

APPLIED MATHEMATICS AND MECHANICS

The *Journal of Applied Mathematics and Mechanics* is translated cover to cover (Russian original copyright: Nauka, 90 Profsoyuznaya ul., Moscow 117864) and has been published by Pergamon since 1958.

Translation Editors:

Professor G. HERRMANN, Stanford University, CA, U.S.A.
R. C. GLASS, City University, London, U.K.

Panel of Translators

R. C. GLASS, D. LOUVISH, E. L. SHORT,
T. J. ZASTAWNIAK

PRIKLADNAYA MATEMATIKA I MEKHANIKA

Russian Academy of Sciences

Editorial Board

V. V. RUMYANTSEV (Editor-in-Chief)
Yu. P. GUPALO (Deputy Editor)

F. L. CHERNOUS'KO
G. G. CHERNYI
K. V. FROLOV
S. S. GRIGORYAN
A. A. IL'YUSHIN
A. Yu. ISHLINSKII
P. Ya. KOCHINA

N. N. KRASOVSKII
I. F. OBRAZTSOV
Yu. S. OSIPOV
L. V. OVSYANNIKOV
L. I. SEDOV
V. V. STRUMINSKII
G. A. TIRSKII

Editorial Advisory Board

V. M. ALEKSANDROV
S. A. AMBARTSUMYAN
I. I. BLEKHMAN
V. V. BOLOTIN
A. L. GOLD'DENVEIZER
D. D. IVLEV
A. V. KARAPETYAN
S. A. KHRISTIANOVICH
V. B. KOLMANOVSKII
V. V. KOZLOV
A. N. KRAIKO
A. G. KULIKOVSKII
V. B. LIDSKII
G. A. LYUBIMOV
V. M. MATROSOV

N. N. MOISEYEV
V. I. MOSSAKOVSKII
D. E. OKHOTSIMSKII
V. Z. PARTON
G. I. PETRASHEN'
B. E. POBEDRYA
G. Ya. POPOV
V. L. RVACHEV
V. N. RUBANOVSKII
O. S. RYZHOV
Yu. S. RYAZANTSEV
G. Yu. STEPANOV
A. I. SUBBOTIN
V. V. SYCHEV
I. I. VOROVICH

Publishing and Advertising Offices:

Elsevier Science Ltd, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, U.K.

Tel. (01865) 843000. Fax. (01865) 843010.

Elsevier Science Inc., 660 White Plains Road, Tarrytown, NY 10591-5153, U.S.A.

© 1997 Elsevier Science Ltd. All rights reserved.

Periodicals postage paid at Rahway, NJ, and additional entry points. The *Journal of Applied Mathematics and Mechanics* (ISSN 0021-8928) is published 6 issues per annum in January, March, May, July, September and November by Elsevier Science Ltd, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, U.K. The annual subscription in the U.S.A. is \$2030. The *Journal of Applied Mathematics and Mechanics* is distributed by Mercury Airfreight International Ltd, 2323 Randolph Avenue, Avenel, NJ 07001-2413. POSTMASTER: please send address corrections to: *Journal of Applied Mathematics and Mechanics*, c/o Elsevier Science Inc., Customer Support Department, 655 Avenue of the Americas, New York, NY 10010, U.S.A. [Tel: (+1) 212-633-3730/1 888 4ES-INFO. Fax: (+1) 212-633-3680. E-mail: usinfo-f@elsevier.com].

The Item-Fee Code for this publication: 0021-8928/97 \$24.00 + 0.00.