

ISSN 0020-7462

INTERNATIONAL JOURNAL OF

**NON-LINEAR
MECHANICS**

1989

VOLUME 24

NUMBER 4



Editor-in-Chief: **WILLIAM A. NASH**



Pergamon Press

**OXFORD · NEW YORK · BEIJING · FRANKFURT
SÃO PAULO · SYDNEY · TOKYO · TORONTO**

INTERNATIONAL JOURNAL OF NON-LINEAR MECHANICS

Editor-in-Chief

WILLIAM A. NASH

College of Engineering, University of Massachusetts
Amherst, MA 01002, U.S.A.

VOLUME 24, No. 4

1989

CONTENTS

- M. V. Gandhi and M. Usman 251 On the non-homogeneous finite swelling of a non-linearly elastic cylinder with a rigid core
- C. G. A. van der Beek 263 Normal forms and periodic solutions in the theory of non-linear oscillations. Existence and asymptotic theory
- J. Shaw, S. W. Shaw and A. G. Haddow 281 On the response of the non-linear vibration absorber
- D. E. Panayotounakos 295 Non-linear and buckling analysis of bars lying on an elastic foundation
- A. K. Dacko and P. G. Glockner 309 Behaviour of spherical pneumatics subjected to axisymmetric ring loads
- H. Flashner and R. S. Guttalu 327 Analysis of non-linear non-autonomous systems by truncated point mappings
- J. Irons and W. Kennedy 345 Non-linear vibration of centrally clamped thin discs

I Software Survey Section

Indexed/abstracted in: *Appl. Mech. Rev.*, *Curr. Cont. ASCA*, *Cam. Sci. Abstr.*,
Curr. Cont./Eng. Tech. & Applied Sci., *Eng. Ind.*, *Math. R.*,
Mechanics, *Curr. Cont. SCISEARCH Data*, *SSSA/CISA/ECA/ISMEC*.



ISSN 0020-7462
IJNMAG 24(4) 251-352 (1989)

PERGAMON PRESS

Headington Hill Hall, Oxford OX3 0BW, U.K.

Maxwell House, Fairview Park, Elmsford, NY 10523, U.S.A.