

## CONTENTS

<b>J. Janecki:</b> 25 Years Experience with Programs Supporting Medical Research and Diagnostics with Multidimensional Statistical Methods	7
<b>W. Jędruch, J. Waniewski:</b> Molecular Modelling of a Predator-Prey System	13
<b>R. Kalicka:</b> Optimal Input Design. Optimality and Applicability	19
<b>I. Kopocińska, B. Kopociński, A. Okulewicz:</b> Mixed Negative Binomial Distributions in Analysis of the Number of Parasitic Nematodes in Blackbird ( <i>Turdus merula</i> L.)	25
<b>T. Lipniacki:</b> Non-Linear Model of DNA Dynamics	33
<b>W. Marczewski, P. Kręzałek:</b> Modelling of Human Motion Using <i>ADAMS<sup>TM</sup></i> System	39
<b>A. Molińska, D. Kayzer, K. Moliński:</b> Evaporation from the Surface of Cultivated Fields	45
<b>I. R. Moraczewski, W. Borkowski:</b> Analyzing Leaf Shapes with the Use of Fractal Measures and a Shape Feature Description Language	50
<b>A. Nowakowski:</b> The Proof that a Control with One Switch is Optimal in a Simple Control Problem Arising in Chemotherapy	56
<b>W. Pasewicz:</b> On the Estimators of the Discriminant Function in Case Symmetric Normal Distribution	62
<b>J. Piętka:</b> Mathematical Model of Plant Growth	68
<b>S. Smolik:</b> Statistical Description of Some Factors in Ecology	74
<b>H. Stanuch, Z. Szybiński:</b> The Analysis of Biological Time Series	79
<b>J. Suliński:</b> The Amount of Biomass as a Function of the Height and Density of a Tree Stand	85
<b>J. Suliński, P. Sypka:</b> Assumptions for Interpretation of Measurements of Energy Radiation within Tree Stands	91
<b>W. Szeliwicki:</b> Hydrodynamically Affected Euphotic Zone Structure	97
<b>J. Waniewski, O. Heimbürger, A. Weryński, B. Lindholm:</b> Modeling of Peritoneal Transport	103
<b>T. Wyszomirski:</b> Quantifying Treatment Effect with Randomization-Elimination Model	109
<b>M. Ziółko, J. Grabska-Chrząstowska, J. Pietrzyk, M. Komorowska:</b> Cellular Clearance in Hemodialyzed Patients	115
<b>H. Zorski:</b> Influence of Temperature on Dynamics of a Continuous Peptide Chain	121