

LIST OF PAPERS

KRZYSZTOF BALAWENDER, HUBERT KUSZEWSKI, ADAM USTRZYCKI THE EFFECT OF SOME PARAMETERS OF INJECTOR CONTROL SIGNAL ON FUEL INJECTION PROCESS IN THE COMMON RAIL SYSTEM	9
JOSEF BLAŽEK, PAVEL BRABEC SIMULATION MODEL OF COMBUSTION ENGINE WITH DIRECT INJECTION OF HYDROGEN	15
JÓZEF BŁACHNIO, ARTUR KUŁASZKA COMPUTER AIDED VISUAL INSPECTION OF THE TECHNICAL CONDITION OF GAS TURBINE BLADES DURING THEIR OPERATION PERIOD	23
DAMIAN BORECKI, JERZY JANTOS COLD START CONTROL OF THE SI ENGINE SUPPLIED WITH HYDROGEN	31
TADEUSZ BORKOWSKI, PRZEMYSŁAW KOWALAK IN CYLINDER PRESSURE ASSESSMENT FROM MARINE DIESEL ENGINE	39
WACLAW BORKOWSKI, BOGUSLAW MICHALOWSKI, KRZYSZTOF PAPLINSKI, PIOTR RYBAK JOZEF WYSOCKI SELECTION OF ELASTIC SUSPENSION ELEMENTS FOR THE SPECIAL USE VEHICLE	47
PAVEL BRABEC, MIROSLAV MALÝ, ROBERT VOŽENÍLEK ACTION OF FORCE IN STEERING MECHANISMS OF VEHICLES IN AN EXPERIMENTAL LABORATORY ESTABLISHMENT	55
GRZEGORZ BUDZIK, TADEUSZ MARKOWSKI, MARIUSZ SOBOLAK, MARIUSZ CYGNAR TOOTH CONTACT ANALYSIS OF HYPOID GEAR TRANSMISSION PROTOTYPES MANUFACTURING WITH VACUUM CASTING METHODS	63
PIOTR BZURA METHOD OF IDENTIFICATION OF THE SLIDE TRIBOLOGICAL SYSTEM TOP LAYER CONDITION BY ASSESSMENT OF THE T-02 FOUR-BALL TESTER FRICTION NODE OPERATION	69
A. CHARCHALIS, J. KREFFT ELECTRIC POWER OF CONTEMPORARY CONTAINER VESSELS IN A PRELIMINARY STAGE	77
ŁUKASZ DRAĞ, WOJCIECH ADAMSKI, LUCYNA BRZOZOWSKA ASSIGNMENT OF MAXIMAL ACCELERATION OF A CAR AS A FUNCTION OF SOME INDEPENDENT VARIABLES	85
KRZYSZTOF DUDZIK, MIROSLAW CZECHOWSKI INFLUENCE OF FRICTION STIR WELDING ON IMPACT RESISTANCE OF ALZn5Mg1 ALLOY JOINTS	93

JAN FILIPCZYK, ALEKSANDRA KUTRZYK THE INFLUENCE OF TECHNICAL CONDITIONS AND THE AGE STRUCTURE OF VEHICLES ON TRAFFIC EMISSION	99
PRZEMYSŁAW FILIPEK, TOMASZ KAMIŃSKI IMPLEMENTATION OF MODERN ELECTRONIC SUBSETS UNDER CONSTRUCTION AND CONTROL WITH A WIRELESS INSPECTION VEHICLE	107
MARIUSZ GIERNALCZYK, ZYGMUNT GÓRSKI DEVELOPMENT TRENDS OF LNG GAS CARRIERS	115
ZYGMUNT GÓRSKI, ROMUALD CWILEWICZ PROPOSAL OF ECOLOGICAL PROPULSION FOR SEAGOING SHIPS	121
TADEUSZ HEJWOWSKI INVESTIGATIONS INTO THE DEGRADATION MECHANISM OF THERMAL BARRIER APPLIED IN IC ENGINE	129
ANTONI JANKOWSKI STUDY OF THE INFLUENCE OF DIFFERENT FACTORS ON COMBUSTION PROCESSES (PART TWO)	135
KONRAD S. JANKOWSKI, MARCIN ZAJENKOWSKI THE ROLE OF CIRCADIAN RHYTHMS AND INDIVIDUAL DIFFERENCES IN HUMAN ATTENTION IN ROAD TRANSPORT SAFETY	141
ARTUR JAWORSKI, KAZIMIERZ LEJDA PROBLEMS OF FUEL CONSUMPTION MEASUREMENTS IN RESEARCH OF LIQUID PHASE LPG INJECTION ENGINE	149
PIOTR KALINA, WŁODZIMIERZ CHOMCZYK, ANDRZEJ IRZYCKI, KRZYSZTOF SNOPIKIEWICZ BLADE PISTON COMPRESSOR	157
GRZEGORZ KOSZAŁKA, JACEK HUNICZ, PAWEŁ KORDOS COMPERATIVE ANALYSIS OF EMISION FROM ENGINE FUELLED WITH DIESEL AND BIO-DIESEL	165
ANDRZEJ KOWALEWICZ COMPRESSED NATURAL GAS ENGINES. A REVIEW	173
WIESŁAW KRASON, JOZEF WYSOCKI EXPERIMENTAL VERIFICATION OF NUMERICAL TEST RESULTS FOR A DOUBLE MULTI- LEAF SPRING	185
STANISŁAW W. KRUCZYŃSKI, PIOTR ORLIŃSKI, STANISŁAW ORLIŃSKI INFLUENCE OF THE COMPOSITION OF MICROEMULSIVE FUEL HYDROCARBON-ESTER-ETHANOL ON CHOSEN PARAMETERS OF DIESEL ENGINES COMBUSTION PROCESS	195
TOMASZ LEŻAŃSKI , JANUSZ SĘCZYK, PIOTR WOLAŃSKI RESEARCH OF COMBUSTION SYSTEM WITH SEMI-OPEN COMBUSTION CHAMBER IN A COMMERCIAL SPARK IGNITION ENGINE	203
JANUSZ LUBAS BRAK NAGLOWKA TRIBOLOGICAL PROPERTIES OF SURFACE LAYER WITH BORON	213

SEBASTIAN LAWNICZAK, PRZEMYSŁAW SIMINSKI RESEARCH ON WHEELED ARMoured FIGHTING VEHICLE IN CURVILINEAR MOTION	223
SŁAWOMIR ŁUKJANOW, JERZY TOKARZEWSKI, MICHAŁ KOŁODZIEJCZAK INVESTIGATIONS OF ELECTRIC FIELD STRENGTH (IN EMC CONTEXT) IN CHOSEN VEHICLES EXPOSED TO ELECTROMAGNETIC FIELD	233
ADAM MARCINIEC, ANNA PAWLOWICZ THE BENDING AND CONTACT STRESS ANALYSIS OF SPUR GEARS	243
ANDRZEJ MARCZUK EVALUATING THE WORKING EFFICIENCY OF TRANSPORTATION MEANS AT MEAT PROCESSING WORKS	251
WŁADYSŁAW MITIANIEC, KONRAD BUCZEK A VALVED TWO STROKE ENGINE AS A NEW POWER SOURCE	259
JAN MONIETA DETERMINATION OF GROSS HEAT OF COMBUSTION AND THE CALORIFIC VALUE OF RAPE BIOFUELS	269
Ł. MUŚLEWSKI CONTROL METHOD FOR TRANSPORT SYSTEM OPERATIONAL QUALITY	275
TADEUSZ NIEZGODA, DANUTA MIEDZINSKA ALUMINIUM FOAM TESTING FOR IMPACT ENERGY ABSORPTION AIMS	283
JÓZEF NITA, IWONA KOMORSKA ESTIMATION OF USEFULNESS OF HFM-5 AIR-MASS METER FOR FORECAST CYCLE FILLING UP OF SI ENGINE	291
NIKOLETT PÉZSA, BÁLINT SZABÓ, BALÁZS TRENCSENI COMPARISON OF DIFFERENT VEHICLES DRIVEN BY ALTERNATIVE FUELS AND HYBRID DRIVELINE FOCUSING ON EMISSION, EFFICIENCY AND ECONOMY	301
ANDRZEJ PIĘTAK, SŁAWOMIR WIERZBICKI, MACIEJ IMIOŁEK, MACIEJ MIKULSKI DUAL-FUEL FEEDING DIESEL ENGINE BEHIND ASSISTANCE CNG WITH LIQUID DOSE PILOTING FUEL RENEWABLE	311
SAUGIRDAS PUKALSKAS, ALVYDAS PIKŪNAS, GINTAUTAS BUREIKA THE INFLUENCE OF DIESEL ENGINE'S THERMAL CONDITION ON FUEL CONSUMPTION AND SMOKE OF EXHAUST GASES	319
JACEK RUDNICKI ASSESSMENT OF OPERATION OF SHIP MAIN DIESEL ENGINE USING THE THEORY OF SEMI-MARKOVIAN AND MARKOV PROCESSES	325
MARCIN RYCHTER LEVEL OF IMPLEMENTATION OF DIGITAL TACHOGRAPHS SYSTEM IN EUROPEAN UNION	335

HUBERT SAR, ANDRZEJ REŃSKI SIMULATION OF NON-STEADY-STATE CURVILINEAR VEHICLE MOTION	343
KRZYSZTOF SICZEK, MACIEJ KUCHAR THE CONTROL OF VALVE TIMING WITH MAGNETOELECTRIC ACTUATORS	357
LECH J. SITNIK ANALYSIS OF MILEAGE TO ENGINE OIL REMOVING IN THE NATURAL EXPLOITATION OF PASSENGER CARS	367
MARIUSZ SOBOLAK, PATRYCJA EWA JAGIELOWICZ PRELIMINARY RESEARCH OF PROTOTYPES HELICAL GEARS FOR POWER TRANSMISSION SYSTEMS	375
ANDRZEJ STAROSTA APPLICATION OF BAYESIAN NETWORK TO ESTIMATE MERCHANT SHIP USABILITY FOR SAR ACTION	381
TOMASZ STOECK IMPROVEMENT SELECTED WORKING PARAMETERS OF THE ENGINE TURBOCHARGING WITH ROTATIONAL COMBUSTION CHAMBER SUPPLIED WITH THE RAPESEED FUEL BY THE CHANGE OF NOMINAL SETTING	387
JANUSZ SZPYTKO, PAWEŁ HYLA REVERSE ENGINEERING VISION TECHNIQUE APPLYING IN TRANSPORT SYSTEMS	395
TOMASZ SZYDŁOWSKI EXPERIMENTAL VERIFICATION OF THE MODEL OF ELECTROHYDRAULIC DRIVE FOR INTERNAL COMBUSTION ENGINE VALVES	401
WIESŁAW SZYMCZYK, DANUTA MIEDZIŃSKA NUMERICAL ANALYSIS OF AN OPEN CELL FOAM STRUCTURE WITH THE USE OF MODELS BASED ON SOLID FINITE ELEMENTS	409
ELZBIETA SZYMCZYK, GRZEGORZ SŁAWINSKI, JERZY JACHIMOWICZ, AGNIESZKA DEREWONKO COMPARISON OF THE DYNAMIC RIVETING PROCESS OF A RIVET WITH AND WITHOUT A COMPENSATOR	415
MICHAŁ SMIEJA CAR ASSEMBLY MANAGEMENT WITH CAN	423
HENRYK TOMASZEK, SŁAWOMIR KLIMASZEWSKI, MARIUSZ ZIEJA A PROBABILISTIC METHOD OF DETERMINING FATIGUE LIFE OF A STRUCTURAL COMPONENT USING THE PARIS FORMULA AND THE PROBABILITY DENSITY FUNCTION OF TIME OF EXCEEDING THE BOUNDARY CONDITION – AN OUTLINE	431
PIOTR TOMCZUK LIGHTING OF TRAM'S FOREGROUND WITH THE USE OF HEAD AND LOW BEAM LIGHTS – RESEARCH	439
ANDRZEJ TYPIAK REMOTE-CONTROLLED VEHICLE FOR REMOVAL OF DISASTERS	447

ALEKSANDER UBYSZ ENGINE PERFORMANCE MAPS IN NONSTATIONARY OPERATING CONDITIONS OF CAR ENGINE	455
ZSOFIA UJSAGHY DISPOSAL OF AUTOMOBILE SHREDDER RESIDUE, CONSIDERING MIXED PLASTIC PART OF THE LIGHT FRACTION	465
LESZEK UŁANOWICZ OUTLINE OF A MODEL FOR FLOW OF INHOMOGENEOUS WORKING FLUIDS VIA AN INTERSTICE	471
KRZYSZTOF WIERZCHOLSKI THE METHODOLOGY OF SLIDE MICRO-BEARINGS LUBRICATION	483
KRZYSZTOF WIERZCHOLSKI, OLIWIA ŁUPICKA NETWORK ANALYSIS FOR ARTIFICIAL INTELLIGENT MICRO-BEARING SYSTEMS	489
KRZYSZTOF WIERZCHOLSKI, ANDRZEJ MISZCZAK ADHESION AND CAPILARITY IN MICRO-BEARING LUBRICATION	497
PAWEŁ WIRKOWSKI WORK PARAMETERS OF THE GAS TURBINE ENGINE DURING THE CHANGE OF FLOW PASSAGE GEOMETRY ON THE INLET OF AXIAL COMPRESSOR	505
M. WOROPAY, K. MIGAWA, A. WDZIĘCZNY MARKOV'S MODEL OF MEANS OF TRANSPORT OPERATION AND MAINTENANCE IN A CITY TRANSPORT SYSTEM	511
KRZYSZTOF ZBIERSKI, MARIUSZ SMOCZYŃSKI MOTION PROPERTIES OF HYDRAULICALLY ACTUATED VALVE TRAIN	517
JÓZEF ŻUREK ANALYSIS OF THE PROCESS OF OPERATING AN AIRCRAFT FROM ASPECT OF FLIGHT SAFETY AND EFFECTIVENESS	527

