Issued with the consent of the Rector

Editor in Chief Publishing House of Rzeszow University of Technology Leonard ZIEMIAŃSKI

Journal of Mathematics and Applications (JMA) will publish carefully selected original research papers in any area of pure mathematics and its applications. Occasionally, the very authoritative expository survey articles of exceptional value can be published.

Manuscript, written in English and prepared using LaTex, may be submitted in duplicate to the Editorial Office or one of the Editors or members of the Editorial Board. Electronic submission (of pdf or dvi file) is strongly preferred. Detailed information for authors is given on the inside back cover.

Editor in Chief Journal of Mathematics and Applications Jan STANKIEWICZ (Poland)

Editorial Committee (Thematic editors) Józef BANAŚ (Poland), Janusz SOKÓŁ (Poland) Bronisław Dov WAJNRYB (Poland), Iwona WŁOCH (Poland)

Statistical editor Mariusz STARTEK (Poland)

Editorial assistant Katarzyna WILCZEK (Poland)

Members

Antoni PARDAŁA (Poland), Krzysztof PIEJKO (Poland) Beata RZEPKA (Poland)

Language editors

Richard Fournier (Canada)

Text prepared to print in LATEX by K. Wilczek

The printed version of JMA is an original version.

p-ISSN 1733-6775 e-ISSN 2300-9926

Publisher: Publishing House of Rzeszow University of Technology, 12 Powstanców Warszawy Ave., 35-959 Rzeszow (e-mail: oficyna1@prz.edu.pl) http://oficyna.portal.prz.edu.pl/en/ Editorial Office: Rzeszow University of Technology, Department of Mathematics, P.O. BOX 85 8 Powstańców Warszawy Ave., 35-959 Rzeszów (e-mail: jma@prz.edu.pl) http://jma.prz.edu.pl Additional information and an imprint - p. 133