

Preface

Researchers in geomechanics and geotechnical engineers are getting more and more involved into the prediction and assessment of natural hazards. Seismic risks, landslides and hydrological risks are becoming a major area of concern, not only from a scientific and technical viewpoint, but also in social and economic terms. It appears that there is an increasing need for knowledge and technology transfer from the mechanics of geomaterials to hazard prediction and assessment, and vice versa.

The Alert Board of Directors decided to devote one session of the 2002 Alert workshop to "Geomechanics for Natural Hazards". We were given the responsibility to take care of the scientific organisation of this session, and we tried to provide a forum for researchers in the European community to exchange ideas on how to cope with natural hazards using the most advanced, state-of-the-art methodology both in geomechanics and hazard prediction and assessment.

Topics discussed in the workshop included laboratory and in situ experiments, numerical modelling, field observations and measurements, hazards assessment and risk analysis, mapping techniques, hazard alert systems and countermeasures.

In view of this special issue of the *Rivista Italiana di Geotecnica*, with the approval of the Chief Editor of the journal, we asked a few authors to present with more detail their work, in order to have, as far as possible, a representative picture of the current research activities in the field of geomechanics for natural hazards. We sincerely thank the Editor in Chief of the journal, Roberto Nova, and all the authors for their contributions.

The Guest Editors
Cino Viggiani and Laurent Vulliet