Bio

LINKS

• Personal research website: http://www.stanford.edu/~levonyan

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS
My current research project is a part of geomechanics project, focusing on the geomechanics in naturally fractured porous media. The idea here is to explore the effect of fracture deformation, caused by different processes, on fluid flow, i.e. permeability and porosity changes effects, and to develop stable algorithms for this process. As a starting point we restricted ourselves to a simple case of single-phase flow with linear elastic reservoir deformation and are trying to solve the fully-coupled problem to investigate influence of introducing fractures on deformations and consequently, on fluid flow.

LAB AFFILIATIONS

• Hamdi Tchelepi, SUPRI-B (9/1/2011)