## **Antonio Gens**

Department of Geotechnical Engineering and Geosciences Escola Tècnica Superior d'Enginyers de Camins, Canals i Ports de Barcelona (ETSECCPB) Universitat Politècnica de Catalunya (UPC) Jordi Girona, 1, Mòdul D2 - UPC – Campus Nord E-08034 Barcelona, Spain) Phone:+34 93 401 68 67 Fax: +34 93 401 72 51 e-mail: antonio.gens@upc.edu

## **Current position**

Full professor of Geotechnical Engineering, Universitat Politècnica de Catalunya

#### Education

Civil Engineering, Escuela Técnica Superior de Caminos, Canales y Puertos, Universidad Politécnica de Madrid (1972)

M.Sc. & D.I.C. in Soil Mechanics, Imperial College, University of London (1973)

Ph. D. in Soil Mechanics, Imperial College, University of London (1982)

### Research Interests

Numerical analysis of geotechnical problems

Behaviour of partially saturated soils.

Study of soil behaviour by laboratory testing

Field measurements and geotechnical backanalysis.

Constitutive modelling of soils

Radioactive waste disposal in deep geological formations

### Career

Civil Engineer, Rodio (1974-1976)

Research Student, Imperial College, London (1976-1978)

Research Assistant, Imperial College, London (1978-1982)

Associate Professor, Universitat Politècnica de Catalunya (1983-1988)

Full Professor, Universitat Politècnica de Catalunya (from 1988)

Head of Departament d'Enginyeria del Terreny, Universitat Politècnica de Catalunya (from 1999)

#### Honors and awards

Member of the Reial Acadèmia de Doctors, Spain (Royal Academy of Doctors)

Chandra Desai Medal, International Association for Computer Methods and Advances in Geomechanics, 2001.

8th Prague Lecturer, Czech and Slovak Committee for Soil Mechanics and Geotechnical Engineering, 2000. British Geotechnical Society Touring Lecturer, 1998.

José Torán Prize, Spanish Committee on Large Dams, 1995.

Telford Medal, Institution of Civil Engineers, UK, 1994.

NATO Fellowship for a stay at M.I.T. 1991.

### Professional activities

Editorial boards

Geotechnical Engineering (I.C.E., U.K.)

Geotechnical and Geological Engineering

Computers and Geotechnics

Revista Internacional de Métodos Numéricos en Ingeniería

Rivista Italiana di Geotecnica

Community services

Adviser to the Research Assessment Exercise 2001, UK Higher Education funding bodies.

Referee for grant applications to Australian Research Council

Referee for grant applications to Foundation for Research Development (FRD), South Africa.

Referee for Evaluation of Researchers. Fonds National de la Recherche Scientifique, Belgium.

Member of over 10 Committees and Boards of Directors.

Some selected recent jobs:

Construction of Line 9 of Barcelona Metro, from 2003.

Construction of Spanish Synchrotron, Geotechnical Consultant, from 2003.

Expansion of Barcelona airport, Geotechnical Consultant, from 1999.

# Summary of journal publications

Journal	Impact factor	Number of papers
Géotechnique	0.520	15
International Journal for Numerical and Analytical Methods in Geomechanics	0.594	9
Transport in Porous Media	0.848	3
Other indexed journals		17

# Selected publications (max. 5)

Alonso, E.E., Gens, A. and Josa, A., "A constitutive model for partially saturated soils" Géotechnique. 40: 405-430, 1990 (141 times cited)

Hight, D.W., Gens, A. and Symes, M.J. "The development of a new hollow cylinder apparatus for investigating the effect of principal stress rotation in soils". Géotechnique. 33:355-383, 1983 (37 times cited)

Gens, A. and Alonso, E.E, "A framework for the behaviour of unsaturated expansive soils" Canadian Geotechnical Journal. 29: 1013-1032, 1992 (32 times cited)

Gens, A., Guimaraes L. Do N., Garcia-Molina, A., Alonso, E.E., Factors controlling rock–clay buffer interaction in a radioactive waste repository. Engineering Geology, 64: 297-308, 2002 (1 cite)

Gallipoli, D., Gens, A., Sharma, R., Vaunat, J. "An elasto-plastic model for unsaturated soil incorporating the effects of suction and degree of saturation on mechanical behaviour". Géotechnique, 53, 123-135, 2003