

## Contents of Volume 46 (2003)

### *Vol. 46 No. 1 May 2003*

S.J. Chapman and J.R. King: The selection of Saffman-Taylor fingers by kinetic undercooling	1–32
B. Türetken, A. Büyükaksoy and A. Demir: Radiation of sound waves from a rigid stepped cylindrical waveguide	33–54
G. Madhumita and V.D. Sharma: Propagation of strong converging shock waves in a gas of variable density	55–68
L. della Croce, P. Venini and R. Nascimbene: Numerical simulation of an elastoplastic plate via mixed finite elements	69–86
J. Fish and W. Chen: RVE-based multilevel method for periodic heterogeneous media with strong scale mixing	87–106
Errata	107–109

### *Vol. 46 No. 2 June 2003*

T.G. Myers: Unsteady laminar flow over a rough surface	111–126
G. Colicchio and M. Landrini: On the use of boundary-integral equation methods for unsteady free-surface flows	127–146
M.S. Howe: Influence of train Mach number on the compression wave generated in a tunnel-entrance hood	147–163
S.D. Furta: Linear vibrations of a rotating elastic beam with an attached point mass	165–188

### *Vol. 46 Nos. 3–4 August 2003*

L. N. G. Filon and Biharmonic Problems in Mechanics  
*Guest edited by: V. V. Meleshko, A. P. S. Selvadurai and V. T. Grinchenko*

Preface	189
V. V. Meleshko and A. P. S. Selvadurai: Contributions to the theory of elasticity by Louis Napoleon George Filon as viewed in the light of subsequent developments in biharmonic problems in applied mechanics and engineering mathematics	191–212
E. I. Beshpalova and A. B. Kitaygorodskii: Advanced Kantorovich method for biharmonic problems	213–226

A. M. J. Davis: Rotational effects in Stokes flow; pressure-driven extrusion through an annular hole or concentric holes in parallel walls	227–240
J. N. Flavin: Spatial-decay estimates for a generalized biharmonic equation in inhomogeneous elasticity	241–252
A. M. Gomitko: A Dirichlet problem for the biharmonic equation in a semi-infinite strip	253–268
YA. M. Grigorenko and L. S. Rozhok: Discrete Fourier-series method in problems of bending of variable-thickness rectangular plates	269–280
V. T. Grinchenko: The biharmonic problem and progress in the development of analytical methods for the solution of boundary-value problems	281–297
V. G. Karnaukhov and I. K. Senchenkov: Thermomechanical behavior of a viscoelastic finite circular cylinder under harmonic deformations	299–312
J. T. Katsikadelis and A. J. Yiotis: The BEM for plates of variable thickness on nonlinear biparametric elastic foundation. An analog equation solution	313–330
R. J. Knops: Filon's construct for dislocations and related topics	331–354
V. V. Meleshko: Equilibrium of an elastic finite cylinder: Filon's problem revisited	355–376
A. P. S. Selvadurai: On the axisymmetric loading of an annular crack by a disk inclusion	377–393
A. F. Ulitko and V. V. Lyakh: Torsional load transfer from a rigid shaft to an elastic plane with a slit	395–408
P. Villaggio: Brittle detachment of a stiffener bonded to an elastic plate	409–416
Author index	417
Contents of Volume 46	419–420