The three winners of the Nobel Prize in Chemistry for 2001 have been named Distinguished Honorary Professors of PolyU. The conferment of this highest academic honour in the University was followed by the delivery of two public lectures on campus. Together, these mark an important day in the University’s 65th Anniversary Celebrations.

The distinguished trio are: Prof. Ryoji Noyori, Director of the Research Centre for Materials Science of Nagoya University in Japan; Prof. K. Barry Sharpless, W.M. Keck Professor of Chemistry at the Scripps Research Institute in the US; and Dr William Knowles, previously with Monsanto Company in the US.

The professorships were formally conferred by the University Council Chairman, Dr Sir Gordon Wu Wing-sheung, on 29 April. Although Dr Knowles was unable to receive the honorary professorship in person, Prof. Albert Chan Sun-chi, Chair Professor of Chemical Technology and Head of the Department of Applied Biology and Chemical Technology, earlier on made a special trip to the US for an exclusive interview with him. The video interview was presented during the event, after which Prof. Noyori gave his lecture on “The Science and Opportunities of Asymmetric Catalysis” and Prof. Sharpless on “Searching for New Reactivity”.

According to PolyU President Poon Chung-kwong, the honour was a most fitting tribute to the three top scholars, whose association with PolyU would also mean a strong boost to the further development of the University’s Area of Excellence (AoE) “The Hong Kong Institute of Molecular Technology for Drug Discovery and Synthesis”.

As co-recipients of the 2001 Nobel Prize in Chemistry, Prof. Noyori and Dr Knowles were laureated for their work on chirally catalysed hydrogenation reactions and Prof. Sharpless for his work on chirally catalysed oxidation reactions.
Two medicine research centres open in Shenzhen

The University recently celebrated the opening of its Institute of Materia Medica and Institute of Modern Chinese Medicine in Shenzhen.

According to Prof. Albert Chan Sun-chi, Director of the Institute of Materia Medica and Member of the Chinese Academy of Sciences, the Institutes will offer new biological and chemical technology and world-class facilities for supporting a modern Chinese medicine industry and for developing high quality health products and drugs for the international market.

The two research facilities were opened on 27 April by Mr Guo Rongjun, Deputy Mayor of the Shenzhen City Government; Prof. Cheng Jinpei, Deputy Minister of the Ministry of Science and Technology of PRC; Prof. Ren Dequan, Deputy Director of the State Drug Administration; and Prof. Poon Chung-kwong, PolyU President.

The ceremony was also joined by Prof. Ryoji Noyori from Nagoya University and Prof. K. Barry Sharpless of the Scripps Research Institute — two Nobel Laureates in Chemistry — and more than 10 members of the Chinese Academy of Sciences and the Chinese Academy of Engineering. These scholars shared their insights at the International Forum on Pharmaceutical Technology which followed the opening ceremony. A lecture by Nobel Laureate Dr William S. Knowles was presented in a video.

Situated at the Shenzhen High-tech Industrial Park, the 2,000-square-metre Institutes consist of several laboratories equipped with the state-of-the-art instruments. The funding invested in setting up the Institutes reached $50 million.

The Institute of Materia Medica and the Institute of Modern Chinese Medicine form two units of the PolyU Shenzhen Research Institute, a conglomerate of research centres and training facilities. The other three units of the Research Institute are, namely, the China Accounting and Finance Research Centre, Hong Kong Young Industrialists Council Executive Training Centre, and the MIC Multimedia Technologies Ltd.

At the forefront of chemistry technology research

Institute of Molecular Technology for Drug Discovery and Synthesis — Under the University Grants Committee’s 2001 funding decision in its Areas of Excellence (AoE) scheme, this joint project with The University of Hong Kong was selected and obtained funding allocation of $48 million. The team also collaborates with researchers from six local universities as well as scientific and industrial leaders from around the world.

The AoE is led by Prof. Albert Chan Sun-chi of PolyU and Prof. Che Chi-ming of the University of Hong Kong. It was awarded a $48 million grant by the University Grants Committee in its second round of AoE selection exercise last year.
PolyU has successfully registered five US patents by breaking new grounds in chirotechnology research. The University has licensed the use of these technologies to ICI Chemicals and Polymers Limited (ICI), the largest chemical company in the UK.

According to the principal investigator Prof. Albert Chan Sun-chi, Chair Professor of Chemical Technology and Head of PolyU’s Department of Applied Biology and Chemical Technology, the new technologies can find massive applications in the pharmaceutical and fine chemical industries.

The licensing agreement was signed by Dr Lui Sun-wing, PolyU Vice President (Partnership and Continuing Education), and Mr Fred Hancock, Product Manager of Synetix Chiral Technologies Group of ICI.

Under the agreement, ICI will be granted the rights to make use of the University’s newly developed chiral catalysts in their development of effective processes for the production of higher value-added pharmaceutical products.

The University has registered patents of a number of technologies in areas such as electric power, filter and ultrasound in recent years.

The mission of this AoE, hosted at PolyU by the Department of Applied Biology and Chemical Technology, is to implement world-class science and technology in the area of drug discovery and synthesis. The Institute will invent novel methodologies for the preparation and structural modification of new drug candidates. It is expected that commercially applicable technologies will be attained within five to 10 years.

**Chinese Medicine Research and Further Development** — PolyU experts from the same department are also involved in this AoE which was awarded funding in the UGC’s selection exercise. The AoE was allocated a total of $25 million funding. It seeks to promote the modernisation of Chinese medicine and to provide clinical research for drug development.

Under this AoE, a consortium, led by The Chinese University of Hong Kong with close collaboration from the City University of Hong Kong, The Hong Kong Polytechnic University and The Hong Kong University of Science and Technology, was formed. The PolyU team of researchers is led by Prof. Chau Foo-tim.

The consortium will establish an evidence-based scientific model for Chinese medicine research, with a view to identifying complementary or alternative treatments for illnesses that still have not found effective solutions or preventive measures in Western medicine. The priority projects selected for the AoE include antiviral preparation for hepatitis, treatment/maintenance for childhood asthma, limb salvage for diabetic foot ulcer, treatment of women’s ailments, and health promoting tonic for cardiac diseases.