

CONTENTS

<i>Mikuláš Hajduk</i> METHODOLOGICAL FRAMEWORK OF THE DESIGN OF MULTIROBOTIC CELLS	7
<i>Vladimír Baláž</i> PRINCIPLES OF PROGRAMMING MULTIROBOTIC SYSTEMS MOTOMAN	11
<i>Rudolf Jánoš</i> METHODOLOGY OF TECHNICAL SCENARIO FOR MULTIROBOTIC CELL	16
<i>Frantisek Durovsky</i> DEVELOPMENT OF LADDER CLIMBING ROBOT	20
<i>Marek Sukop, Michal Špak , Mikuláš Hajduk</i> PROPOSAL OF FLYING ROBOT CONTROL FOR MULTI ROBOTIC SYSTEM (QUADROPTER)	28
<i>Ján Semjon, Vladimír Baláž , Marek Vagaš</i> PROJECT MULTIROBOTIC SYSTEMS WITH KUKA ROBOTS IN COOPERATION WITH VW SLOVAKIA	33
<i>Marek Vagas</i> VARIANTS FOR THE SOLUTION OF MULTI ROBOTIC SYSTEMS	39
<i>Juraj Beniak, Peter Križan, Miloš Matúš</i> LAYERING PRECISION FOR SMALL FUSED DEPOSITION MODELING DEVICES	47
<i>Lucia Koukolová</i> RESEARCH ISSUES IN THE AREA OF MULTI ROBOTIC SYSTEMS	51
<i>Arkadiusz Gola, Łukasz Sobaszek, Antoni Świć</i> SELECTED PROBLEMS OF MODERN MANUFACTURING SYSTEMS DESIGN AND OPERATION	56
<i>Juraj Kováč</i> DESIGNING OF PRODUCTION SYSTEMS IN VIRTUAL ENVIRONMENT USING MULTI-TOUCH TABLE	69
<i>Edward Kozłowski</i> OPTIMAL STOPPING OF CONTROLLED LINEAR SYSTEM WITH QUADRATIC CRITERION	73
<i>Viera Kyseľová</i> INNOVATIVE INDUSTRIAL POLICY IN EUROPEAN UNION AND ROBOTICS	85
<i>Jozef Varga</i> MOBILE APPLICATION FOR CONTROLLING SOCCER ROBOTS	90

<i>Jozef Varga, Ján Semjon</i> SECOND VERSION OF MECHANISM FOR SOLVING RUBIK'S CUBE	97
<i>Rudolf Jánoš , Lucia Koukolová</i> METHODOLOGY OF PRELIMINARY CALCULATIONS OF ROBOTS WITH PARALLEL STRUCTURE.....	104
<i>Jarosław Zubrzycki , Antoni Świć</i> AUTOMATION OF SHAFTS MACHINING	109
<i>Lucia Koukolová , Rudolf Jánoš</i> ROBOTIC REHABILITATION – THE THERAPY USING ROBOTIC SYSTEMS	126
<i>Zbigniew Nawrat</i> ROBIN HEART SURGICAL ROBOT	131
<i>Jozef Varga</i> THE PROPOSAL OF WALKING PHASES FOR TWO-LEG ROBOT	142
<i>Jarosław Zubrzycki, Katarzyna Piotrowska</i> RESEARCHES OVER THE DURABILITY ENLARGEMENT OF SWORD-BLADE SAW APPLIED TO THE CUT OF CONVEYOR BELT THROUGH PLATTING LAYERS FROM TITANIUM NITRIDE (TiN)	148
<i>Peter Tuleja</i> ECOLOGICAL ASPECTS OF THE COMPRESSED AIR ENERGY SAVING	155
<i>Jan Semjon</i> SERVICE METHODOLOGY FOR THE DESIGN OF MULTIROBOTICS ASSEMBLY SYSTEMS	162
<i>Antoni Świć, Arkadiusz Gola, Victor Taranenko</i> DYNAMIC SYSTEM MODELING OF SHAFT MACHINING PROCESS IN ELASTIC DEFORMABLE CONDITION	170
<i>Peter Tuleja</i> TECHNICAL RESOURCES FOR ENERGY SAVING OF COMPRESSED AIR IN AUTOMATED OPERATION.....	184
<i>Marian Marek Janczarek</i> HEAT AND MASS TRANSFER PROCESSES IN THERMAL TREATMENT CHAMBERS FOR FRUIT	191
<i>Mieczysław Dziubiński, Mieczysław Plich, Ewa Siemionek</i> INVESTIGATIONS OF ALTERNATORS, STARTERS AND IGNITION SYSTEMS RELIABILITY	202
<i>Marek Błaszczak</i> THE INFLUENCE OF SYNERGISM IN THE MODELING OF PHASE TRANSITION PLOT ALGORITHMS FOR ALLOYS.....	216