

# Kenneth Morgan

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## ***Current position***

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Professor and Head, Civil & Computational Engineering Centre

## ***Education***

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BSc 1<sup>st</sup> class honours in mathematics, University of Bristol, 1966  
PhD applied mathematics, University of Bristol, 1970  
DSc(Eng), University of Bristol, 1987

## ***Research interests***

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Computational fluid dynamics  
Computational electromagnetics  
High order methods for wave propagation

## ***Career***

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Scientific Officer, UKAEA, Aldermaston, 1969; Lecturer, Department of Mathematics, University of Exeter, 1972; Lecturer, Department of Civil Engineering, University of Wales Swansea, 1975; Professor, Department of Civil Engineering, University of Wales Swansea, 1988; Zaharoff Professor of Aviation, Department of Aeronautics, Imperial College, 1989; Professor, Department of Civil Engineering, University of Wales Swansea, 1991–2002; Head, Department of Civil Engineering, University of Wales, Swansea, 1991–1996; Dean of Engineering, University of Wales Swansea, 1997–2000; Professor, School of Engineering, University of Wales, Swansea, 2002;

Visiting Scientist, Aerothermal Loads Branch, NASA Langley Research Center, Virginia, 1993–95; Research Professor, University of Virginia, 1988–1992; Research Professor, Old Dominion University, Norfolk, Virginia, 1986–87; Visiting Research Scientist, Institute for Computer Applications in Science and Engineering (ICASE), NASA Langley Research Centre, Hampton, Virginia, 1985; Visiting Scientist, Aerothermal Loads Branch, NASA Langley Research Center, Hampton, Virginia, 1982–84; Visiting Scientist, Applied Mechanics Division, Joint Research Centre of the European Communities, Ispra, Italy, 1980–1981.

## ***Honors and awards***

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Fellow, Institution of Mathematics & Its Applications, 1978  
Chartered Mathematician  
NASA Special Achievement Award, 1989  
Fellow, Institution of Civil Engineers, 1993  
Chartered Engineer  
Fellow, Royal Academy of Engineering, 1997  
IACM Computational Mechanics Award, 1998  
Honorary Fellow, International Society for Computational Fluid Dynamics, 2003  
Fellow, IACM, 2004.

## ***Summary of journal publications***

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<b>Journal</b>	<b>Impact factor</b>	<b>Number of papers</b>
Computer Methods in Applied Mechanics and Engineering	1,252	17
International Journal for Numerical Methods in Engineering	1,691	18
International Journal for Numerical Methods in Fluids	0,544	18
Other indexed journals		52
Other papers in refereed journals		

### ***Selected publications (max. 5)***

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P. D. Ledger, K. Morgan and O. Hassan, Frequency and time domain electromagnetic scattering simulations employing higher order edge elements, *Computer Methods in Applied Mechanics and Engineering*, **194**, 105–125, 2005.

M. El hachemi, O. Hassan, K. Morgan, D. Rowse and N. P. Weatherill, A low-order unstructured mesh approach for computational electromagnetics in the time domain, *Philosophical Transactions of the Royal Society of London, Series A*, **362**, 445–469, 2004.

P. D. Ledger, J. Peraire, K. Morgan, O. Hassan and N. P. Weatherill, Parameterised electromagnetic scattering approximations for a range of incident wave angles, *Computer Methods in Applied Mechanics and Engineering*, **193**, 3587–3605, 2004.

K. A. Sørensen, O. Hassan, K. Morgan and N. P. Weatherill, A multigrid accelerated hybrid unstructured mesh method for 3D compressible turbulent flow, *Computational Mechanics*, **31**, 101–114, 2003.

M. Ainsworth, J. Coyle, P. D. Ledger and K. Morgan, Computation of Maxwell eigenvalues using higher order edge elements in three dimensions, *IEEE Transactions on Magnetics*, **39**, 2149–2153, 2003.

### ***Other relevant information***

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