



Department of Civil &  
Environmental Engineering  
College of Design and Engineering



The Institution of  
**StructuralEngineers**

**You are cordially invited to a Guest Lecture Jointly Organized by**

**Department of Civil and Environmental Engineering, Singapore Structural Steel Society  
And The Institution of Structural Engineers**

## **Advances in Direct Analysis: Ensuring Safety and Economy in Semi-Rigid Structures**

by

**Professor Chan Siu-Lai**

Director, Nida Technology Limited, Science Park  
Retired Chair Professor in Computational Structural Engineering  
The Hong Kong Polytechnic University

**Host: Professor Richard Liew, Head of Department of Civil and Environmental Engineering**

**Date: 11 May 2023, Thursday**  
**Time: 3.00 pm – 5.00 pm**  
**Venue: Engineering Auditorium**  
**National University of Singapore**  
**College of Design and Engineering**  
**9 Engineering Drive 1**  
**Singapore 117575**



**Scan code to register**

**PDU points: (pending)**

**\*\*\*Seats are limited. Please register early. All are welcome and admission is free\*\*\***

**Refreshment will be serve after the Lecture**

### **Speaker's Biography**



**Ir Professor S.L. Chan** had been the Chair Professor in Computational Structural Engineering at the The Hong Kong Polytechnic University until 2022 when he retired from PolyU and joined Nida Technology Limited in Science Park as a Director. Professor Chan's research interests include the stability analysis and design of steel, composite and concrete structures, nonlinear finite element analysis, glass and slender skeletal structures, steel, rock and flood barriers, bamboo and aluminum scaffolding and pre-tensioning steel structures. During the past three decades, Professor Chan developed a new design method second-order direct analysis (SODA) allowing for imperfections for practical structures bypassing the effective length assumption and the prescriptive use of charts and tables in Code. Since 1998, SODA has been applied to the design of a number of steel and composite structures which include numerous steel structures in Hong Kong, Macau and the region including the 2008 and 2016 award winning projects in Hong Kong and the "Spectacular Roof" for MGM Resorts, being archived in Guinness record as world's longest single layer steel space frame. Further Professor Chan has delivered numerous keynote in local and overseas conferences and symposia and acted as chief editor of 3 international journals and member of board for other 7 journals. He was also a chairman of structural division, structural discipline of HKIE and a co-chairman of Fire division of HKIE. His work in second-order analysis with imperfections is notable internationally as listed among top few in the Google and Yahoo searches.