International Symposium on Design and Practice of Geosynthetic-Reinforced Soil Structures (and Joint Sessions with 26th Italian National Conference on Geosynthetics) Bologna, Italy, 14-16 October 2013

The symposium was held in Bologna, Italy, to honor the research achievements of Prof. Dov Leshchinsky of the University of Delaware. Dr. Leshchinsky is a world-renowned geotechnical researcher and educator in the design and practice of geosynthetic-reinforced soil structures.

The event took place for three days (14-16 October, 2013) with the first two days held at the School of Engineering and Architecture, Bologna University. The third day of symposium included joint sessions with the 26th Italian National Conference on Geosynthetics at Sala Topazio, close to SAIE Building Innovation Exhibition Center.

A total of 71 papers were selected for oral presentation. These papers have been reviewed and published in a hardcopy (751 pages, by DEStech Publications, Inc.) as well as digital version of proceedings. Limited number of copies are available (contact Hoe Ling about the cost).

Over 110 participants from more than 34 countries have participated in the symposium. The symposium consisted of several main technical sessions, as follows:

- Laboratory Testing and Physical Modeling
- Wall/Slope Design and Construction
- Pavement and Footing
- Bridge and Vertically Loaded Structure
- Embankment, Soft Ground and Geosynthetic Tube
- Application of Numerical Methods
- Case Studies of Wall/Slope and Embankment
- Case Studies of Off-shore, Road and Railway Construction



Dov Leshchinsky delivering the special lecture



Conference Proceedings

The following seven keynote lectures were delivered by the international experts:

- Leshchinsky, D. (USA): Framework for limit state design of geosynthetic-reinforced walls and slopes
- Cazzuffi, D. (Italy): Geosynthetics engineering and vegetation growth in soil reinforcement applications
- Collin, J.G. (USA): Shored MSE walls research to practice
- Koseki, J. (Japan) and Shibuya, S. (Japan): Mitigation of disasters by earthquakes, tsunamis and rains by means of geosynthetic-reinforced soil retaining walls

- Tatsuoka, F. (Japan): The importance of good compaction of the backfill and the compaction control based on the dry density and the degree of saturation
- DiMaggio, J.D. (USA): Geosynthetic-reinforced soil walls and slopes: Best practices in design and construction and reality: Why they differ
- Moraci, N. (Italy): Soil-geosynthetic interaction: Design parameters from experimental and theoretical analysis

Several of the keynote papers will appear in early 2014 in a forthcoming issue of the journal *Transportation Infrastructure Geotechnology* (published by Springer) http://www.springer.com/engineering/civil+engineering/journal/40515

In addition to the technical presentations, several social events were organized. A welcome reception was offered in the first evening inclusive of a music concert featuring operatic excerpts by well-known 19th-century Italian composers. A banquet was organized in the second evening at Palazzo Isolani, which is one of the most beautiful and important historical buildings in Bologna. During the third day, participants were offered an opportunity to visit the SAIE Building Innovation Exhibition located near the conference venue.



Group photo taken at the School of Engineering and Architecture, Bologna University (Photo Credit: Ben Leshchinsky)



Organizing committee and Italian committee members during the closing ceremony at Sala Topazio



Dov and Ora Leshchinsky with Delaware Senator Harris McDowell III at the SAIE Building Innovation Exhibition Center

The symposium was held under the auspices of the International Geosynthetics Society, the Italian Geotechnical Association, the Italian Chapter of IGS, the International Society of Soil Mechanics and Geotechnical Engineering (TC 101 & TC 305), the American Society of Civil Engineers Geo-Institute, Department of Civil, Chemical, Environmental and Materials Engineering of the University of Bologna, University of Delaware, and several Japanese research institutes (Public Works Research Institute, Railway Technical Research Institute and National Institute for Rural Engineering).

A total of fourteen leading firms participated as industrial sponsors (in alphabetical order): ACE Geosynthetics, ADAMA Engineering, Allan Block, Callide Technologies, Inc, Huesker Synthetic GmbH, Intergeo Services, Micheletto Pavimentazioni, Officine Maccaferri S.p.A, NAUE GmbH & Co. KG, Risi Stone Systems, TeMa Technologies and Materials srl, TENAX, TenCate Geosynthetics Asia Sdn Bhd, Tensar International Corporation. The industrial supports helped to reduce significantly the registration fee while upholding the highest quality of the symposium.

Conference website http://www.columbia.edu/cu/civileng/bologna2013/

Reported by Hoe I. Ling, Guido Gottardi, Daniele Cazzuffi, Jie Han, and Fumio Tatsuoka.

October 22, 2013