

Materials & Structures, Software Development

Expertise Investigation of dense granular material behavior in solid-like and flowing regimes by means of laboratory experiments and distinct element modeling.

Education Ph.D. (Materials and Structures), 2006
Ecole Nationale des Ponts et Chaussées, Marne-la-Vallée, France.
DEA (Modeling and Simulation of Materials), 2002
M.Sc. (Material Sciences), 2001
Université de Marne-la-Vallée, France.

Professional Experience

2007 - Present *Itasca Consultants S.A. Ecully, France, Project Engineer*

2002 – 2006 *Ecole Nationale des Ponts et Chaussées, Laboratoire des Matériaux et Structures du Génie Civil/Centre d'Enseignement et de Recherche en Mécanique des Sols, Research Student*

Project Experience

Development activities associated with the **Particle Flow Code**.

University Activities: Investigation of the packing and mechanical properties of dense, anisotropic granular media. Numerical analysis (3D distinct element simulations) in conditions mimicking a well-defined experimental procedure; quantitative comparison between numerical data and laboratory results (agreements, limitations and perspectives).

Simulation of the quasi-static behavior of a two-dimensional, dense, isotropic, granular system submitted to biaxial compression. Micro-structural and parametric analysis.

Simulation of the behavior of a 2D ideal granular system (dry and cohesive) submitted to pure shear. Micro-structural and parametric analysis.