Post-doctoral position in Geosciences(tectonics) at the University of Fribourg (Switzerland)

as part of the project entitled

"Stress in the Alpine foreland - a kinematic and mechanical approach (SALAMANDER)"

The Department of Geosciences of the University of Fribourg is seeking candidates for a post-doctoral position funded by the Swiss National Science Foundation.

<u>Summary of project</u>:

In the alpine foreland we have, unfortunately, little in situ information on the stress tensor and the frictional strength. We will use mechanical principles applied in the Limit Analysis approach to develop sequential and static models for a variety of given geometric scenarii and explore the mechanical parameter space, making it possible to populate the alpine foreland with mechanical parameters and modelled stress tensor values. This will, subsequently, allow us to test if and where the alpine foreland is in a state of critical stress and to make predictions on the distance to critical failure of discrete known fault structures. The present project will benefit from synergies with our ongoing project on Stress State, Fault Criticality and Fluids in the Alpine foreland.

Position : Post-doctoral researcher at Département de Géosciences, Université de Fribourg, Chemin du Musée 6, 1700 Fribourg, Switzerland

<u>Duration</u>: 18 months, starting as soon as possible. Possible extension of 6 months.

<u>Location</u>: Department of Geosciences, University of Fribourg, Switzerland, in collaboration with the University of Cergy-Pontoise, France (possibility extended exchange visits).

<u>Skills and knowledge desired</u>: structural geology, Jura fold-and-thrust belt geology, kinematic modelling, concepts of mechanics, scientific programming (basic), Linux environment, MOVE software.

Salary (gross): 85 kchf/year (of which some 19% are social security)

<u>Application</u> (until position filled) : send CV and letter to <u>Pr. Jon Mosar</u> or to <u>Pr. Bertrand Maillot</u>