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Croucher Laboratory on Multiscale Modeling and Simulation Named

A new laboratory for advanced mathematical research – The Croucher Laboratory on Multiscale Modeling and Simulation – was instituted and named today (15 November 2004) at the Hong Kong University of Science and Technology (HKUST).

The Laboratory has been established with a generous donation of HK\$1 million from The Croucher Foundation, whose mission is to promote advanced research in science and technology in Hong Kong.

The Naming Ceremony was officiated by Professor Y W Kan, Chairman of The Croucher Foundation's Board of Trustees, and Prof Yuk Shee Chan, Acting President of HKUST. Since the University's inception, The Foundation has donated about HK\$ 37 million in support of HKUST research and education endeavors.

Prof Chan thanked The Croucher Foundation for its long-standing support for the University. "This important donation will help us establish a new lab and, more importantly, will enable us to continue pushing back the frontiers of knowledge and research, and to continue our relentless pursuit of excellence," he remarked.



Dr Wang, Prof Chan, Prof Kan and Prof S Y Cheng, Dean of Science



Prof Y W Kan

Many problems in nature involve multiple active scales. Examples include protein folding, the dynamics of microcrack in the fracture process and the vortical structures on weather maps. Their wide applicability and interdisciplinary nature have positioned multiscale modeling and simulation as one of the most important fields now emerging in science and technology.

The Laboratory has engaged a team of top-flight applied mathematicians and scientists who are experts in numerical techniques in hierarchies of different scales ranging from ab-initio quantum mechanical calculations to large scale continuum simulations. Recently a joint math-physics team from HKUST led

the breakthrough in solving the Moving-Contact-Line Problem which has eluded theoretical and experimental analysts for nearly a century.

Dr Xiao-Ping Wang, Director of the Laboratory and Associate Professor of Mathematics, said, "This unique combination of skill and talent will make the Laboratory one of the best in the world in its field. HKUST now has a winning team for tackling multiscale problems."

The donation was matched by the Government on a dollar-for-dollar basis under its Matching Grant Scheme.

