

# CONTENTS

<b>Dynamic Properties of Frozen Silt Under Cyclic Loading</b> <i>by Ronald L. Czajkowski and Ted S. Vinson</i> . . . . .	963
<b>Pore-Pressure Dissipation During Offshore Cyclic Loading</b> <i>by Geoffrey R. Martin, Ignatius Lam, and Chan-Feng Tsai</i> . . . . .	981
<b>Seismic Response of Cohesive Marine Soils</b> <i>by Chan-Feng Tsai, Ignatius Lam, and Geoffrey R. Martin</i> . . . . .	997
<b>Empirical Strength Criterion for Rock Masses</b> <i>by Evert Hoek and Edwin T. Brown</i> . . . . .	1013
<b>Ground Control for Shallow Tunnels by Soil Grouting</b> <i>by David Y. Tan and G. Wayne Clough</i> . . . . .	1037

---

## DISCUSSION

Proc. Paper 15662

---

<b>Cross-Hole and Down-Hole <math>V_p</math> by Mechanical Impulse</b> , by Bruce Auld (Dec., 1977. Prior Discussions: Jan., Oct., 1979, May, 1980). <i>closure</i> . . . . .	1061
---	------

→

---

This Journal is published monthly by the American Society of Civil Engineers. Publications office is at 345 East 47th Street, New York, N.Y. 10017. Address all ASCE correspondence to the Editorial and General Offices at 345 East 47th Street, New York, N.Y. 10017. Allow six weeks for change of address to become effective. Subscription price to members is \$15.00. Nonmember subscriptions available; prices obtainable on request. Second-class postage paid at New York, N.Y. and at additional mailing offices. GT, HY.

The Society is not responsible for any statement made or opinion expressed in its publications.

<b>Retaining Wall Performance during Backfilling,<sup>a</sup></b> by Terry S. Ingold (May, 1979).	
<i>by R. T. Murray</i> . . . . .	1062
<i>closure</i> . . . . .	1066
<b>Stress Path Method: Second Edition,<sup>a</sup></b> by T. William Lambe and W. Allen Marr (June, 1979).	
<i>by Michael J. Pender</i> . . . . .	1068
<i>by G. Gudehus</i> . . . . .	1071
<i>closure</i> . . . . .	1074
<b>Uncertainty Analysis of Relative Density,<sup>a</sup></b> by Achintya Haldar and Wilson H. Tang (July, 1979).	
<i>by Eli Zolkov</i> . . . . .	1078
<i>closure</i> . . . . .	1080

**INFORMATION RETRIEVAL**

The key words, abstract, and reference "cards" for each article in this Journal represent part of the ASCE participation in the EJC information retrieval plan. The retrieval data are placed herein so that each can be cut out, placed on a 3 × 5 card and given an accession number for the user's file. The accession number is then entered on key word cards so that the user can subsequently match key words to choose the articles he wishes. Details of this program were given in an August, 1962 article in CIVIL ENGINEERING, reprints of which are available on request to ASCE headquarters.

---

<sup>a</sup>Discussion period closed for this paper. Any other discussion received during this discussion period will be published in subsequent Journals.