

## **TECHNICAL CHARACTERIZATION OF FILL IN THE TOWN OF ROME(ITALY) BY THE APPLICATION OF IN SITU INVESTIGATIONS**

Napoleoni Q., Sappa G. Dept. of Hydraulic, Transportations and Roads - University La Sapienza

Rome has a long history, and from the ancient times until now many modifications have been made by human activities, which changed several times the original geomorphology of surface. As a matter of fact now it is more and more usual that when any kind of civil works has to be carried on, part of them involves significant strata of fill, most of which is made of typical geological roman soil, handled and, with the time, somehow compacted. For these reasons in the last years a map of the fill over the town of Rome was edited by the engineering geology staff of the university La Sapienza, and it has become more and more important to give a technical characterization to some of the most spread fill in this territory. This paper presents the results of many in situ investigation campaigns carried on in this area in the aim to give a good technical characterization to the fill. These in situ investigations are SPT, DCPT, and Menard pressure tests, which have been correlated to stratigraphic reports of drillings of the same place, in the aim to associate the results of the in situ investigation with the stratigraphy. The analysis and the discussion of the results of these correlations, and a statistical analysis of data we have, are presented in this paper, with, moreover, some considerations on the necessity of setting up particular relationships depending on the area where the fill outcrops, the history it has had and, obviously, the material it is made of.