

Dr Tsao has earned the prestigious title of "Tan Sri" bestowed by the King of Malaysia in 1973, and was named "Personality of the Year" by Lloyd's Maritime Asia in 1999. In 2002, he was the first person in Asia to be awarded "CMA Commodore" by the Connecticut Maritime Association of the US. In 2006, Dr Tsao was named Honorary Citizen by the Dalian Provincial Government, and awarded the Silver Bauhinia Star by the HKSAR Government.

Prof. Wang Min, Governor of Jilin Province and Professor of the College of Mechanical and Electrical Engineering of the Nanjing University of Aeronautics and Astronautics (NUAA), was conferred the Honorary Degree of Doctor of Engineering. Prof. Wang served as Vice Governor of Jiangsu Province and Secretary of Suzhou Municipal Committee before taking up his present position in Jilin. He was also former Vice President of the NUAA.

With his expertise in mechanical and manufacturing engineering, Prof. Wang has published widely and received major scientific and technological progress awards. His research interests include anti-fatigue manufacturing, super-hard film and tooling, precision machining, and information application in manufacturing. He was Visiting Scholar and Croucher Foundation Research Fellow of PolyU's Department of Manufacturing Engineering (now renamed Department of Industrial and Systems Engineering).

During his terms of office in the governments of Jiangsu and Suzhou, Prof. Wang helped steer Jiangsu to great success in terms of scientific and technological advancement, education, culture and sports. Under his able leadership, Suzhou ranked second in the Chinese mainland in terms of industrial output. In just two years since Prof. Wang became Governor of Jilin, the fixed asset investment in Jilin has grown by 120 per cent, the fastest of all provinces across the country.



Prof. Wang (right)

Pledge to support HK and the nation's future

In his Congregation speech, the University President, **Prof. Poon Chung-kwong**, called for the HKSAR Administration to support different types of universities in Hong Kong on an equal footing, so that they can be better positioned to play their respective roles to serve society.

Prof. Poon emphasized that comprehensive universities and application-oriented universities complement each other and they play equally important roles in fostering innovation and serving society. He cited the Massachusetts Institute of Technology (MIT) as a shining example of how an application-oriented institute can achieve success as one of the world's top institutions, given the strong support of the government and the community. In Hong Kong, PolyU has earned special commendation from the University Grants Committee for its outstanding performance in fulfilling its role as an application-oriented university.

However, he added that with our strategic emphasis on applied research of relevance to the needs of the Hong Kong economy, PolyU is often regarded as a non research-intensive institution by the authorities and thus granted a smaller research student intake quota as compared to the conventional "research universities".

"It is extremely unfair that there should be a gap between the research student quota of traditional research universities and that allocated to PolyU. Such a gap is causing severe hindrance to us in our efforts to nurture for Hong Kong a bigger pool of talents that focus on studies of an applied nature," Prof. Poon said.



Chancellor Mr Tsang, Council Chairman Mr Victor Lo and the President posing with Dr Chow and Dr Tan Sri Tsao.

He stressed: "It is therefore my earnest hope that this gap can be narrowed, and that different types of local universities can enjoy an equal level of support, so that they can flourish and ultimately become world-class universities."

Prof. Poon is confident that PolyU — as a fully-fledged institution which subscribes to the philosophies of "application orientation and learning for application" as well as "all-round education" — can contribute to developing Hong Kong as an education hub in the region.

At the same time, he believes PolyU's professional programmes in areas such as finance, accounting, business, marketing, logistics and hotel and tourism will play a vital role in supporting the Hong Kong's transformation into a knowledge-based economy.





A warm welcome to mainland graduates and representatives from partners on the mainland.

Prof. Poon said the University would lend full support to realizing the goals of the 11th Five-Year Plan by building on our advantage both as a pioneer in forging links with universities on the Chinese mainland and as the leader in offering on the mainland the largest number of State-accredited degree and above level programmes among Hong Kong and overseas universities.

Specifically, the University will play an active role in three of the nation's key projects, which involve exchange and cooperation with the Lunar Exploration Centre of the China National Space Administration, running Hong Kong's only Confucius Institute to promote Chinese language and culture, and partnering with the Science and Education Department of the Chinese Olympic Committee by sending health care and sports sciences experts to

prepare national athletes for the 2008 Olympic Games. Prof. Poon also said with much delight that PolyU's dedicated efforts as an application-oriented university had paid off handsomely. According to a study conducted by Thomson Scientific, the number of research papers published by our civil engineering experts between 2003 and 2005 ranked number one in the world. Our School of Hotel and Tourism Management was rated fourth best in the world by a leading international journal. In a recent survey by the US magazine *BusinessWeek*, PolyU's School of Design ranked among the top 60 in the world and among the four best in China.

Apart from offering congratulations to all graduates, Prof. Poon quoted the Confucian maxim "The Gentleman agrees with others without being an echo" in advising graduates to be always ready to accept different views. "Reaching consensus through debate and consultation is, I believe, the key to building a harmonious society in Hong Kong today," he observed.

(For the full text of the speech, see http://www.polyu.edu.hk/cpa/polyu/media/12congregate_e.php.)



PolyU shines in innovation

Vice President (Partnership Development) Dr Lui Sun-wing (middle), warmly congratulates the award winners.



The University has clinched one gold and three bronzes during its debut appearance in the 58th International Trade Fair “Ideas - Inventions – New Products” (IENA). Held in Nuremberg from 2 to 5 November, the event attracted exhibitors from 32 countries, showcasing close to 700 inventions in total. As in every year, an expert jury deliberated on the best inventions at IENA for awarding prizes and medals. PolyU’s winning entries are described as follows:



Gold Medal: Smart Wristband for Sleep Apnoea

*By Prof. Thomas Wong Kwok-shing,
Faculty of Health & Social Sciences*

This innovative anti-sleep apnoea device combines the use of Chinese acupuncture theory with wearable electronics. It is non-invasive, reliable, low-cost and easy to use. Through triggering the Lieque acupuncture point, or Lung Acupoint LU7, the device helps sleep apnoea sufferers resume breathing without being awakened. Preliminary clinical results revealed that it could lower the Apnoea Hypopnoea Index (AHI) by nearly 30 per cent on average. The device consists of a conductive fabric abdomen belt and a wristband which serve as two signal-processing units for monitoring the change of circumference of the user’s abdomen and releasing electrical pulses to an acupuncture point of the user respectively. Behind this innovation is an inter-disciplinary research team from the School of Nursing, Department of Health Technology and Informatics and Institute of Textiles and Clothing.



summit in Germany

Bronze Medal: Ultrasonic Decalcification Techniques and Agents

*By Dr Guo Xia, Department of Rehabilitation Sciences; and
Dr Zheng Yong-ping, Department of Health Technology & Informatics*

The novel technique accelerates the process of bone decalcification for pathological diagnosis or bone-grafting in orthopaedic or plastic surgeries. While traditional decalcification procedure is complicated, taking months to complete, this new method, which works on a custom-made ultrasound machine and foaming agent, can achieve decalcification within a few days or even hours. The patented system is also built-in with an end point detection and temperature controlling function which prevents deterioration of biological properties of decalcifying bone.



Bronze Medal: Self-Sustainable Magnetolectric Smart Sensors

*By Dr Derek Or Siu-wing and Prof. Helen Chan Wong Lai-wa,
Department of Applied Physics*

Using proprietary magnetolectric composite materials, PolyU physicists have developed a new generation of smart sensors for intelligent detection and conversion of magnetic fields into electrical signals. These smart sensors require no external power supplies to sustain their operations and produce large output voltages 2,000 times higher than the conventional sensors. They also have the features of high detection sensitivity, large field range of linearity, wide operational frequency range, high temperature stability, and tailorable performance and geometry. These sensors are cost-effective, reliable, and suitable for a broad range of applications, which include real-time, isolated/non-contact measurements of magnetic fields, electrical currents, and rotational speeds. The researchers have already filed their application for a US patent for this invention.

Bronze Medal: Intelligent Thermal Protective Clothing System

Prof. Li Yi, Institute of Textiles & Clothing

This project tackles problems for winter sports lovers and people facing extreme weather. With this system, smart thermal clothing can be designed to provide thermal regulating effects for more than 100 minutes without heating. The clothing can save 30 per cent more of body energy during heating and achieve temperature control. It can also prevent moisture condensation, making the clothing dry and warm. The patented system is designed using advanced thermal functional CAD technology, nano composite PCM (phase change materials) microcapsules, and moisture management fabrics.



Cutting-edge projects reap awards in national expo



Award winners posing with Dr Lui Sun-wing, Vice President (3rd from right).

Gold Medal: Multi-Sensory Training Unit for Children's Development

By Dr David Man, Department of Rehabilitation Sciences

This is a compact and portable device to provide young children with sensory stimulation in touch, sight, sound, vibration and movement. With its small size and light weight, this inexpensive training unit can be used in nurseries and special schools for normal children as well as those with developmental problems such as hyperactivity and attention deficit.



Dr Man explains how the multi-sensory training unit can benefit toddlers.

Silver Medal: Polymer-bonded Magnetic Device

By Prof. Eric Cheng Ka-wai, Department of Electrical Engineering

Prof. Cheng's team members have successfully applied this device in producing

magnetic materials. Using this new method, non-brittle magnetic cores of flexible shapes and different sizes can be made. The device has versatile applications in various products, including transformers and inductor components, direct-current-to-direct-current power converters, high frequency power supplies, and screening of electromagnetic wave.



Prof. Cheng introducing his innovative device for producing magnetic materials.

Silver Medal: Lucid Platform for Online Game Development

By Dr Gino Yu, School of Design

Lucid Platform provides a complete solution for game development. The platform consists of two main components, namely Lucid3D and LucidNet. Lucid3D is a cutting-edge 3D Game Engine which supports development of single player game and multi-player game clients. LucidNet is a high performance middleware for both the client and server-side multi-player game development. Using Lucid Platform, game developers can create almost any game genres.

Silver Medal: i-JADE e-Community

By Dr Raymond Lee, Department of Computing

This project integrates the power of Intelligent Agent Technology, 3G mobile computing technology, Global Positioning System, Fuzzy Logic, Ontology as well as Chaotic Theory. Through this user-friendly platform, users can easily obtain useful information from their PDA or 3G mobile devices. Users can make use of i-JADE features to acquire information on news, weather, stock, and location. They may also sort out relevant data for business decision-making through obtaining advice on stock, shopping, navigation or supply chain management.

Bronze Medal: SimLogistics™

Dr Henry Lau, Department of Industrial and Systems Engineering

SimLogistics™ is a simulator which mimics complex fleet management operations in the logistics industry. Using patented Adaptable Method Invocation Technology (AMIT) and adopting game-based approach, it allows interchange among heterogeneous environments which can create different logistics cases. As a fun-filled learning exercise, it helps enhance students' knowledge and skills in handling daily logistics-related activities. ♦

Winning medals in Doha

Congratulations to the four PolyU fencers who have won five bronzes in the 2006 Doha Asian Games. They have contributed to Hong Kong's best-ever results in the Asian Games. A total of 11 athletes from PolyU have represented the HKSAR in the fencing, volleyball, beach volleyball, handball and water polo games in Doha.

The medallists are **Miss Chow Tsz-ki**, Higher Diploma graduate in Information Systems, on Women's Individual Sabre and Women's Team Sabre; **Miss Bjork Cheng Yuk-man**, BSc graduate in Physiotherapy, on Women's Team Epee; and **Miss Au Yeung Wai-sum**, Year Three student in BBA in Marketing, and **Miss Tsui Wan-yi**, Year Three student in BBA in International Shipping & Transport Logistics, both on Women's Team Sabre.



Wai-sum (left) and Wan-yi



Bjork



Tsz-ki

Pact signing for Beijing Olympics

Staff and students of FHSS pictured with representatives of the Tennis Administration Centre and the national tennis team.



Deputy Director of Tennis Administration Centre Mr Gao Shenyang (left) presents a plaque to PolyU Deputy President Mr Alexander Tzang.



PolyU signed an agreement with the Tennis Administrative Centre of the General Administration of Sports of China in Guangzhou on 18 December to help prepare the national tennis team for the 2008 Beijing Olympics. With the signing of the agreement, PolyU has been designated as a research partner and Designated Sports Health and Rehabilitation Centre of the Tennis Administration Centre for the 2008 Olympics. The University will send forth experts from the Faculty of Health and Social Sciences (FHSS) and other related faculties to provide the tennis players with physical training and services in health care, health assessment, physiotherapy and recovery treatment.