

Javier Oliver

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Current position

Full professor of Continuum Mechanics and Structural Analysis, Universitat Politècnica de Catalunya (UPC)

Education

Civil Engineer, Escuela Técnica Superior de Ingenieros de Caminos, Canales y Puertos de Valencia (1976)
Ph. D. in Civil Engineering, Universitat Politècnica de Catalunya (1982)

Research Interests

Computational mechanics
Computational material failure
Numerical modeling of industrial forming processes

Career

(1989-present) Full professor of Continuum Mechanics and Structural Analysis, UPC.
(2000-2001) Visiting scholar. Civil, Architectural and Environmental Engineering Dept. University of Colorado at Boulder, Boulder, Co., (USA)
(1989) Visiting scholar. Mechanical Engineering Dept., University of Stanford, Stanford, Ca., (USA).
(1982-1989): Associate Professor, Universitat Politècnica de Catalunya.
(1979-1982): Assistant Professor, Universitat Politècnica de Catalunya,

Honors and awards

Fellow of the International Association of Computational Mechanics, (IACM), 2002
Director of the high-quality and stable research group on "Computational Mechanics", Generalitat de Catalunya, 1997-1999, 1999 – 2001 and 2002 – 2004.

Professional activities

Editorial boards

Revista Interacional de Metodos Numéricos en Ingeniería, Universitat Politècnica de Catalunya, 1985
(Associate Editor)
Archives of Computational Methods in Engineering, CIMNE, (1995)
International Journal for Numerical Methods in Engineering, John Wiley & Sons, 1998
Computers and Concrete, Techno Press, 2005

Community services

Member, Executive Board, Sociedad Española de Métodos Numéricos en Ingeniería (SEMNI), since 1997
Member, Advisory Council, Centro Internacional de Métodos Numéricos en Ingeniería (CIMNE) since 1998
Member, Executive Council, Centro Internacional de Métodos Numéricos en Ingeniería (CIMNE) (1995-1998)
Vicepresident, Sociedad Española de Métodos Numéricos en Ingeniería (SEMNI), since 2002

University services

Vice-dean. Escola Tècnica Superior d'Enginyers de Camins, Canals i Ports de Barcelona, (1994-1996)

Refereed papers and chapters in books

Oliver J., Oñate E. A finite element formulation for the geometrically non linear analysis of shells. *Finite Element Methods for Plate and Shell Structures*, Ed. Pineridge Press, ISBN 0-906674-49-26, pp.:83-101,1986

Oliver J., Oñate E. A total Lagrangian Finite Element Formulation for the Geometrically Non Linear Analysis of Shells. *Flexible Shells*, Ed. Springer-Verlag, ISBN 3-540-13526, pp.:241-256,1988

Oliver J., Oñate E. A finite element formulation for the geometrically non linear analysis of shells using a total Lagrangian approach. *Computational Methods for Non-Linear Problems*, Ed. Pineridge Press, ISBN 0-906674-52-2, pp.:29-55,1987

J. Oliver, M. Cervera, O. Manzoli.

On the Use of Strain-Softening Models for the Simulation of Strong Discontinuities in Solids. *Material Instabilities in Solids*, Ed. Wiley, pp.:107-124, 1998

Summary of journal publications

Journal	Impact factor	Number of papers
International Journal of Plasticity	2,768	1
International Journal for Numerical Methods in Engineering	1,691	9
International Journal of Solids and Structures	1,327	4
Engineering Fracture Mechanics	1,308	3
Computer Methods in Applied Mechanics and Engineering	1,252	2
Other indexed journals		13
Other papers in refereed journals		13

Selected publications (max. 5)

Oliver J. A consistent characteristic length for smeared cracking models, *Int. J. Num. Meth. Eng.*, (1989) (62 times cited)

Simo J, **Oliver J.**, Armero F. An analysis of strong discontinuities induced by strain-softening in rate-independent inelastic solids. *Computational Mechanics* (1993) (92 times cited)

Oliver J. Modelling strong discontinuities in solid mechanics via strain softening constitutive equations Part .1.Fundamentals ., *Int. J. Num. Meth. Eng.*, (1996) (54 times cited)

Oliver J. Modelling strong discontinuities in solid mechanics via strain softening constitutive equations Part .2.Numerical simulation ., *Int. J. Num. Meth. Eng.*, (1996) (32 times cited)

Oliver J, Cervera M, Manzoli O. Strong discontinuities and continuum plasticity models: the strong discontinuity approach . *International Journal Of Plasticity* 15 (3): 319-351 1999 (17 times cited)

Other relevant information

Workshop and Conference Committees

Scientific Committee

- 2nd, 3rd, 4th, 5th, 6th, 7th and 8th Int. Conf. on Computational Plasticity fundamentals and applications, 1989, 1991, 1995, 1997, 2000, 2003 and 2005
- 5th, 6th, 7th and 8th Int. Conf. on Computational Modeling of Concrete Structures, 1997, 2000, 2003 and 2006
- IV th and Vth World Congress on Computational Mechanics, 1998,2002
- IV ECCOMAS Conference on Numerical Methods in Engineering, 2004

Program Committee

- 2^{on}, 3rd, 4th, 5th and 6th Congreso de Métodos Numéricos en Ingeniería, 1993, 1996, 1999, 2002, 2004 and 2005
- II Congreso Internacional de Métodos Numéricos en Ingeniería, 2002 (Guanajuato, México)

Editorial Works

Steinmann P, Armero F, Willam K, **Oliver J**, Special Issue on "Computational failure Mechanics", *Computer Methods in Applied Mechanics and Engineering* (ISSN 0045-7825), Vol 193, Issues 30 – 32, 2004