

## **Appendix I National and international esteem indicators**

### *(a) Refereeing*

Journal papers for - ASME Fluids Engineering, ASCE Journal of Hydraulics Division, Journal of Fluid Mechanics, Journal of Wind Engineering and Industrial Aerodynamics, Journal of Fluids and Structures, Aeronautical Journal, Atmospheric Environment, Environmental Technology, Journal of Applied Meteorology, Wind and Structures

Books for BHRA, British Book News, Allen and Unwin, McGraw Hill, Arnold  
Member of Editorial Board of “Wind and Structures – an international journal” (2003-)

Member of Editorial Board of “Journal of Wind Engineering and Industrial Aerodynamics” (2010-)

### *(b) External examiner*

The three dimensional flow around railway trains, PhD thesis by J Copley, Department of Engineering, University of Cambridge, 1985

Theoretical and experimental aerodynamic analysis for high speed ground vehicles, PhD thesis by I Farhan, Department of Aeronautics, University of Loughborough, 1987

Aerodynamic stability of road vehicles in side winds and gusts, Department of Aeronautics, PhD thesis by S Mullarkey, Imperial College, London, 1989

Aerodynamic loads on a railway train in a cross wind, PhD thesis by T W Chui, Department of Engineering, University of Cambridge, 1990

The mathematical simulation of reservoir sedimentation and flushing, PhD thesis by G Taghipoor, Department of Civil Engineering, Kings College, London, 1990

Passenger car aerodynamics - a comparison between wind tunnel and track derived data, PhD thesis by G le Good, College of Aeronautics, Cranfield University, 1993

Aerodynamics of road vehicles during yawed flow conditions, PhD thesis by D de Beer, Department of Aeronautics, Imperial College, London, 1993

Two phase flow at T junctions, PhD thesis by P Roberts, Department of Theoretical Mechanics, University of Nottingham, 1994

The design and optimisation of dust collectors by experimental and numerical techniques, MEng (Eur) thesis by J Deremetz, Department of Engineering, University of Exeter, 1994

Aerodynamic effects on articulated road vehicles, PhD thesis by D Jadjikakides, Department of Aeronautics, Queen Mary and Westfield College, London, 1994

The aerodynamics and design of a dust collector, MEng (Eur) thesis by C Winter, Department of Engineering, University of Exeter, 1995

An investigation of conical roof edge vortices, PhD thesis by R Marwood, Department of Engineering, University of Oxford, 1996

Measuring the effects of crosswinds on cars, PhD thesis by A Macklin, College of Aeronautics, Cranfield University, 1996

A study of the wind flow around buildings with reference to wind energy capture, PhD thesis by N Jennings, Department of Aeronautics, Imperial College, London, 1997

The growth and mechanical response of trees to wind loading, PhD thesis by G Blackburn, School of Biology, University of Manchester, 1997

Vortex interaction in flows over bluff bodies, PhD thesis by R Mills, Department of Mechanical Engineering, Monash University, Australia, 1998

The use of riblets for delaying boundary layer transition to turbulence, PhD thesis by I Starling, Department of Mechanical Engineering, University of Nottingham, 1998

Measurements of airflow in an urban environment, PhD thesis by P Louka, department of Meteorology, University of Reading, 1998

Wind flow structures and wind forces in forests, PhD thesis by B Marshall, Department of Engineering Science, University of Oxford, 1998

EngD portfolio by R Cant, Department of Mechanical Engineering, University of Surrey, 1999

Influence of aerodynamics on the operating performance of automotive external rear view mirrors, PhD thesis by G Oswald, Department of Mechanical and Manufacturing Engineering, RMIT, Australia, 2000

EngD portfolio by C Fothergill, Department of Mechanical Engineering, University of Surrey, 2002

Development of wind tunnel technique for unsteady train aerodynamics, MPhil thesis by K Ahmed, Queens University Belfast, 2003

CFD modelling of wind flow over terrain, PhD thesis by Paul Stangroom, School of Civil Engineering, University of Nottingham, 2004

Aerodynamic interaction mechanisms relevant to the underbodies of formula 1 cars, PhD thesis by Barnaby Garrod, Department of Aeronautics, Imperial College, 2004

Physical simulation of vehicular pollution dispersion in an isolated urban street canyon under heterogeneous traffic conditions, PhD thesis by N Sharma, IIT, Dehli, 2004

Jet flow through porous screens, PhD thesis by S Webb, School of Aeronautics, University of Southampton, 2005

Evaluation of sand scouring techniques to determine pedestrian level wind speeds, PhD thesis by Gabor Dezso, University of Eindhoven 2006

The use of LES techniques in train aerodynamics, PhD thesis by Ben Diedrichs, Chalmers University

Tunnel ventilation research, DSc thesis by Alan Vardy, University of Dundee, 2007

Numerical simulations of flows around trains and buses in cross winds, PhD thesis by Hassan Hemida, Chalmers University, 2008

On-road turbulence, PhD thesis by Scott Joseph Wordley, Monash University, 2009

Measures for damping aerodynamic oscillations of bridges, PhD thesis by Kuowei Chang, Nottingham University, 2009

Leakage and atmospheric dispersion of CO<sub>2</sub> associated with carbon capture and storage projects, PhD thesis by Alberto Mazzoldi, Nottingham University, 2009

The influence of turbulence on a flat plate aerofoil at Reynolds numbers relevant to MAVs, PhD thesis by Sridhar Ravi, RMIT, Australia, 2011

Effects of boundary layer forcing on wing tip vortices, PhD thesis by Samantha Shaw-Ward, University of Surrey, 2015

An Evaluation of Vortex Shedding over Slender Structures using Large-Eddy Simulation, PhD thesis by Stephen Daniels, University of Southampton 2016

Base pressure on box models of vehicles, PhD thesis by Anna Perry, University of Loughborough, 2016

Italian High Speed Rail Development: an Investigation on Train-Infrastructure Aerodynamic Interaction, PhD thesis by Claudio Sommachini, Politecnico di Milano, 2016

The Computational Analysis of the Slipstream Characteristics of High-Speed Train,

PhD thesis by Shibo Wang, Monash University, 2017  
Aerodynamics of heavy trucks, PhD thesis by Luigi Salari, Politecnico di Milano, 2018

*(c) Research assessment*

Ongoing grant appraisal for SERC, NERC, AFRC, EPSRC, Australian Research Council, National Science and Engineering Research Council of Canada, EPSRC Peer Review College (1995-), Member and chair of Silsoe Research Institute Animal Production and Welfare Strategy Group (1994-96) Member of BBSRC Visiting Group to Silsoe Research Institute (2001) Research programme assessment, Polytechnic University of Hong Kong (2003)

*(d) Conferences*

Organising committee of Wind Engineering Society Conferences in Cambridge (1992), Bristol (1998), RAeS Vehicle Aerodynamics Conference (1994), Royal Academy / WES Symposium on the IDNDR (1995), IDNDR conference (1998), 3rd Computational Wind Engineering Conference in Birmingham (2000) - chair of committee, European and African Wind Engineering conference in Cambridge (2013)

Scientific Advisory Committee of 2nd Bluff Body Aerodynamics Conference in Melbourne (1992), Eastern European Wind Engineering Conference in Warsaw (1994), 3rd Bluff Body Aerodynamics Conference in Virginia (1996), Bridge Aerodynamics in Copenhagen (1998), Vehicle Aerodynamics Conference in Coventry (1998), European Wind Engineering Conference (2001), International Conference on Wind Engineering in Lubbock, Texas (2003), Flow Induced Vibrations Conference in Paris (2004), European Wind Engineering Conference in Prague (2005), Bluff Body Aerodynamics, Milan (2008), International Conference on Wind Engineering, Amsterdam (2011), Transport Research Arena in Athens (2012), AWAS, Seoul (2012); First International Conference in Numerical and Experimental Aerodynamics of Road Vehicles and Trains, Bordeaux (2014), Railway Engineering, Sardinia (2016)

*(e) Committees*

1990-96 Member, executive committee of the Wind Engineering Society (WES) - an affiliated learned society of the Institution of Civil Engineers Secretary of WES, chairman of education committee and member of research, and prize committees  
1st place in WES committee elections in 1997  
1996- Elected Fellow of Wind Engineering Society  
1996-97 Vice chairman and chairman elect of WES  
1997 - 99 Chairman WES  
1998-00 Member of Steering Committee of International Association of Bridge Aerodynamics and Chairman of Working Group on Wind effects on vehicles on bridges  
1999-00 Vice chairman, WES  
2000-04 Vice Chairman of EU Co-operation in Science and Technology (COST)

- Action C14 – Wind effects in cities  
 Chairman of Working Group 1 of COST C14
- 2000-05 Committee Member WES  
 1st place in WES committee elections in 2001
- 2002-05 Member of Silsoe Research Institute Governing Body
- 2003-05 European and African Regional Representative on the Executive  
 Committee of the International Association of Wind Engineering
- 2003- 08 Member ISO committee to revise wind loading code
- 2003- Member BSI loading committee
- 2004-06 Theme leader of SOCRATES programme Teaching and Research in  
 Engineering Education
- 2005-09 European and African Regional Co-ordinator on the Executive Committee  
 of the International Association of Wind Engineering
- 2006-10 Member of Advisory Group on Research in the Rail Industry
- 2007- Editorial Board, Journal of Disaster Research
- 2008-12 Member of the Scientific Advisory Committee of CISIT : International  
 Campus on Safety and Intermodality in Transportation, Valenciennes,  
 France
- 2010- IAWE International Group for Wind-Related Disaster Risk Reduction
- 2010-12 Chair, DfT committee on climate change in the Railway Industry.
- 2010-14 CEN Working Group on climatic actions – UK representative.
- 2011-14 Member UK BSI mirror group for CEN TC256 WG6
- 2011-14 UNECE Expert panel on the effects of climate change on international  
 travel networks

*(f) Honorary positions*

- 2009-12 Visiting Professor at Tokyo Polytechnic University  
 Postgraduate short courses delivered in 2009, 2010, 2011
- 2012- 17 Visiting Professor at Central South University, Changsha

