VOL. 113 NO. 5. MAY 1987

ISSN 0733-9410 CODEN: JGENDZ

## Journal of Geotechnical Engineering

AMERICAN SOCIETY OF CIVIL ENGINEERS

GEOTECHNICAL ENGINEERING DIVISION

## General Information

Journal of Geotechnical Engineering covers the field of soil mechanics and foundations, with special emphasis on the relationship between the geologic environment and man-made works. Computer applications are also examined. Topics include dynamic response of foundations, earth-retaining structures, earth-supported structures, and dam construction and slope stability, as well as soil failures and their solutions.

Journal of Geotechnical Engineering (ISSN 0733-9410) is published monthly by the American Society of Civil Engineers. Publications office is at 345 East 47th Street, New York, NY 10017-2398. All editorial correspondence should be directed to the Journals Department. Second-class postage is paid at New York, NY, and at additional mailing offices.

Postmaster: Send address changes to Journal of Geotechnical Engineering, ASCE, 345 East 47th Street, New York, NY 10017-2398.

Submission of papers: Submit four copies of papers, notes, and discussions to the Journals Department. Maximum length for papers is 10,000 words; for notes, 2,500 words; for discussions, 1,250 words. Multiple submissions are not accepted for review. Indicate division and, if applicable, committee to which material is being submitted. The use of SI units is preferred; if other units are used, SI equivalents must also be given. Write or phone Journals Department for ASCE Authors' Guide to Journals, Books, and Reference Publications for complete instructions for manuscript preparation.

Reprints for authors are ordered prior to publication; others may order them by using the coupon published in ASCE News and ASCE Publications Information or contacting the Reprint Department, ASCE.

Photocopies. Permission to photocopy for personal or internal reference beyond the limits in Sections 107 and 108 of the U.S. Copyright Law is granted by the American Society of Civil Engineers for libraries and other users registered with the Copyright Clearance Center, 21 Congress Street, Salem, MA 01970, provided the appropriate fee is paid to the CCC for all articles bearing the CCC code. Requests for special permission or bulk copying should be addressed to the Journals Reprint Department, ASCE.

Subscriptions. 1987 rates are \$25.00 for members and \$100.00 for non-members. Postage outside the U.S.A. is \$8.50 additional. Single copies are \$10.00. Address all *member* subscription inquiries and correspondence to Member Records, ASCE. Address all *nonmember* inquiries and correspondence to Publications Publiment Department, ASCE. Subscriptions are filled for the calendar year and must be prepaid. Notify the appropriate ASCE department of address changes as soon as possible; allow six weeks for it to become effective.

This publication is abstracted in ASCE Publications Information (bimonthly), Transactions of the ASCE (annually), and Civil Engineering Database (online), and indexed in ASCE Annual Combined Index. Address inquiries to Information Products, ASCE.

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

Copyright ©1987 by American Society of Civil Engineers.

## Journal of

## **Geotechnical Engineering**

Volume 113 Number 5 May 1987

TECHNICAL PAPERS  Constitutive Model for Rocks. Chandrakant S. Desai and Mohammad R. Salami	124 140 158 176
Technical Notes  Collapse Load of Strip Footing above Circular Void. M.  C. Wang and C. W. Hsieh  Dilatometer Testing in Highly Overconsolidated Soils.  Alireza Boghral  Lateral Stiffness of Contact Pile Foundations. Michael  O'Rourke and Mushtaq A. Nasim  Inclination Factors for Strip Footings. V. V. R. N. Sastry  and G. G. Meyerhof  Uncertainty in Dynamic Anisotropic Strength of Sand.  Achintya Haldar and Shuh-Gi Chern	516 520 524
Discussions Interface Model for Dynamic Soil-Structure Interaction. Md. Musharraf-uz Zaman, Chandrakant S. Desai, and Eric C. Drumm. By T. J. Pilecki. Closure by authors Bearing Capacity of Reinforced Sand Subgrades. Richard J. Fragaszy and Evert Lawton. By Vito A. Guido. Closure by authors  Evaluating Stability of Open Shafts in Soft Clay. Ulrich	
W. Stoll. By Osamu Kusakabe and Arul M. Britto. Closure by author	544
vy	-

Sheetpile Interlock Tension in Cellular Cofferdams. Mark
P. Rossow. By W. L. Schroeder. Closure by author547
Risk Analysis for Seismic Design of Tailings Dams. Ste-
ven G. Vick, Gail M. Atkinson, and Charles I. Wilmot.
By Phillip O. Gregory and Edward C. Tse. Closure by au-
thors