

Curriculum Vitae 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** Vicepresident of International Center for Numerical Methods in Engineering
- 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 ENGINEERING ,TECHNICAL UNIV. OF CATALONIA (UPC)

- 1979** - Advanced course on Structural Analysis
- 1980** - Introduction to the Finite Element Method (Ph.D. Course)
- 1984** - Analysis of thermal problems (Ph. D. Course)
- 1985** - Director of Master Course on Numerical Methods in Engineering
- 1979** - Participant in over 250 short courses and seminars in different topics related to Computational Engineering

SUPERVISOR OF 41 Ph.D thesis

MAIN RESEARCH TOPICS

Finite strip methods for prismatic plate and shell structures. Finite element methods for hot metal forming and sheet stamping processes. Rotation-free plate and shell elements. FEM analysis of composite structures using mixing theory. Critical displacement method for structural stability analysis. Meshless techniques based on finite point methods. Stabilized methods based on finite calculus theory for problems in fluid and solid mechanics. Particle finite element method (PFEM) for fluid-structure interaction and multiphysic engineering problems.

PUBLICATIONS

271 papers in international journals (*h-index: 33*)

4 books written

3 edited international journals

49 edited books

56 chapters in books with ISBN

Editor of 3 book series

36 monographs with ISBN

3 books translated into English

408 papers in congress proceedings

215 publications in research centers

TOTAL: 1045 publications

MAIN JOURNALS WHERE HE HAS PUBLISHED

Int. Journal for Numerical Methods in Engineering (43 papers), Computer Methods in Applied Mechanics and Engineering (35 papers), International Journal of Numerical Methods for Engineering Design and Analysis (in Spanish) (23 papers), Computers and Structures (14 papers), Engineering Computations (14 papers), Computational Mechanics (16 papers), International Journal of Solids and Structures (7 papers), Communications in Numerical Methods in Engineering (6 papers), Journal of Materials Processing Technology (5 papers), International Journal of Numerical Methods for Heat and Fluid Flow (2 papers), International Journal of Finite Elements in Analysis and Design (4 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), International Journal of Mechanical Science (1 paper), Computing Systems in Engineering (1 paper), Computing and Visualization in Science (1 paper), International Journal of Pipelines (1 paper), International Journal of Mechanical Science (1 paper), International Journal of Computational Fluid Dynamics (1 paper), Computational Materials 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 Accessit 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 Doctor Honoris Causa, University Ovidius, Constanza, Rumania

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

2003 Award for Excellence for Outstanding Paper in Engng. Computations. Emerald Literati Club

2004 University of Jyväskylä Medal (Finland)

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

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

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

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

2008 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

2012 Doctor Honoris Causa, INSA-Lyon, France

MEMBERSHIP TO ACADEMIES

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 25 international journals.
- Organiser of 29 international conferences since 1980.
- Participant in over 500 research and development projects in cooperation with companies worldwide
- Creation of 9 spin-off companies in Spain in the fields of computational and structural engineering.