

**EVALUATION OF RELATIVE DENSITY  
AND ITS ROLL IN GEOTECHNICAL PROJECTS  
INVOLVING COHESIONLESS SOILS**

**STP 523**

***Selig/Ladd***



**AMERICAN SOCIETY FOR TESTING AND MATERIALS**

# EVALUATION OF RELATIVE DENSITY AND ITS ROLE IN GEOTECHNICAL PROJECTS INVOLVING COHESIONLESS SOILS

A symposium  
presented at the  
Seventy-fifth Annual Meeting  
AMERICAN SOCIETY FOR  
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## Foreword

A two-session symposium on evaluation of relative density and its role in geotechnical projects involving cohesionless soils was held 25–30 June 1972 at the Seventy-fifth Annual Meeting of the American Society for Testing and Materials in Los Angeles, Calif. The sponsor of the symposium was Committee D-18 on Soil and Rock for Engineering Purposes under the chairmanship of E. B. Hall. The format for each session consisted of a keynote address, followed by presentation of selected papers and then a panel discussion on the session topic. Session I concerned the factors affecting relative density including the measurement of maximum, minimum, and *in situ* density. Session II concerned the correlation between relative density and properties or performance of soils and gives examples of the use of relative density.

The keynote address for the first session was given by W. G. Holtz, Consulting Civil Engineer, Wheat Ridge, Colorado; while for the second session, Yves Lacroix, Director, Woodward-Clyde Consultants, New York, N. Y., presented the keynote address. The symposium chairman and also moderator of Session I was E. T. Selig, Department of Civil Engineering, State University of New York at Buffalo; R. S. Ladd Woodward-Moorhouse & Associates, Inc., Clifton, New Jersey, served as cochairman and moderator of Session II.

These published proceedings contain all of the accepted papers dealing with the symposium topic, most of which were not presented orally, and the two keynote addresses. A concluding paper summarizes the program discussion and provides recommendations.

The chairman and co-chairman would like to express their appreciation to the staff members of ASTM who assisted in the presentation of this symposium and Special Technical Publication, and especially to Miss Jane Wheeler.

## **Related ASTM Publications**

**Underwater Soil Sampling, Testing, and Construction  
Control, STP 501 (1972), \$15.50**

**Special Procedures for Testing Soil and Rock for En-  
gineering Purposes, STP 479 (1970), \$15.75**

**Laboratory Shear Testing of Soils, STP 361, (1965),  
\$24.50**

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