

CONTENTS

CONTENTS	5
PREFACE	7
KEY NOTES	11
CLASSIFICATION AND SYSTEMATIC TYPES OF TRAFFIC ACCIDENTS	
MODIFICATION OF SHEEP WOOL BY ELECTRON BEAM	13
SMART CITIES, TRANSPORT AND ROAD SAFETY	
POSSIBILITIES OF A QUANTITATIVE MODELING OF FAULT TREE CONDITIONS	21
DETERIORATION	27
DEVELOPMENT OF THE PLANETARY GEARBOX SPECIAL MOBILE TECHNICS	29
TRENDS IN THE DEVELOPMENT OF PISTON COMBUSTION ENGINES	35
A TOOL FOR SOLUTION OF TURBOCHARGER ROTORDYNAMICS BASED NOISE	47
MODELLING OF HIGH TEMPERATURE DEFORMATION USING 3D DISCRETE DISLOCATION DYNAMICS	55
SYSTEMS OF ACTIVE PROTECTION OF COMBAT VEHICLES	61
DEPENDABILITY	73
DESIGN OF DYNAMIC MODEL WITH ABSOLUTELY DETERMINED STOCK MOVEMENT FOR THE ARMY OF THE CZECH REPUBLIC	75
ADHESION CONDITIONS SIMULATION OF AN EXPERIMENTAL VEHICLE	89
DEPENDABILITY OF THE SECURITY CHECKPOINT	97
MODELLING OF ENGINE OIL FLOW PROPERTIES	105
LOGISTIC CRYISIS MANAGEMENT	115
LIFETIME PREDICTION FOR MACHINE COMPONENTS	123
PROTECTION FEATURES OF MODERN COMBAT VEHICLES	133
ENCHANCING OF LOGISTICS SUPPORT BY USE OF THE UNMANNED VEHICLES	143
MODEL OF FLOODED AREA	151
ANALYSES OF ACCELERATED TEST METHODS OF ELECTRONIC COMPONENTS IN COMBAT VEHICLES	159
COST EFFECTIVENESS ANALYSIS OF THE LITHIUM-ION BATTERIES APPLICATION IN A FORKLIFTS	175

DETERIORATION DEPENDABILITY DIAGNOSTICS 2017

DIAGNOSTICS	183
TESTING DEVICE FOR MECHANICAL SEALING OF CENTRIFUGAL PUMPS	185
ERRORS OF CONTACT THERMAL MEASUREMENT	193
THEORETIC BASES FOR AIRCRAFT GAS TURBINE ENGINE VIBRATION EVALUATION	199
MOTOR OIL TESTING ON BUSES WITH EMISSION STANDARD EURO VI WITH HI-ESCR TECHNOLOGY	205
RESEARCH OF MICROCLIMATE IN BUSES	213
MONITORING OF MOTOR OILS DEGRADATION BY THE OPERATION OF THE VEHICLES 155 MM SHKH ZUZANA TYPE 2000	221
DIAGNOSTICS OF TANKERS AND OIL BARGES HULL THICKNESS ON DUNABE	229
EVALUATION OF FUEL BORNE CATALYST	237
CONTRIBUTION TO USING LABVIEW PROGRAM IN EXPERIMENTAL PRACTICE	245
CORPORATE PRESENTATION	253
POSSIBILITIES OF CHEMICAL ANALYSIS OF ELEMENTS IN TRIBOTECHNICAL APPLICATIONS	255
LIST OF AUTHORS	267