Foreword

Landslides represent a relevant problem for most of the countries overlooking the Mediterranean. This trivial consideration should prompt researchers, professionals, and stakeholders in this region to form closer relationships and engage themselves in a continuous exchange of data and ideas to find common strategies of landslide risk mitigation.

A common problem concerns the stability of slopes in hard fissured soils, weak rocks and flysch deposits, which are widespread all over the region, posing major problems to the development of these areas. In the last decades, the geo-engineering community has occasionally focused on these complex materials. In 1977 the Italian Geotechnical Society held an International Conference on "The Geotechnics of Structurally Complex Formations" in Capri. Sixteen years later, the Hellenic Society of Soil Mechanics and Foundation Engineering and the French Committee for Soil Mechanics and Foundation Engineering jointly organized an international symposium in Athens on "The Geotechnical Engineering of Hard Soils and Soft Rocks" (1993). The Italian Geotechnical Society picked up on this initiative five years later, organizing the Second International Symposium on "The Geotechnics of Hard Soils and Soft Rocks" (Naples, 1998). Finally, in 2011, the Greek community organized the 15th European Conference of Soil Mechanics and Geotechnical Engineering in Athens, which was devoted to "The Geotechnics of Hard Soils and Weak Rocks".

It is evident that the behaviour of such a wide and complex class of materials, spreading across large areas in this corner of the world, cannot be interpreted simply through the basic laws of the Soil or Rock Mechanics. This is because they lay in a grey area between the two families of soils and rocks, showing distinct and special features, which are related to the origin of such materials and then to the geological processes which led to their deposition and evolution. On the other hand, it is just from all these complex settings that most of the problems arise, and it is to this that scholars and professionals should be devote their efforts.

With the goal in mind of urging the people living on the Mediterranean to join their efforts, we decided to organize a Mediterranean Symposium on Landslides (MSL) in Napoli in June, 2021, hoping that this initiative will be the first of a series of similar periodic events.

Giovanni Battista Crosta and Luciano Picarelli

Session I

GEOLOGICAL SETTING, TRIGGERS AND MECHANISMS

This session is aimed at describing preparatory, conditioning and triggering factors and events. The main topic of this session will be the typology of slope failure processes which take place in these geomaterials, focusing in particular on the role of the geological structure and settings, the hydrologic regime, the soil properties and the natural stress field. Wide room is also left to description of the impact of weather, including climate changes, and of seismic activity on landslide triggering.

Session II

INVESTIGATIONS,
MONITORING AND ANALYSIS

The scope of this session is to present data about the most relevant aspects of site and laboratory investigation, field monitoring and slope stability analysis from case studies of the Mediterranean region, accounting for thepeculiar material properties and features of the slope response to triggers. The performance of different monitoring and investigation techniques will be discussed.

Session III

REMEDIAL MEASURES,
LANDSLIDE-STRUCTURE/INFRASTRUCTURE INTERACTION

The scope of this session is to give room to some very important and often disregarded issues: i) the design, construction and performance of works aimed at slope stabilization or at mitigating the effects of slope movements; ii) the interaction between active landslides and man-made works, a typical problem in areas, occupied by unstable formations, where are located facilities and infrastructures. This should provide data and information useful to create a connection to risk and cost-benefit analysis, and to guide stakeholders in risk mitigation decisional processes.