

# CONTENTS

<b>Penetration of Projectile into Terrestrial Target</b> <i>by Ching H. Yew and Pete P. Stirbis</i> . . . . .	273
<b>Analysis of Orthotropic Cylindrical Cantilever Shells</b> <i>by Medhat M. Ghobrial and George Abdel-Sayed</i> . . . . .	287
<b>Isotropic Cylindrical Shells under Line Load</b> <i>by Helmut F. Microys and Joseph Schwaighofer</i> . . . . .	301
<b>Linear and Nonlinear Wave Action Estimates</b> <i>by Robert T. Hudspeth and Larry S. Slotta</i> . . . . .	319
<b>Active Control of Building Structures</b> <i>by Smanchai Sae-Ung and James T. P. Yao</i> . . . . .	335
<b>Large Deflection of Tapered Annular Plates by Dynamic Relaxation</b> <i>by Geoffrey John Turvey</i> . . . . .	351
<b>Lateral Buckling of Intersecting Connected Beams</b> <i>by Shitalkumar P. Morchi and Edward G. Lovell</i> . . . . .	367
<b>Stochastic Analysis of Yielding System</b> <i>by Narayana R. Iyengar and Janardhan K. Iyengar</i> . . . . .	383
<b>Model Tests for Plastic Response of Lined Tunnels</b> <i>by Timothy C. Kennedy and Herbert E. Lindberg</i> . . . . .	399
<b>Stochastic Analysis of Wind-Loaded Structures</b> <i>by Y. K. Lin and Phillip J. Holmes</i> . . . . .	421

→

---

This Journal is published bimonthly 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 \$10.00. Nonmember subscriptions available; prices obtainable on request. Second-class postage paid at New York, N.Y. and at additional mailing offices. EE, EM, TE.

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

**Seismic Assessment of High-Rise Buildings**  
*by Ping-chun Wang, Rudolf F. Drenick, and Warren Y. L. Wang . . . .* .441

**Vibration of Towers Due to Galloping of Iced Cables**  
*by Milos Novak, Alan G. Davenport, and Hiroshi Tanaka . . . . .* .457

---

TECHNICAL NOTES

Proc. Paper 13649

---

**Free Fall of Large Pipes**  
*by James F. Costello and Alan E. Stephenson . . . . .* .477

**Finite Strip Analysis of Quadrilateral Plates in Bending**  
*by Thomas G. Brown and Amin Ghali . . . . .* .480

**Effect of Initial Base Motion on Response Spectra**  
*by David A. Pecknold and Rafael Riddell . . . . .* .485

**Effect of Tension Changes on Cable Truss Stability**  
*by H. Max Irvine . . . . .* .491

---

DISCUSSION

Proc. Paper 13644

---

**Instability, Ductility, and Size Effect in Strain-Softening Concrete,**  
by Zdeněk P. Bazant (Apr., 1976. Prior Errata: Feb., 1977. Prior  
Discussions: Apr., Aug., 1977).  
*closure . . . . .* .501

**Cone Penetration of Granular and Cohesive Soils,** by Raymond N.  
Yong and Choong-Kong Chen (Apr., 1976. Prior Discussions: Apr.,  
1977).  
*closure . . . . .* .502

**Elastic-Plastic Torsion of Nonhomogeneous Bars,** by Carl T. Herako-  
vich and Rafik Y. Itani (Oct., 1976. Prior Discussions: Oct., 1977).  
*closure . . . . .* .503

**Elastic Versus Plastic Optimal Strength Design,** by George I. N.  
Rozvany (Feb., 1977).  
*errata . . . . .* .503

**Inelastic Finite Element Analysis Using Tresca Yield Condition,**<sup>a</sup> by Subhash C. Anand and Frank E. Weisgerber (Feb., 1977).  
*by Robert M. Haythornthwaite* . . . . .504

**Formulation of Probabilistic Design,**<sup>a</sup> by Niels C. Lind (Apr., 1977).  
*by Petru Petrina* . . . . .505

**Bond Failure and Inelastic Response of Concrete,**<sup>a</sup> by Rene B. Testa and Norris Stubbs (Apr., 1977).  
*by David Darwin* . . . . .507

**Experimental Evaluation of Lateral Buckling Loads,**<sup>a</sup> by Harold R. Meck (Apr., 1977. Prior Discussions: Dec., 1977).  
*by Herbert H. Spencer* . . . . .509

**Progressive Failure in a Model Heterogeneous Medium,**<sup>a</sup> by Nicholas J. Burt and John W. Dougill (June, 1977).  
*by Spyros Cavounidis and Elias Sotiropoulos* . . . . .511

**Coefficients of Deformation of an Anisotropic Body,**<sup>a</sup> by Frans Van Cauwelaert (Oct., 1977).  
*by Paul Seide* . . . . .513

**Hydrodynamic Pressure in Semicylindrical Reservoir,**<sup>a</sup> by Francisco J. Sánchez-Sesma and Emilio Rosenblueth (Oct., 1977).  
*errata* . . . . .514

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.