

SHORT CV of EUGENIO OÑATE



Date and place of birth: March 28th 1953, Valencia, Spain
Married. Three children.

ACADEMIC DEGREES

- 1975** Ingeniero de Caminos, Canales y Puertos (Civil Engineering), Universidad Politécnica de Valencia.
- 1976** Master in Science, University College of Swansea, United Kingdom.
- 1978** Doctor in Philosophy. University College of Swansea, United Kingdom.
- 1979** Doctor Ingeniero de Caminos, Canales y Puertos (Ph.D. in Civil Engineering)

ACADEMIC POSITIONS

- 1979** Associated Professor at Technical University of Catalonia (School of Civil Engineering).
- 1981** Full Profesor in Structural Mechanics, Universidad Politécnica de Catalunya (UPC).
- 1983 - 89** Director of Escuela Técnica Superior de Ingenieros de Caminos, Canales y Puertos (School of Civil Engineering), UPC
- 1992-95** Director of Department of Strength of Materials and Structural Analysis at UPC

SCIENTIFIC POSITIONS

- 1987** Executive-Vicepresident of International Center for Numerical Methods in Engineering (CIMNE)
- 1989 - 2004** President of Spanish Society for Numerical Methods in Engineering (SEMNI)
- 1992- 1995** President of Scientific Council of the Center for Supercomputing of Catalonia (CESCA)
- 1993- 1996** Vice-president of European Community on Computat. Methods in Applied Sciences (ECCOMAS)
- 1994 - 2004** General Secretary of International Association for Computational Mechanics (IACM)
- 2000 - 2004** President of European Community on Computational Methods in Applied Sciences(ECCOMAS)
- 2002 -2010** President of International Association for Computational Mechanics (IACM)
- 2004** Honorary President of the Spanish Society for Numerical Methods in Engineering (SEMNI)

MAIN TEACHING ACTIVITY AT SCHOOL OF CIVIL ENGG. ,TECHNICAL UNIV. OF CATALONIA (UPC)

- 1979 -** Advanced course on Structural Analysis
- 1980 -** Introduction to the Finite Element Method (Ph.D. Course)
- 1984-2008** Analysis of thermal problems (Ph. D. Course)
- 1985 -** Director of Master Course on Numerical Methods in Engineering
- 1979 -** Participant in over 350 short courses and seminars in different topics related to Computational Engineering

SUPERVISOR OF 46 Ph.D thesis and 95 M.Sc. thesis

MAIN RESEARCH TOPICS

Particle finite element method (PFEM) for fluid-structure interaction and multiphysics engineering problems. Finite element methods for particulate flows. Stabilized numerical methods based on the Finite Calculus (FIC) theory for problems in fluid and solid mechanics. Rotation-free plate and shell elements. Meshless techniques based on finite point methods. Finite element methods for analysis of composite structures. Numerical methods for analysis of inflatable structures. Finite element methods for hot metal forming and sheet stamping processes. Critical displacement method for structural stability analysis. Finite strip methods for prismatic plate and shell structures.

PUBLICATIONS

306 papers in JCR journals (***h-index: 37, 5213 citations. Source: ISI Web of Knowledge***)

4 books written

46 monographs with ISBN

Editor of 4 international journals

3 books translated into English

53 edited books

437 papers in congress proceedings

62 chapters in books with ISBN

230 publications in research centers

Editor of 3 book series

TOTAL: 1148 publications

MAIN JOURNALS WHERE HE HAS PUBLISHED

Int. Journal for Numerical Methods in Engineering (51 papers), Computer Methods in Applied Mechanics and Engineering (39 papers), Revista Internacional de Métodos Numéricos para Cálculo y Diseño en Ingeniería (26 papers), Computational Mechanics (25 papers), Engineering Computations (18 papers), Computers and Structures (14 papers), International Journal of Solids and Structures (8 papers), Communications in Numerical Methods in Engineering (6 papers), Journal of Materials Processing Technology (5 papers), Composite Structures (5 papers), International Journal of Numerical Methods for Heat and Fluid Flow (2 papers), International Journal of Engineering Fracture Mechanics (2 papers), International Journal of Forming Processes (2 papers), Nuclear Engineering and Design (1 paper), Rapid Prototyping Journal (1 paper), Computing Systems in Engineering (1 paper), Computing and Visualization in Science (1 paper), International Journal of Computational Fluid Dynamics (1 paper), Computational Materials Science (1 paper), Int. Journal of Mechanical Science (1 paper).

PRICES AND AWARDS

1990 Catalanian Medal for Research "Narcís Monturiol".

1995 Medal to Professional Merit of Spanish Institution of Civil Engineering.

1996 Eric Reissner Medal in Computational Mechanics.

1998 Fellow of the International Association for Computational Mechanics (IACM).

1998 Computational Mechanics Award of IACM.

1999 Accesit to the City of Barcelona Award in Technological Research.

1999 Narcis Monturiol Award from the Catalanian Government to the Scientific Merit of CIMNE.

2000 Award of Spanish Association for Fracture Mechanics.

2000 Argentinean Association for Computational Mechanics Award (AMCA).

2001 Medal of the School of Civil Engineering of Barcelona to Professional Achievements.

2002 City of Barcelona Award in Technological Research.

2002 Highly Commended Award for Outstanding Paper in Engng. Computations. Emerald Literati Club.

2004 University of Jyväskylä Medal (Finland).

2004 Duran i Farell Award for Innovative Research and Technology of the Univ. Politècnica de Catalunya (UPC).

2005 Honorary Member of Portuguese Assoc. for Theoretical, Applied and Computational Mechanics (APMTAC).

2007 Award from Spanish Association for Numerical Methods in Engng. (SEMNI).

2009 Grand Prize of the Japan Society for Computational Engineering and Science (JSCES).

2009 O.C. Zienkiewicz Medal of the Polish Association for Computational Mechanics (PACM).

2009 Ted Belytschko Applied Mechanics Award of ASME.

2009 Computational Mechanics Award of the Japan Society of Mechanical Engineering (JSME).

2009 Literati Award for Excellence to the best article published in Engineering Computations.

2010 Gauss-Newton Medal of the International Association for Computational Mechanics (IACM).

2010 Advanced Grant of the European Research Council of the European Community.

2013 Argentinian Award "Dr. Luis Federico Leloir" to the International Cooperation in Science, Technology and Innovation.

HONORARY DEGREES

1998 Fellow of the International Association for Computational Mechanics (IACM)

2000 Doctor Honoris Causa, University Ovidius, Constanza, Rumania.

2007 Honorary Fellow of University of Wales at Swansea (UK).

2012 Doctor Honoris Causa, INSA-Lyon, France.

2013 Doctor Honoris Causa, Universidad "Martha Abreu", Las Villas, Cuba.

ACADEMY MEMBERSHIP

1998 Member of the Royal Academy of Doctors. Barcelona.

2006 Foreign Member of the Accademia di Scienze e Lettere, Istituto Lombardo, Milan (Italy).

OTHER SCIENTIFIC AND PROFESSIONAL MERITS

- Member of the Editorial Board of 26 international journals.
- Organiser of 47 international conferences.
- Participant in over 500 research and development projects in cooperation with companies worldwide.
- Creation of 12 spin-off technology-based companies in Spain.