



香港城市大學  
City University  
of Hong Kong

*Research Excellence Awards 2007*

*Award of Excellence*

*Prof. Paul Chu Kim-ho*

City University of Hong Kong

Research Excellence Awards  
Presentation Ceremony

*March 17, 2008*



香港城市大學  
City University  
of Hong Kong

## *Award of Excellence Winner*

# *Professor Paul Chu Kim-ho*

*Professor (Chair) of Materials Engineering, Department of Physics and Materials Science*

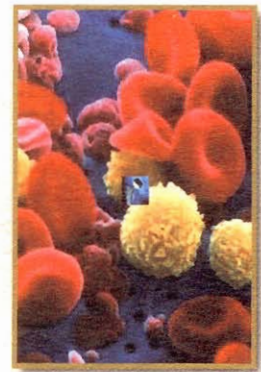


Professor Paul Chu, who has an MS and a PhD in Chemistry from Cornell University, is a leading scientist in plasma science and materials engineering. Since joining CityU in 1996, he has been committed to researching the basic theories of plasma and plasma immersion ion implantation and deposition (PIII&D) and applications in semiconductors as well as biomedical and other functional materials. His team has developed a range of advanced technologies, including silicon-on-insulator and plasma-based orthopaedic shape memory alloys for correcting spinal deformities. He holds concurrent Professorships in 10 universities and research institutes in China and collaborates closely with scientists locally and abroad. For example, he works with the Shanghai

Institute of Ceramics of the Chinese Academy of Sciences on projects using plasma technology to encourage cells to grow on ceramic, a material used for producing artificial hip joints.

In the ISI Thomson Essential Science Indicators, Professor Chu is ranked as one of the top 0.1% scientists in materials science and 0.5% in engineering and all fields. He has contributed significantly to applied research, and has been granted eight United States and five Chinese patents.

He also has an impressive track record of attracting external funding, obtaining more than 40 research grants worth over HK\$50 million in the past 10 years. He led an inter-institutional team to secure HK\$2.8 million in the 2006/07 Central Allocation Vote grants exercise to upgrade major equipment essential for PIII&D research in Hong Kong. This expands and updates one of the old plasma implanters in the Plasma Laboratory at CityU designed and built by Professor Chu's team over 12 years ago. The technology arising from this research has wide applications such as in industrial cutting blades, artificial hip joints and heart valves, microelectronics, optoelectronics, and nanotechnology.



Professor Chu has received many prestigious awards. In 2007, he won the IEEE/NPSS (Nuclear and Plasma Sciences Society) Merit Award, the most prestigious award given by IEEE in the areas of



nuclear and plasma sciences bestowed on just one person each year, for his outstanding technical contributions to the field of plasma science. He was the first academic from an Asian institute to win this award since it was established in 1972.