

## PERMISSION TO PHOTOCOPY JOURNAL PAPERS

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, Mass. 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 Manager of Technical and Professional Publications, American Society of Civil Engineers.

## CONTENTS

<b>Cyclic Bending of Plates under Transverse Loading</b> <i>by Yuhshi Fukumoto and Haruyuki Kusama</i> .....	477
<b>Progressive Collapse of Rigid-Plastic Circular Foundations</b> <i>by George Gazetas</i> .....	493
<b>Crack Growth in Fiber-Reinforced Materials</b> <i>by James A. Mandel and Steven C. Pack</i> .....	509
<b>Random Shrinkage Stresses in Aging Viscoelastic Vessel</b> <i>by Tatsuya Tsubaki and Zdeněk P. Bažant</i> .....	527
<b>Body Wave Excitation of Embedded Hemisphere</b> <i>by Vincent W. Lee and Mihailo D. Trifunac</i> .....	546

---

The Journal of the Engineering Mechanics Division (ISSN 0044-7951) 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 \$17.50. Nonmember subscriptions available; prices obtainable on request. Second-class postage paid at New York, N.Y. and at additional mailing offices. EM.

POSTMASTER: Send address changes to American Society of Civil Engineers, 345 East 47th Street, New York, NY 10017.

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

---

DISCUSSION  
Proc. Paper 17112

---

<b>Eigenvalues for <math>\Delta\phi + \lambda\phi = 0</math> in Regular Polygons</b> , by Peter Bettess (Dec., 1980. Prior Discussion: Oct., 1981). <i>closure</i> .....	567
<b>Flow around Fixed Circular Cylinders: Fluctuating Loads,<sup>a</sup></b> by Cesar Farell (June, 1981). <i>by M. M. Zdravkovich</i> .....	567
<b>Wind Tunnel Design for Physical Modeling of Atmospheric Bound- ary Layers,<sup>a</sup></b> by Jack E. Cermak (June, 1981). <i>by John D. Holmes</i> .....	569
<b>Wagner Hypothesis in Beam and Column Theory,<sup>a</sup></b> by Morris Ojalvo (Aug., 1981). <i>by Sritawat Kitipornchai and Peter F. Dux</i> .....	570
<i>by Toma Leko</i> .....	572
<i>by Jiří Studnička and Vladimír Křístek</i> .....	573
<i>by Nicholas S. Trahair</i> .....	575
<b>Numerical Solution of Singular Integral Equations: Applications</b> , by Pericles S. Theocaris (Oct., 1981). <i>errata</i> .....	579
<b>Principle of Normal Tail Approximation</b> , by Ove Ditlevsen (Dec., 1981). <i>errata</i> .....	579

---

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