

Prof. Javier Bonet

School of Engineering
University of Wales Swansea
Swansea SA2 8PP, UK

Phone: +44-1792 295689
Fax: +44-1792 295903
e-mail: j.bonet@swansea.ac.uk

Current position

Professor of Civil Engineering and Deputy Head of School

Education

Ingeniero de Caminos Canales y Puertos, UPC, Barcelona, 1996
PhD, University of Wales Swansea, 1989

Research interests

Particle based meshless methods
Computational solid mechanics
Fast dynamics
Finite element technology including error estimation and adaptivity

Career

Research Student, University of Wales Swansea, 1986-1988
Senior Research Assistant, University of Wales Swansea, 1989-1990
Temporary Lecturer, University of Wales Swansea, 1990-1990
Lecturer grade A, University of Wales Swansea, 1990-1992
Lecturer grade B, University of Wales Swansea, 1992 -1996
Senior Lecturer, University of Wales Swansea, 1996-1998
Reader, University of Wales Swansea, 1998-2000
Professor, University of Wales Swansea, from 2000
Head of Civil & Computational Engrg., University of Wales Swansea, 2002-2003
Deputy Head of School of Engineering, University of Wales Swansea, from 2003 -

Professional activities

Chairman UK Association of Computational Mechanics – 2002
Advisory Editor of Communications in Numerical Methods in Engineering
Member of the EPSRC Advisory College
Sub-dean of the Postgraduate Research Faculty of UWS
Editor of Bulletin of the International Association of Computational Mechanics, 1992-95

Refereed papers and chapters in books

3 books, 5 invited chapters in books, 47 Journal papers and 72 refereed conference papers, over 150 publications in total.

Summary of journal publications

Journal	Impact factor	Number of papers
International Journal Numerical Methods Engineering	1.7	10
Computer Methods in applied Mechanics & Engineering	1.3	13
Communications in Numerical Meth. Engr.	0.6	7
Other indexed journals		23
Other papers in refereed journals		4

Selected publications (max. 5)

J. Bonet & R.D. Wood, Nonlinear Continuum Mechanics for Finite Element Analysis, Cambridge University Press, 1997

Finite elements – A gentle introduction, Macmillan Press, 1996

J. BONET and J. PERAIRE, 'An alternating digital tree (ADT) algorithm for geometric searching and intersection problems', Int. J. Num. Meth. Eng. vol. 31, 1991.

J. BONET & S. KULASEGARAM, 'Correction and stabilisation of smooth particle hydrodynamics with application in metal forming' Int. J. Num. Meth. Engrg., 47, 2000, 1189-1214.

J. BONET & T.-S. L. LOK, 'Variational and momentum preservation aspects of smooth particle hydrodynamics formulations', Comp. Meth. Appl. Mech. Engrg., 180, 97-115, 1999.

Other relevant information

MSc/MRes Coordinator and Postgraduate Tutor at UWS from 1995 to 2000

3 Successful applications to the UK Engineering and Physical Science Research Council for funding for the MSc/MRes courses totalling over £1M.

Successful supervision of over 30 research students, including 13 PhD students.

Research funding over £3M in computational mechanics.

Over 20 invited and keynote lectures at international conferences