

CONTENTS

ANDRZEJ ADAMKIEWICZ, JANUSZ FYDRYCH OPERATIONAL VERIFICATION OF A SHIP MAIN POWER SYSTEM ELEMENT CHOICE – CASE STUDY	7
WITOLD BĄK, GRZEGORZ WOJNAR ANALYSIS OF POSSIBILITY LIMITING THE TIME OF TEST INJECTOR IN DIESEL ENGINE USING FACTORY TEST BENCH PRODUCERS OF THESE ELEMENTS	15
ANDRZEJ BIENIEK, JAROSŁAW MAMALA, KRZYSZTOF PRAŻNOWSKI, MARIUSZ GRABA SLIP AT VEHICLE TRANSMISSION SYSTEM WITH HYDROKINETIC CONVERTER IN THE URBAN TEST CYCLE	21
ADAM CZABAN, ANDRZEJ MISZCZAK SIMULATIONS OF THE INFLUENCE OF THE HEAT FLUX AT THE SHAFT SURFACE OF THE CONICAL SLIDE BEARING ON ITS HYDRODYNAMIC LUBRICATION AND OPERATING PARAMETERS	29
DO VAN DOAN, ADAM SZELEZIŃSKI, LECH MURAWSKI, ADAM MUC MODELLING METHOD OF DYNAMIC CHARACTERISTICS OF MARINE THIN-WALLED STRUCTURE	39
KRZYSZTOF DUDZIK MECHANICAL PROPERTIES OF AW-5083 ALLOY JOINTS WELDED BY HYBRID METHOD – FSW AND MIG	47
MARCIN FRYCZ DISTRIBUTIONS OF HYDRODYNAMIC PRESSURE IN THE GAP OF SLIDE JOURNAL BEARING LUBRICATED WITH FERRO-OIL	53
WOJCIECH GIS, MACIEJ MENES THE DEVELOPMENT OF THE WORLD FLEET OF ELECTRIC VEHICLES IN YEARS 2010–2017 WITH EMPHASIS ON FUEL-CELL VEHICLES	63
WOJCIECH GIS, JERZY WAŚKIEWICZ, MACIEJ MENES, MACIEJ GIS COMPARATIVE PRELIMINARY UNIT COSTS ANALYSIS OF THE OPERATION OF PASSENGER CARS WITH COMBUSTION ENGINES AND FUEL CELL VEHICLES POWERED BY HYDROGEN	69
MARIUSZ GRABA, JAROSŁAW MAMALA, ANDRZEJ BIENIEK SELF-LEARNING CONTROL ALGORITHMS USED TO MANAGE THE OPERATING OF AN INTERNAL COMBUSTION ENGINE	75

ARNOLD JĘDRAL, ANNA BONA VALIDATION OF MICROSCOPY MEASURED POROSITY IN CARBON FIBERS COMPOSITES	83
MIROŚLAW KARCZEWSKI, LESZEK SZCZĘCH, FILIP POLAK ENERGY BALANCE OF A VEHICLE EQUIPPED WITH HYBRID PROPULSION SYSTEM FUELED WITH ALTERNATIVE FUELS	91
MIROŚLAW KARCZEWSKI, LESZEK SZCZĘCH, FILIP POLAK, SZYMON BRODOWSKI ANALYSIS OF ELECTRIC VEHICLES EFFICIENCY AND THEIR INFLUENCE ON ENVIRONMENTAL POLLUTION	97
RADOSŁAW KICIŃSKI, BOGDAN SZTUROMSKI, WOJCIECH JURCZAK DETERMINATION OF MATERIAL CHARACTERISTICS NECESSARY FOR MODELING OF MARINE STRUCTURES EXPOSED TO SMALL-CALIBER BULLET	105
WŁODZIMIERZ KOŃCZEWICZ, SYLWIA POLASZ, KINGA ROGOWSKA USING SORBENTS FOR OIL SPILL CLEANUP IN PORTS AND COASTAL AREAS	113
ARKADUSZ KOPROWSKI, DOMINIK GOTOWSKI, ROMUALD RZADKOWSKI, RYSZARD SZCZEPANIK INFLUENCE OF INLET GEOMETRY ON THE EFFICIENCY OF 1 MW STEAM TURBINE	119
RAFAŁ KRAKOWSKI TECHNICAL AND ECOLOGICAL ANALYSIS OF DIFFERENT SOLUTIONS OF THE POWER SUPPLY OF A MARINE DIESEL ENGINE	127
LESŁAW KYZIOŁ COMPOSITE MATERIALS FOR WARSHIP CONSTRUCTIONS	135
WOJCIECH LABUDA THE INFLUENCE OF CUTTING PARAMETERS ON SURFACE TOPOGRAPHY DURING TURNING MARINE PUMP SHAFTS	141
ANNA LESNAU, MIROŚLAW TYLISZCZAK COMPARATIVE ANALYSIS OF FUELS DERIVED FROM PE PLASTIC WASTE WITH A MIXTURE OF PLASTIC RECYCLING WASTE OF CODES: 1, 2, 4, 5, 6, AND 7, BASED ON LOW-TEMPERATURE PYROLYSIS	149
MAŁGORZATA LINEK APPLICATION OF SIMILARITY METHOD OF DISTANCE COURSES DESCRIBING THE ELEMENTS CONTENT IN CEMENT CONCRETE AFTER 50 FORCED THERMAL CYCLES	155
MAŁGORZATA LINEK, PIOTR NITA APPLICATION OF SIMILARITY METHOD OF DISTANCE COURSES DESCRIBING THE ELEMENTS CONTENT IN TYPICAL CEMENT CONCRETE AFTER THERMAL CYCLES	163

ANDRZEJ MISZCZAK, KRZYSZTOF WIERZCHOLSKI OPERATING PARAMETERS OF A SLIDE BEARING WITH PARABOLIC-SHAPED SLIDE SURFACES WITH CONSIDERATION OF THE STOCHASTIC CHANGES IN THE LUBRICATION GAP HEIGHT	171
JUSTYNA MOLEND THE EXPERIMENTAL INVESTIGATION OF SURFACE ROUGHNESS AFTER DRY TURNING OF STEEL S235	179
ADRIAN IOAN NICULESCU, ANTONI JANKOWSKI, MIROSLAW KOWALSKI, TUDOR SIRETEANU SOLUTIONS IN THE VEHICLE SUSPENSION	185
KATARZYNA PANASIUK, LESŁAW KYZIOŁ, GRZEGORZ HAJDUKIEWICZ EFFECT OF THE RECYCLATE ON A DEFLECTION OF COMPOSITES IN BENDING	197
ADAM ROJEWSKI, JAROSŁAW BARTOSZEWICZ NUMERICAL INVESTIGATION OF ENDPLATES INFLUENCE ON THE WING IN GROUND EFFECT LIFT FORCE	205
MATEUSZ SIERAKOWSKI, WOJCIECH GODLEWSKI, ROMAN DOMAŃSKI, JAKUB KAPUŚCIŃSKI INVESTIGATION OF THERMAL PROPERTIES OF NOVEL PHASE CHANGE MATERIAL MIXTURES (OCTADECANE-DIAMOND) WITH LASER FLASH ANALYSIS	211
MIROSLAW SIERGIEJCZYK, ADAM ROSIŃSKI ANALYSIS OF THE VEHICLE EXPLOITATION PROCESS WITH REGARD TO PROFILING	219
LESZEK SMOLAREK, MONIKA ZIEMSKA MODELLING OF TRANSPORT SYSTEM OPERATIONAL RELIABILITY A MARKOV APPROACH	227
AGNIESZKA SOBIESZEK ANOMALY OF ROTOR DYNAMICS IN ULTRA-LIGHT HELICOPTER – ROBINSON R22	235
ADAM SZELEZIŃSKI, ADAM MUC, LECH MURAWSKI, DO VAN DOAN INTRODUCTION TO THE EXAMINATION OF THIN-WALLED STRUCTURES USING THE VIBRODIAGNOSTIC METHOD	241
BOGDAN SZYBIŃSKI, MATEUSZ WYGODA NUMERICAL INVESTIGATIONS OF STRESS CONCENTRATION IN REINFORCEMENT STEEL STRUCTURE BY COMPOSITE OVERLAYS	249
ANDRZEJ TYWONIUK, ZBIGNIEW SKORUPKA STORAGE OF WIND POWER ENERGY	257
AGATA WIECZORSKA, ADRIAN BUJKO ANALYSIS OF POSSIBILITY OF REPAIRING WELDING OF SELECTED OF THE STEAM TURBINES	265

GRZEGORZ KOWALECZKO, Andrzej Leśniczak MODELLING OF HELICOPTER MAIN ROTOR AERODYNAMIC LOADS IN MANOEUVRES	273
GRZEGORZ KUBICA, PAWEŁ MARZEC AN INFLUENCE OF CORRECTION OF THE IGNITION ADVANCE ANGLE ON THE COMBUSTION PROCESS IN SI ENGINE FUELLED BY LPG WITH THE ADDITION OF DME	285