

SEMINAR

SYNOPTIC AND NON-SYNOPTIC WIND FLOW OVER NATURAL CANOPIES

Speaker

Prof. Mark Sterling

University of Birmingham, UK



Abstract

This presentation examines why natural (plant) canopies are important as well as the structure of the wind over and through such canopies. Suitable analytical models for both the wind and the plants within such canopies will be presented and through these the environmental conditions required to cause plant failure will be explored. Synoptic and non-synoptic winds (tornadoes and downbursts) will be examined, and the plant failure pattern due to latter will be examined and used to inform our understanding of the nature of these winds.

Biography

Prof Mark Sterling is the Beale Professor of Civil Engineering, Deputy Pro Vice-Chancellor (DPVC)(Staffing) and has held several senior positions at the University for Birmingham for over the last 10 years. He has undertaken research in Wind Engineering for over 24 years and has successfully graduated 20 PhD students, the majority of whom have successful careers in either industry or academia. His research focuses on transient winds, particularly the effects of extreme winds on infrastructure, vehicles and plants. He is an adjunct research professor at the University of Western Ontario who frequently undertakes multi-disciplinary work and is used to working in (and leading) large diverse teams. He was part of the committee which recently refreshed the ASCE code of practice on Wind Tunnel Testing for Buildings and Other Structures. He has published 185 peer reviewed journal and conference papers, one book on Train Aerodynamics and his latest book on redesigning the academic career framework will be published in December.



**21 November 2023
Tuesday**



3:00pm - 4:00 pm



**Room 3574 (Lift 27/28)
Civil Engineering
Conference Room,
HKUST**

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