Biography

Dr. Lau Hon Chung is currently a professor at the Department of Civil and Environment Engineering at NUS. He has more than 35 years of experience in the upstream petroleum industry. After completing his PhD at **Princeton University**, Dr. Lau joined **Shell Oil Company** in Houston, Texas. Since then he has held positions of increasing responsibility in research and development, operations, project delivery, technical assurance, training, recruitment, technical leadership and project management. He has worked in USA, the Netherlands, Brunei and China on various **onshore, shallow water** and **deepwater oil and gas projects**. Within Shell, Dr. Lau was recognized as a subject matter expert in chemical enhanced oil recovery (EOR), smart wells and sand control. He was the pioneer of Shell's horizontal openhole gravel packing process, a well completion technology used by Shell worldwide.

He is the inventor of over twenty US, Canadian and European patents, covering a wide range of topics, including new ways to accommodate more wells in offshore platforms, new gravel packing processes, new surfactants for EOR, foam for mobility control, residual oil saturation reduction and new drilling mud formulations. He has authored technical papers in various aspects of EOR, sand control, smart wells, history matching, reservoir characterization and unconventional resources. Dr. Lau has held positions as **Chief Production Technologist and Chemist of North America for Shell International**, **adjunct professor at University of Texas at Austin**, **honorary professor at China University of Petroleum Beijing**, **Career Coach at Tsinghua University** and **Technical Editor of Society of Petroleum Engineer journals**. He is a licensed professional petroleum engineer in the State of Texas. His research interests are in the areas of **nanotechnology for oilfield application**, **EOR for conventional and unconventional**, and feasibility of **gas hydrate production**.