

MATHEMATICAL AND COMPUTER MODELLING

(Formerly Mathematical Modelling)

Affiliated with the International Association for Mathematical and Computer Modelling

EDITORS-IN-CHIEF

Ervin Y. Rodin

Xavier J.R. Avula

Editorial Board

- Rutherford Aris
H.T. Banks
Martin Braun
Roger W. Brockett
Colin W. Clark
G.B. Dantzig
John U. Farley
H. von Gierke
R. Glowinski
H.S. Green
Frank Harary
J.N.R. Jeffers
Rudolf E. Kalman
Herbert Keller
Murray S. Klamkin
M.D. Kruskal
H. K. Kuiken
Roger E. Levien
Simon A. Levin
William F. Lucas
N. Metropolis
William F. Miller
D.N.P. Murthy
J.C.J. Nihoul
James J. O'Brien
Hans Oestreicher
Edward C. Posner
Ilya Prigogine
C.R. Rao
Fred S. Roberts
Robert Rosen
Gian-Carlo Rota
Thomas L. Saaty
Jerome Spanier
Lynn Arthur Steen
T.J. Tarn
Samuel C.C. Ting
Lotfi Zadeh
O.C. Zienkiewicz
H.-J. Zimmerman

NOW ACCEPTING
TEX MANUSCRIPTS
(see end of issue
for details)



PERGAMON PRESS

Oxford • New York • Beijing • Frankfurt • São Paulo

Sydney • Tokyo • Toronto

MATHEMATICAL AND COMPUTER MODELLING

Affiliated with the International Association for Mathematical and Computer Modelling

VOLUME 12, NUMBER 6

1989

CONTENTS

- A. H. M. Terpstra** 601 Determination of kinetic parameters of the cholestryl esters and proteins of plasma lipoproteins
- J. C. Misra, G. C. Bera
and S. Samanta** 611 Influence of non-isotropy of osseous tissues and cross-sectional non-uniformity of a long bone on the internal remodelling dynamics of osseous tissues
- V. G. Panchang and
D. A. Kopriva** 625 Solution of two-dimensional water-wave propagation problems by Chebyshev collocation
- G. D. Tsiotras and H. Badr** 641 Modeling the blocking phenomenon of service facilities
- K. A. Masavetas** 651 The mere concept of an ideal gas
- E. C. Martínez** 659 Hidden time-scales in nonlinear systems
- H. Gzyl and R. Jimenez** 667 The physicist's approach to the travelling salesman problem
- M. S. Klamkin** 671 An anomalous heat conduction problem
- T. Trifet and H. S. Green** 673 Unit circuit neural networks of the cortex
- X G. R. Chapman and
L. E. Knop** 695 Monitoring workplace safety: nonlinear optimization in a statistical model
- L. M. Schroeder, J. M. Wolff
and S. Fleeter** 707 Locally analytical prediction of the viscous aerodynamics of an oscillating flat plate airfoil
- M. Muraskin** 721 Alternative approach to no integrability field theory
- T. Elfving** 729 An algorithm for maximum entropy image reconstruction from noisy data
- 747 Mathematical and Computer Modelling Reports
- Educational Mathematical and
Computer Modules*
- E. Y. Rodin** 755 Assessment of the quantal hypothesis of synaptic physiology

Indexed in: Curr. Cont., ASCA, Cam. Sci. Abstr., Curr. Cont., CompuMath, CABS, Math. Cit. Ind., Math. R., Oper. Res. Manage. Sci., Curr. Cont., SCISEARCH Data, Zent. Math.



PERGAMON PRESS

Oxford • New York • Beijing • Frankfurt • São Paulo • Sydney • Tokyo • Toronto