

# **Curriculum Vitae**

**Jean Sulem**

Date of birth [REDACTED]

Nationality [REDACTED]

- Professor of Rock Mechanics at Ecole Nationale des Ponts et Chaussées
- Research Director at CERMES, Laboratoire Navier
- Head of the Geotechnical Group-CERMES, Laboratoire Navier
- Chairman of the French Society of Rock Mechanics

## **Professional address:**

Laboratoire Navier-CERMES, Ecole Nationale des Ponts et Chaussées  
6 et 8 avenue Blaise Pascal, Cité Descartes Champs-sur-Marne  
77455 Marne-La-Vallée Cedex 2

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## **Education:**

- 1994 : Habilitation à Diriger des Recherches (Université de Paris 7)
- 1983 : Doctorate degree at Ecole Nationale des Ponts et Chaussées
- 1981 : Engineering degree at Ecole Nationale des Ponts et Chaussées

## **Professional appointments:**

- Since 2010 : Head of the Geotechnical Group CERMES, Laboratoire Navier, Ecole de Ponts Paristech, CNRS, IFSTTAR
- Since 1998 : Research Director at Ecole Nationale des Ponts et Chaussées, France
- 1985-1998 : Research scientist at Ecole Nationale des Ponts et Chaussées

## **Teaching activities:**

- 1996-2005 : Rock Mechanics, Master Géomatériaux (Université de Marne la Vallée, ENPC, ENSMP)
- 2004-213 : Rock Mechanics and fractured, Master MSROE (ENPC, ECP, University Paris 6)
- 2007-2013 : Tunnels modelling, Master MSROE (ENPC, ECP, Paris 6)
- 2005-2010 : Experimental rock mechanics, Doctoral School UPE
- 2010 : ALERT Geomaterials Doctoral School ‘Mathematical modelling in Geomechanics’
- Since 2013 : Rock Mechanics and Underground Works, Master MSROE (ENPC, ECP, Paris 6)
- 2016 : ALERT Doctoral school ‘Modelling of instabilities and bifurcation and in Geomechanics’

## **Research activities**

### **Research fields**

- Rock mechanics (Experimental and constitutive modelling)
- Strain localisation and bifurcation phenomena in geomechanics
- Underground works
- Fault mechanics
- Thermo-hydro-mechanical couplings in geomaterials
- Petroleum Geomechanics

### **PhD Students**

Supervision of 24 PhD students

#### ***International committees***

- International Society of Rock Mechanics
- Chairman of the French Society of Rock Mechanics
- European Geophysical Union
- American Geophysical Union
- Core member of Technical Committee on large deformations, International Society of Soil Mechanics (2006-2010).
- Member of the Education Committee of International Society of Rock Mechanics

#### ***Publications***

**225 publications** (Web of Science H index : **20**) including 2 books (Vardoulakis, I. and Sulem, J., 1995, *Bifurcation Analysis in Geomechanics*, Blackie Academic (720 citations) and Professional, Hatzor Y., Sulem J., Vardoulakis I. 2009, *Meso-scale Shear Physics in Earthquake and Landslide Mechanics*, Taylor & Francis), 2 special issues of international scientific journals, **88 journal papers or book chapters**, 96 papers in proceedings of international conferences, 39 research reports.

#### ***Invited conferences***

86 invited conferences given since 1988 in Australia, Austria, Belgium, Canada, Cyprus, Czech Republic, France, Germany, Greece, Holland, Israel, Italy, Norway, Switzerland, United States, Venezuela

Several keynote lectures in major rock mechanics conferences (EUROCK 2010, Lausanne, Switzerland, ISRM congress 2015, Montreal, Canada)

10<sup>th</sup> ISRM online lecture (2015)

#### ***Member of advisory board of scientific journals***

- Acta Geotechnica
- International Journal of Geomechanics, ASCE
- Géotechnique (Panel member)
- Rock Mechanics & Rock Engineering (Associate editor)

#### ***Reviewing of scientific papers:***

Acta Geodynamica et Geomaterialia, Acta Geotechnica, Applied clay science, Canadian Geotechnical Journal, Computers and Geotechnics, European Journal of Civil and Environmental Engineering, Geology, Geophysical Research Letters, Géotechnique, International Journal of Geomechanics, International Journal of Numerical and Analytical Methods in Geomechanics, International Journal of Solids and Structures, International Journal of Rock Mechanics and Mining Sciences, Journal of Geophysical Research, Revue Française de Génie Civil, Revue Française de Géotechnique, Rock Mechanics and Rock Engineering, Tunnelling and Underground Space Technology.

#### ***Reviewing of scientific projects***

- European Science Foundation
- Ministero dell'Istruzione, dell'Università e della Ricerca, Italie
- Netherland Organisation for Scientific Research, Pays-Bas
- National Science Foundation, USA
- Swiss National Foundation, Switzerland
- Israel Science Foundation, Israel
- Universitas Foundation Fund, Cyprus
- Research Council of Norway, Norway
- Comité d'évaluation de l'AERES, France
- Haut Conseil de l'évaluation de la recherche et de l'enseignement supérieur, France
- Agence Nationale de la Recherche, France

### ***Research support***

Research contracts with Elf Aquitaine, TOTAL, European Union, Centre d'Etudes des Tunnels, Bureau de Recherches Géologiques et Minières, Agence Nationale pour la gestion des déchets radioactifs France, Nationale Genossenschaft für die Lagerung radioaktiver Abfälle Switzerland, Agence Nationale de la recherche France, EdF Energies Nouvelles, Tractebel Engineering, Curistec, SINTEF Petroleum Research Norway,...