

Gruppo Nazionale di Ingegneria Geotecnica

VII Convegno Nazionale
dei Ricercatori di Ingegneria Geotecnica

*La Ricerca Geotecnica per
la protezione e lo sviluppo
del Territorio*



Politecnico di Milano
Polo Territoriale di Lecco
Aula magna - edificio 10 piano terra

3-5 luglio 2019

Con il Patrocinio di



Comune di Lecco



Provincia di Lecco

Mercoledì 3 luglio

- 12:30-13:45 registrazione partecipanti
13:45-14:15 Introduzione, saluti e inizio lavori

Sessione 1 – Protezione del Territorio

14:15-15:00 Keynote Lecture

Contaminated marine sites: geotechnical issues bridging the gap between characterization and remediation strategies (Claudia Vitone, Politecnico di Bari)

15:00-16:00 presentazione memorie

Long-term monitoring of landslide displacements and damage at Latronico, Italian Apennines (C. Di Maio, G. Fornaro, D. Gioia, D. Reale, M. Schiattarella, R. Vassallo)

Monitoring of rain-induced landslides for the territory protection: the AD-VITAM project (R. Bovolenta, R. Passalacqua, B. Federici, D. Sguerso)

The contribution of spaceborne SAR data in linear infrastructures monitoring activities (D. Infante, D. Di Martire, A. Scotto Di Santolo, D. Calcaterra, M. Ramondini)

Back-analysis of the post-failure stage of a landslide using the material point method (A. Troncone, E. Conte, L. Pugliese)

16:00-16:30 coffee break

16:30-17:30 presentazione memorie

A method to evaluate debris flow triggering and propagation by numerical analyses (M. Ciurleo, M.C. Mandaglio, N. Moraci, A. Pitasi)

Application of a statistical approach for the assessment of design block in rockfall: a case study in Sesia Valley (Northern Italy) (M. Barbero, M. Castelli, V. De Biagi, C. Scavia, G. Vallero)

Mechanised tunnel excavation through an instrumented site in Rome: class A predictions and monitoring data (N. Losacco, Giulia M.B. Viggiani)

Multi-parameter vulnerability analysis of settlement-affected masonry buildings with shallow/piled foundations: case studies in The Netherlands (G. Nicodemo, D. Peduto, M. Korff, S. Ferlisi)

17:30-18:15 Keynote Lecture

“Soil liquefaction: from mechanisms to effects on built environment” (Stefania Lirer, Università degli Studi Guglielmo Marconi)

Giovedì 4 luglio

Sessione 1 – Protezione del Territorio (continua)

9:00-9:45 Keynote Lecture

“Multiphase soil mechanics for landscape protection: from testing to modelling” (Francesca Casini, Università degli Studi di Roma “Tor Vergata”)

9:45-10:45 presentazione memorie

Evaluation of site amplification for the seismic protection of a strategic district in Naples (J.M. Barbagelata, G.A. Alleanza, A. Chiaradonna, A. d’Onofrio, F. Silvestri)

Liquefaction hazard evaluation for a 3rd level microzonation study in a high seismicity area of Central Italy (J. Facciorusso, C. Madiai, G. Vannucchi, E. Gargini, M. Baglione)

A simplified methodology for the assessment of the seismic risk associated with small earth dams (R.M. Cosentini, F. Passeri, S. Foti)

Ground Response Analyses for a Zoned Earth Dam Site in Southern Italy (G. Regina, R. Cairo, P. Zimmaro)

10:45-11:15 coffee break

11:15-12:15 presentazione memorie

Geotechnical aspects in the assessment of stability conditions of the Volumni Hypogea in Perugia (M. Cecconi, A. Vecchietti, V. Pane, G. Russo, C. Cencetti)

On the reactivation of sand boils near the Po River major embankments (M.F. García Martínez, G. Gottardi, M. Marchi, L. Tonni)

Analysis of the effects of seasonal pore pressure variations on the slope stability through advanced numerical modelling (G. Elia, G. Falcone, F. Cotecchia, M. Rouainia)

Optimization of the geometry of monitoring devices for contaminant detection in cement-bentonite cutoff walls (G. Scelsi, G. Della Vecchia, C. di Prisco, G. Musso, G. Sanetti)

12:15-13:00 Keynote Lecture

“Advances in soil reinforcement with geosynthetics: from laboratory tests to design practice” (Giuseppe Cardile, Università degli Studi di Reggio Calabria “Mediterranea”)

13:00-14:00 lunch

Sessione 2 – Sviluppo del Territorio

14:00-14:45 Keynote Lecture

“Macroelement approaches in Geotechnical problems: a promising design framework?” (Andrea Galli, Politecnico di Milano)

14:45-16:00 presentazione memorie

Performance of a deep excavation for the new Line C of Rome underground (L. Masini, S. Rampello, E. Romani)

A coupled study of soil-abutment-superstructure interaction (D.N. Gorini, L. Callisto)

Geogrids as a remedial measure for seismic-liquefaction induced uplift of onshore buried gas pipelines (M. Castiglia, F. Santucci de Magistris, S. Morgante, J. Koseki)

Insights into the behaviour of energy piles under different head constraints and thermal loads (D. Sterpi)

Geotechnical Hazards Caused By Freezing-Thawing Processes Induced By Borehole Heat Exchangers (S. Cola, G. Dalla Santa, A. Galgaro)

16:00-16:30 coffee break

16:30-17:30 presentazione memorie

DEM simulation of frozen granular soils with high ice content (G. Wang, F. Calvetti)

Use of alkali-activated fly ashes for soil treatment (E. Vitale, G. Russo, D. Deneele)

Lightweight cemented soils: mix design, production and control (D. De Sarno, E. Vitale, M.V. Nicotera, R. Papa, G. Russo, G. Urciuoli)

The effects of structure on the one dimensional compression behaviour of a porous calcarenite (M. Zimbardo, A. Nocilla A, M.R. Coop, L. Ercoli, B. Megna, M.C. Mistretta)

17:30-18:30 Assemblea GNIG

Venerdì 5 luglio

Sessione 2 – Sviluppo del Territorio (continua)

9:00-9:45 Keynote Lecture

“The contribution of constitutive modelling to sustainable geotechnical engineering: examples and open issues” (Angelo Amorosi, Università degli Studi di Roma “la Sapienza”)

9:45-10:45 presentazione memorie

Influence of soil heterogeneity on the selection of input motion for 1D seismic response analysis (F. Genovese, D. Aliberti, G. Biondi, E. Cascone)

Numerical study of laterally loaded pile in unsaturated soils (L.M. Lalicata, G. M. Rotisciani, A. Desideri, F. Casini, L. Thorel)

A new methodology for the rock-burst assessment during tunnel construction (A. Voza, L. Valguarnera, S. Fuoco, G. Ascari, D. Boldini, D. Buttafoco)

Experimental study on a three-dimensional passive earth pressure coefficient in cohesionless soil (P. Capilleri, E. Motta, M. Todaro, G. Biondi)

10:45-11:15 coffee break

11:15-13:00 Tavola Rotonda

La Geotecnica e l’Agenda 20-30 dell’ONU per lo sviluppo sostenibile (coord. F. Cotecchia e C. Jommi)

13:00-13:15 Chiusura lavori