

KEYNOTE SPEAKERS | ASEC 2016

Tristram Carfrae

Tristram Carfrae is a leading structural designer and Arup's Deputy Chairman. He has been responsible for the structure of a dazzling array of award winning buildings over his 35 years with the firm, both in Australia and the UK. His particular skills relate to the integration of engineering and architecture to provide the best holistic solution. Tristram has been fortunate to work with many of the world's leading architects on projects where the structure forms a major aesthetic component.

He has an unswerving commitment to designing better buildings that consume less resource: materials, energy, time and money; yet give more pleasure. He has helped design six structures that have won Special Awards from the Institute of Structural Engineers – the world's premier structural accolade.

In 2001 he was named as Australian Professional Engineer of the Year and was recognised in 2004, 2005 and 2006 as one of Australia's top 100 most influential engineers by Engineers Australia. In 2006 The Royal Society for the encouragement of Arts, Manufactures and Commerce (RSA) awarded him the title of Royal Designer for Industry. In 2008 Tristram received the Hero of Innovation Award from the Warren Centre. In 2009 he received the MacRobert Award, the highest engineering recognition available for a project. In 2014, he was awarded the prestigious Gold Medal award by the Institution of Structural Engineers (IStructE). The Award recognises Tristram's exceptional contribution to the science and structural engineering professions.



Sean Brady

Dr Sean Brady is a forensic engineer specialising in identifying the cause of structural engineering failures, defects, and unsatisfactory performance.

He is the managing director of Brady Heywood Pty Ltd and has investigated failures on a wide range of structures both in Australia and overseas. He has published and presented internationally on the subject of forensics, is a practising Chartered Professional Engineer, and a Board member of the Society of Construction Law Australia. He is a member Panel of Experts at the Singapore International Mediation Centre, and he is on the Editorial Board of the *ASCE Journal of Performance of Constructed Facilities* and the *ICE Forensic Engineering Journal*.

He has a special interest in organisational failure and crisis management, and he is a visiting lecturer at the University of Melbourne's Law School and the Queensland University of Technology's Business School.



Alan Crossman

Alan is IStructE 2016 President. Formerly Technical Director – Structural Engineering and Knowledge Leader – Structures & Architecture with Montgomery Watson Harza (MWH). His areas of responsibility have covered Europe, Middle East, Africa & India. He has been responsible for the structural design and project management of major building and civil engineering works, including housing, faculty buildings, superstores, offices, industrial process structures, reservoirs, river barrages and dams.



Rob Heywood

Dr Rob Heywood is a structural engineer with a particular interest in assessing / extending the life of structures, understanding structural behaviour & identifying the cause/s of failure. A recent focus has been on closing the 'plausibility gap' between the observed and theoretical performance of bridges and the safe management of bridges subjected to loads that exceed their design load and their assessed capacity.

Rob is the Principal of Heywood Engineering Solutions, a recipient of the Australian Centenary Scholarship and the Warren Medal for his research into live loads applied to bridges, a member of the OECD DIVINE international research project investigating the dynamic interaction between heavy vehicles and infrastructure, a past Chairman of the Structural College Board of Engineers Australia and an Urban Search & Rescue engineer.

Rob has accepted invitations to speak on topics that include assessment of structures, forensic engineering, earthquake damage, detailing concrete structures, bridge-vehicles interaction, bridge testing, live loads on bridges and cyclone damage. He was invited to present evidence to the Canterbury Earthquakes Royal Commission regarding the collapse of the CTV building where many lost their lives.



SP Chiew

Sing-Ping CHIEW is Professor and Programme Director of Civil Engineering at Singapore Institute of Technology, Singapore's fifth autonomous university set up by the Ministry of Education of Singapore to provide an alternative applied learning pathway for university students. He was previously Head of the Division of Structural Engineering and Mechanics at Nanyang Technological University, Singapore from 2008 to 2014. He is currently a Member of the Panel of Expert Advisors of the Land Transport Authority, a Member of the Building and Construction Authority Academy Advisory Panel and a Board Member of the Professional Engineers Board of Singapore. He is the author of the Design Guide BC1: 2008 and 2012 on selection of alternative structural steel published by the Building and Construction Authority of Singapore. He is also the co-author of the Professional Guide P001: 2015 on selection of equivalent steel materials published by the Hong Kong and Macau's steel construction industries.

