Topic: Composites Activities in Bristol; Scaling Mechanisms and

Evaluating Models for Predicting Failure

Speaker: Professor Michael R. Wisnom

Director, Advanced Composites Centre for Innovation and Science

University of Bristol, UK

Date: 21 January 2014, Tuesday

Time: 2.00pm to 3.00pm

Venue: E1-06-08, Block E1, Faculty of Engineering, NUS

(map of NUS can be found at http://map.nus.edu.sg/)

Host: Prof. Tay Tong Earn

Abstract

An overview will be presented of activities in ACCIS, and the National Composites Centre in Bristol. This will be followed by a research presentation on size effects on strength of composites. The different mechanisms responsible for scaling of strength will be discussed, together with experimental results from scaled tests. Models to fit the observed effects will be considered, emphasising the importance of capturing the correct physical mechanisms in order to be able to predict the complex scaling behaviour found experimentally.

About the Speaker

Michael Wisnom is Professor of Aerospace Structures and Director of the Advanced Composites Centre for Innovation and Science at the University of Bristol. He is a leading expert on the mechanics and failure of fibre reinforced composites, with over 300 published papers. He is Director of the Rolls-Royce Composites University Technology Centre and a member of the steering board of the UK National Composites Centre. He is Editor in Chief of Composites Part A, a Fellow of the American Society for Composites. Professor Wisnom was awarded a Royal Society Wolfson Research Merit Award in 2005 and was President of the International Committee on Composite Materials from 2009-2011.

Admission is free. All are welcome to attend.