



Professor Constantinos Soutis FEng

BSc, MSc, DIC, PhD (Cantab), CEng, FRAeS, FIMechE, FIMMM, AFAIAA

- Chair in Aerospace Engineering
- Director of Aerospace Research Institute
- Director of the Northwest Composites Centre/NCCEF

constantinos.soutis@manchester.ac.uk

<http://www.aerospace.manchester.ac.uk>

<http://www.nccef.manchester.ac.uk>

Biography

Professor Soutis, is a graduate of the University of London (Queen Mary College and Imperial College London, Aeronautics) and Cambridge University (Department of Engineering, PhD). He has taught and performed research in the areas of mechanics of aerospace composite materials and structures at the University of Cambridge (1986-1991), University of Leicester (1991-1994), Massachusetts Institute of Technology (MIT) in the United States of America (2000-2001 as a Visiting Professor in the Department of Aeronautics & Astronautics), Imperial College London (1994-2002), where he held a personal chair in composite structures in the department of Aeronautics. Professor Soutis was the first Professor of Aerospace Engineering at the University of Sheffield where he served as Head of Aerospace and Head of the Composite Systems Innovation Centre (Founding Director) until September 2012. In October 2012, he was appointed at the University of Manchester as Professor of Aerospace Engineering, Director of the Aerospace Research Institute and Director of the Northwest Composites Centre. His industrial research includes work with the Structural Materials Centre of the Defence Evaluation & Research Agency (visiting research fellow, 1995-2001), QinetiQ (Trusted Expert, 2001-2003), Dowty Propellers, Cytec Engineering Materials, IMMG -Athens and ABB Research in Baden, Switzerland. Since October 2012, Visiting Professor and Distinguished Scholar, in the School of Engineering and Information Technology of the University of South Carolina, USA, engaged in innovative pedagogy and research of aerospace composite materials and structures.

Research Interests & Publications

Prof Soutis has over 25 years of experience in working with composite structures and has made significant research contributions in modelling the compressive response of composite plates with open or filled holes under uniaxial, bi-axial static and fatigue loading; impact and post-impact compressive strength and crush energy absorption; multi-scale modelling of damage in orthotropic laminates under multi-axial in-plane loading; structural health monitoring using PZT activated Lamb waves and analysis and inspection of bonded patch repairs. Some of the fracture models he developed have been implemented in commercial computer design packages, used successfully by industry and academia. Professor Soutis is the author or co-author of over 350 archived articles, which include more than 180 ISI listed journal papers and made over 100 technical presentations at international conferences, seminars and symposia (with more than 15 Keynote/Plenary lectures in the last 2 years). Over the last five years an estimated £6.5M has been obtained in research grants and external contracts. Some 25 PhD students have qualified under his guidance.

Teaching courses

Aircraft Structures; Integrity of Materials & Components; Advanced Engineering Materials.

Editorships & Professional Societies

He is Deputy Editor of the Applied Composites Journal, Consultant of the Editorial Committee of the Chinese Journal of Aeronautics, Associate Editor of the RAeS Aeronautical Journal and the International Journal of Structural Health Monitoring. He is also a member of the Editorial Board of 6 international journals in the field of composite materials and structural integrity. Professor Soutis is a Chartered Engineer and Fellow of the Royal Aeronautical Society, The Institution of Mechanical Engineers and the Institute of Materials, Minerals & Mining. On 5 August 2014 was elected as a Fellow of the Royal Academy of Engineering. 'He is distinguished for his major contributions to the science and technology of the mechanics and mechanisms of failure of fibre-composite materials based upon polymeric matrices. His research is innovative and world-leading. The output from his research is being used extensively by major companies working with composite materials.' The Academy's Fellows represents the nation's best engineering researchers, innovators, entrepreneurs, business and industry leaders. Election to the Academy is by invitation only.