

Michele Chiumenti

Department of Strength of Materials and Structural Analysis
in Engineering
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Current position

Professor of Continuum Mechanics and Structural Analysis, Universitat Politècnica de Catalunya
Research Staff, International Center for Numerical Methods in Engineering (CIMNE)

Education

Civil Engineering, Politecnico di Milano, Italy (1994)
Ph.D. Civil Engineering, Escola Tècnica Superior d'Enginyers de Camins, Canals i Ports de Barcelona,
Spain (1999)

Research Interests

Computational methods in applied sciences and engineering.
Finite elements methods in non-linear computational mechanics, coupled problems.
Numerical simulation of industrial metal-forming processes such as casting, sheet metal forming and forging.
Numerical simulation of food preservation processes.

Career

Research Staff, International Center for Numerical Methods in Engineering (CIMNE), since 1994.
Assistant Professor, Consorci Escola Industrial de Barcelona, since 1998.
Assistant Professor, Universitat Politècnica de Catalunya, (UPC), since 1999.
Professor, Universitat Politècnica de Catalunya, (UPC), since 2004.

Honors and awards

Professional activities

Member of the commission for the Civil Engineering program, since 2004.
President of the commission for the degree theses to get the Civil Engineering degree title.

Product Manager for the software VULCAN (numerical tool for the simulation of casting processes) in
consulting and marketing activities at Quantech-ATZ,

Summary of journal publications

Journal	Impact factor	Number of papers
International Journal of Plasticity	2,768	4
International Journal for Numerical Methods in Engineering	1,691	2
Numerical and Analytical Methods in Geomechanics	1,327	1
Computer Methods in Applied Mechanics and Engineering	1,252	5

Selected publications (max. 5)

M. Chiumenti, Q. Valverde, C. Agelet de Saracibar y M. Cervera, "A Stabilized Formulation for Incompressible Elasticity Using Linear Displacement and Pressure Interpolations". Computer Method in Applied Mech. and Eng., Vol. 191, pp. 5253-5264, 2002, (9 times cited).

C. Agelet de Saracibar. y M. Chiumenti, "On the Numerical Modeling of Frictional Wear Phenomena". Computer Methods in Applied Mech. and Eng., Vol. 177, pp. 401-426, 1999, (6 times cited).

M. Cervera, C. Agelet de Saracibar y M. Chiumenti, "Thermo-Mechanical Analysis of Industrial Solidification Processes". Int. Journal for Num. Methods in Engineering, Vol. 46, pp. 1575-1591, 1999, (3 times cited).

M. Chiumenti, Q. Valverde, C. Agelet de Saracibar y M. Cervera, "A Stabilized Formulation for Incompressible Plasticity Using Linear Triangles and Tetrahedra". International Journal of Plasticity, Vol. 20, pp. 1487-1504, 2004, (2 times cited).

M. Cervera, M. Chiumenti y C. Agelet de Saracibar, "Softening, Localization and Stabilization: Capture of Discontinuous Solution in J2 Plasticity". Numerical and Analytical Methods in Geomechanics, Vol. 28, pp. 373-393, 2004, (2 times cited).

Other relevant information
