

Contents of Volume 43 (2002)

Vol. 43 No. 1 May 2002

G.A. Pavliotis and M.H. Holmes: A perturbation-based numerical method for solving a three-dimensional axisymmetric indentation problem	1–17
W. Freeden, V. Michel and H. Nutz: Satellite-to-satellite tracking and satellite gravity gradiometry (Advanced techniques for high-resolution geopotential field determination)	19–56
T. Miloh, P.A. Tyvand and G. Zilman: Green functions for initial free-surface flows due to 3D impulsive bottom deflections	57–74
R. Chapko: On the numerical solution of the Dirichlet initial-boundary-value problem for the heat equation in the case of a torus	75–87
S. Tooley and J.-M. Vanden-Broeck: Waves and singularities in nonlinear capillary free-surface flows	89–99

Vol. 43 Nos. 2–4 August 2002

Introduction	101–103
<i>Papers from industry</i>	
L. Borucki: Mathematical modeling of polish-rate decay in chemical-mechanical polishing	105–114
S. M. P. Smolders and H. P. Urbach: On the determination of dopant-concentration profiles by grazing emission X-ray fluorescence spectroscopy using the maximum-entropy method	115–134
T. C. Poling and A. Zatezalo: Interferometric GPS ambiguity resolution	135–151
G. S. Strumolo: VAWT: The virtual aerodynamic/aeroacoustic wind tunnel	173–187
<i>Industry/university collaborations</i>	
S. Rudnaya, D. Misemer and F. Santosa: Rational design of a diffractive homogenizer for a laser beam	189–199
L. W. Schwartz and R.R. Eley: Flow of architectural coatings on complex surfaces: theory and experiment	153–171
A. D. Fitt, K. Furusawa, T. M. Monro, C. P. Please and D. J. Richardson: The mathematical modelling of capillary drawing for holey fibre manufacture	201–227

S. H. Bittleston, J. Ferguson and I. A. Frigaard: Mud removal and cement placement during primary cementing of an oil well	229–253
S. Rudnaya, F. Santosa, A. Chiareli and D. Misemer: Asymptotic analysis and design of diffractive optical elements	255–279
<i>Papers resulting from university consulting in industry</i>	
R. J. Braun, S. A. Snow and S. Naire: Models for gravitationally-driven free-film drainage	281–314
F. T. Smith and L. Li: Swirl-flow effects in a duct bending through a substantial angle	315–346
W. R. Smith and H. J. J. Gramberg: Mathematical modelling of moisture-induced panel deformation	347–366
X. Wen, D. B. Ingham and B. Fletcher: The numerical modelling of a two-dimensional local exhaust system associated with an inclined jet flow	367–384
J. H. M. Ten Thije Boonkkamp and J. K. M. Jansen: An analytical solution for mechanical etching of glass by powder blasting	385–399