

**Title of Seminar:**

Research at School of Mechanical & Aerospace Engineering, Nanyang Technological University, Singapore

The research conducted at the School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore, and its Ph.D. programs, are introduced.

Subsequently, the research areas of Professor Lam Yee Cheong are outlined, in particular in the areas of femto-second laser machining and the fabrication of micro-features of aluminum molds. Investigations carried out demonstrated that (a) significant laser energy is conducted away during femto-second laser machining contrary to the common belief that there is no or negligible heat conduction; and (b) features much less than the grain size of a polycrystalline metal could be formed and that grain size is a limiting factor on feature size is only a myth.

**CV of Professor Lam Yee Cheong**

Dr. Lam graduated in Mechanical Engineering, Melbourne University, Australia and was awarded the Dixon Scholarship for “Outstanding Academic Achievement”. Subsequently, he obtained his Ph.D. from the same University and was awarded the M.H. de Fina Memorial Prize for “The Best Postgraduate Student in the Department”.

Dr. Lam is currently a Professor and the Associate Chair (Research) in the School of Mechanical and Aerospace Engineering, Nanyang Technological University. He has received a Certificate of Honour for Inspirational Mentorship of University Scholar. Concurrently, Dr. Lam is a faculty fellow of the Singapore-MIT-Alliance (SMA). He had held joint appointment as Principal Scientist with the Singapore-Institute of Manufacturing Technology (SIMTech).

Before joining NTU, Dr. Lam was a Reader with the Department of Mechanical Engineering, Monash University, Clayton Campus. He was the National President of the Australian Fracture Group and a Director of the Far East Oceanic Fracture Society. Professor Lam was Head (Monash Node) of the Co-operative Research Centre of Advanced Composite Structures (CRC-ACS), Australia, and its Program Coordinator for the Tooling and Repair Task. He was awarded a plaque by CRC-ACS “In Recognition of Service to CRC-ACS”.

He has been invited by the University of Melbourne, Australia to deliver the prestigious Tewksbury Lecture, and by Monash University, Australia to deliver the prestigious Harold Armstrong Memorial Lecture,