

CONTENTS

MACHINE SCIENCE

Polishchuk M.M., Tkach M.M.

MODIFICATION OF THE FOOT OF A WALKING MOBILE ROBOT.....	1
---------------------------------------------------------	---

INDUSTRIAL ENGINEERING

Pavlenko V.Ya.

MANAGEMENT OF THE DESIGN DOCUMENTATION DEVELOPMENT PROCESS – A RELIABLE FOUNDATION FOR THE PRODUCTION OF QUALITY AND COMPETITIVE PRODUCTS IN THE MODERN ORGANIZATION.....	9
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---

Fomin O.V., Kozynka O.S., Turpak S.M., Vasilyeva L.O., Krasulin O.S.

THE PROSPECTIVE CONCEPTS OF BODY DESIGNS FOR GONDOLA CARS USING NEW MATERIALS AND PROTECTIVE ANTI-VIBRATION COATINGS.....	16
------------------------------------------------------------------------------------------------------------------------------	----

Shornikova S.V.

TECHNICAL CONTROL OF DESIGN DOCUMENTATION IS THE KEY TO THE PRODUCTION OF HIGH-QUALITY PRODUCTS	22
----------------------------------------------------------------------------------------------------------	----

EQUIPMENT

Dolya G.M., Romaniuk V.A., Starodubtsev S.O.

EFFICIENCY OF RRS BASED LASER SENSOR FOR EARLY IGNITION DETECTION IN A NOISY ENVIRONMENT.....	29
--------------------------------------------------------------------------------------------------	----

Monchenko O.V., Kucherenko V.L., Tishchenko Ye.O., Marchenko N.B., Chubko L.S.

MODERNIZATION OF THE RETINAL VISUAL PROSTHESIS TO OBTAIN A HIGH-QUALITY IMAGE FROM THE RETINAL IMPLANT.....	35
----------------------------------------------------------------------------------------------------------------	----

Osadchuk O.V., Martyniuk V.V., Evseeva M.V., Martyniuk G.I.

INFLUENCE OF TEMPERATURE AND MAGNETIC FIELD ON THE PHYSICAL PARAMETERS OF (COPPER, BISMUTH) CONTAINING B-DIKETONATE.....	44
-----------------------------------------------------------------------------------------------------------------------------	----

RADIO ENGINEERING AND TELECOMMUNICATIONS

Valuiskiy S.V., Lysenko O.I., Hiruk D.O.

LOAD BALANCING METHOD IN SDN NETWORKS BASED ON OPENFLOW.....	51
--------------------------------------------------------------	----

Herashchenko A.Yu., Lebedev D.Yu.

TECHNOLOGY FOR PREDICTING THE PARAMETERS OF 802.11 WIRELESS NETWORKS FOR ADAPTIVE OPTIMIZATION.....	59
--------------------------------------------------------------------------------------------------------	----

Yesych D.V., Lebedev D.Yu.

IMPLEMENTATION OF A SOFTWARE MODULE FOR MODELING INTERFERENCE IN WIRELESS NETWORKS BASED ON 802.11 STANDARDS WITHIN THE NS-3 SIMULATOR....	66
-----------------------------------------------------------------------------------------------------------------------------------------------	----

Mikhnenko Ya.O.

QUALITY OF SERVICE ANALYSIS IN SOFTWARE-DEFINED NETWORKS.....	73
---------------------------------------------------------------	----

Shusta V.I., Biganych V.Yu., Shusta V.S., Yevych M.Ya., Shusta V.Yu.

ELECTRONIC COMMUNICATIONS IN EDUCATION: FROM DISTANCE LEARNING TO ONLINE RESOURCES.....	79
--------------------------------------------------------------------------------------------	----

Tykhonov M.V., Kononova I.V.

AN IMPROVED METHODOLOGY FOR CONSTRUCTING BILATERAL RELIABILITY ESTIMATES OF COMMUNICATION DEVICES WITH A COMBINED TIME RESERVE.....	86
----------------------------------------------------------------------------------------------------------------------------------------	----

Shevtsov K.O., Zhivkov O.P.

MICROWAVE METAMATERIAL STRUCTURES BASED ON SIW WAVEGUIDES AND RESONATORS.....	91
----------------------------------------------------------------------------------	----

POWER ENGINEERING

Abdulin M.Z., Kunyk A.A.

INFLUENCE OF HYDROGEN ADMIXTURES ON THE OPERATION OF COMBINED
JET-NICHE MODULES DURING PROPANE-BUTANE COMBUSTION.....98

Bozhenko M.F.

METHODOLOGY FOR SELECTING SURFACE FLUE GAS HEAT RECOVERY UNITS
IN BOILER HOUSES.....107

Boshkov L.Z., Volgusheva N.V., Hrechanovskyi A.P., Garanin Ye.V.

COEFFICIENTS OF DIFFUSION AND THERMAL DIFFUSION OF MOISTURE
IN A DENSE LAYER OF ZEOLITE 13X.....114

Pantielicieva I.V.

PROSPECTS FOR THE APPLICATION OF ELEGAS ELECTRICAL EQUIPMENT
IN ENERGY SYSTEMS.....120

Rindyuk D.V., Bednarska I.S.

INFLUENCE OF STEAM SCREEN ON STRESS-DEFORMED STATE OF CONTROL VALVE.....128

CHEMICAL TECHNOLOGY

Andriianova M.V., Prykhodko D.M., Koval D.S., Yasnohor M.V., Holovenko V.O., Chervakov O.V.

ANTI-CORROSION COATINGS FOR PROTECTION OF METAL STRUCTURES.....135

Buket O.I., Butenko O.S.

INDUCTIVE COMPONENT OF IMPEDANCE AS A MARKER OF ELECTROCHEMICAL
CORROSION OF STEEL ANODES IN MINERAL OIL.....142

Dudka M.V., Vorobiova V.I.

ANTIOXIDANT PROPERTIES OF COMPOUNDS DERIVED FROM HOP CONES
(*HUMULUS LUPULUS*): A QUANTUM-CHEMICAL PERSPECTIVE.....148

Zabaluyev A.S., Ushchapovskyi D.Yu., Vorobyova V.I., Vasilyev G.S., Linyucheva O.V.

ELECTROCHEMICAL, MECHANICAL AND CATALYTIC PROPERTIES OF NICKEL-BASED
GALVANIC COATINGS.....155

Ivanchenko A.V., Sokol O.D.

PRODUCTION OF CHEMICALLY ACTIVATED SORBENTS FROM SECONDARY RAW
MATERIALS AND THEIR TESTING FOR THE REMOVAL OF DYES FROM WASTEWATER.....164

Ivaniuta S.P., Ivanenko O.I., Plashykhin S.V., Abramova A.O.

EVALUATING THE RISKS TO UKRAINE'S INFRASTRUCTURE IN A WARTIME CONTEXT.....170

Koval M.G.

STUDY OF COTTON FABRICS DYEING WITH DIRECT DYES WITH REUSE OF TREATED
WASTEWATER.....180

Maizelis A.O.

CONTACT DISPLACEMENT OF COPPER IN PYROPHOSPHATE-SULFOSALICYLATE
ELECTROLYTE FOR COPPER PLATING.....189

Melnyk L.I., Sviderskyi V.A., Donii O.M.

THE INFLUENCE OF MINERAL FILLERS ON THE THERMAL CONDUCTIVITY
OF POLYMER COMPOSITES.....197

Mitina N.B., Mitina Yu.O.

PROCESSING OF POLYMERIC WASTE BY VERMICULTURE.....205

Morozova O.M., Fedorenko O.Yu., Hevorkian E.S.

APPLICATION OF WEIBULL STATISTICS IN MECHANICAL PROPERTIES DESCRIPTION
OF CERAMIC MATERIALS.....211

Moshchenko A.S., Vorobiova V.I.

SKIBA RESEARCH OF PHYSICO-CHEMICAL PROPERTIES OF DEEP-EUTETIC SOLVENTS
BASED ON CHOLINE CHLORIDE.....217

Sgadov S.O.

AN ALGORITHM FOR COMPOSITION MODELING OF NEAR-SURFACE LAYERS OF SOLIDS
UNDER THE INFLUENCE OF ACTIVATED GAS PHASE.....224

Frolova L.A., Rodin D.O., Nikitin M.O. INFLUENCE OF COMPOSITION AND SYNTHESIS PARAMETERS ON COLOR AND PHOTOCATALYTIC PROPERTIES OF FE-AL-CO SPINEL PIGMENTS.....	230
Shkoda V.O., Kravchenko O.V., Gulyayev V.M., Kovalenko A.L. STUDIES OF ADSORPTION CAPTURE OF PLATINUM LOST DURING CONTACT OXIDATION OF AMMONIA IN THE PRODUCTION OF NITRIC ACID.....	237

TRANSPORT

Boiko S.M., Kotov O.B., Raida I.M., Lebid H.O., Boiko O.S., Deryabina I.O. PROSPECTS FOR THE ORGANIZATION OF MULTIMODAL TRANSPORT NODES IN THE ASPECT OF AIRPORT INFRASTRUCTURE RENOVATION.....	243
Vyshnevskiy D.O., Vyshnevskaya O.D. SPECIFICS OF FLEET OPERATION WITHIN ORGANIZATION OF CARGO CARRIAGES.....	249
Voichenko T.O., Tryshyn V.V., Riashchenko O.I., Lisovskiy S.V. THE STUDY OF THE VESSELS PROPULSION COMPLEXES OPERATION PROBLEMS WITH SEMI-SUBMERSIBLE PROPELLERS.....	255
Herasymenko I.M., Pron S.V., Vysotska I.I., Soloviova O.O. APPLICATION OF PILOTLESS AIRCRAFTS IS DURING REALIZATION OF MONITORING IN RELATION TO THE STATE OF FOREST ARRAYS IN POST-WAR TIME	263
Hordieiev M.H. POTENTIAL AND CHALLENGES OF AI-BASED AUTOMATIC NAVIGATION AND SHIP CONTROL.....	270
Lovska A.O., Muradian A.O., Rukavishnikov P.V., Demydiakov O.V. SPECIFICS OF CALCULATION OF THE HATCH COVER STRENGTH OF AN OPEN WAGON LOADED BY A REMOVABLE MODULE FOR FIXING CONTAINERS.....	276
Okorokov A.M., Bekh P.V., Lashkov A.V. ORGANIZATION OF INTERNATIONAL MULTIMODAL TRANSPORTATION WITH RISKS IN MIND.....	283
Petrov L.M., Kishianus I.V., Petryk Yu.M., Borysenko T.M., Mogilianets T.M., Verpivskiy S.M., Malinovskiy O.A., Maslich N.Ia., Shelushin S.V., Nikishyn V.A. THEORY L.M. PETROV WITH APPENDICES YU.M. PETRYKA FOR A WHEELED MACHINE WITH A KINEMATIC CONNECTION.....	289
Podolian V.O. AUTOMATION OF TRANSPORT PROCESSES USING IT SOLUTIONS.....	295
Prokudin G.S., Melnykov I.A., Poliak P.K. FORECASTING THE MOVEMENT OF VEHICLES ACROSS THE CUSTOMS BORDER OF UKRAINE.....	301
Reshetkov D.M., Koskina Yu.O. DECARBONIZATION OF SEA CARRIAGES – REQUIREMENTS AND PERSPECTIVES.....	308
Semychayevskiy S.V., Prisyajnyuk V.V., Yakimenko M.L., Osadchuk M.V., Svirskiy V.V. ABOUT THE DEVELOPMENT OF SCIENTIFIC PRIMING STANDARDS EQUIPPED WITH PORTABLE FLAME EXHAUSTERS OF WHEEL TRANSPORT VEHICLES.....	315
Silvanska H.M. MODERN CLASSIFICATION AND STRUCTURE OF PASSENGER TRANSPORTATION.....	323
Stepanov O.V., Volobuyeva T.V., Zhdanov O.O. OPTIMAL FREQUENCY OF REPLACEMENT OF FREIGHT VEHICLE UNITS WHEN REACHING A GIVEN OPERATING TIME.....	335
Stepanov O.V., Kuvshinov A.O. ADAPTIVE SYSTEM OF FREIGHT VEHICLES MAINTENANCE.....	342
Trofymenko I.V., Voichenko T.O., Plita L.L., Fedunov V.M. DEVELOPMENT OF PROPOSALS FOR THE APPLICATION OF METAHEURISTIC ALGORITHMS IN THE PROBLEMS OF MULTIAGENT ROUTING OF SEA FREIGHT TRANSPORTATION.....	348

Urum N.S., Mannapova O.V., Riashchenko O.I., Lisovskyi S.V. COMPARISON OF COMBUSTION EMISSIONS OF THE LATEST LOW-SULPHUR MARINE FUELS.....	355
Fomin O.V., Kozynka O.S., Skok P.O., Cherkashin O.P., Krasulin O.S. PROSPECTIVE CONCEPTS OF CAR BODIES FOR GONDOLA CARS USING NEW MATERIALS AND PROTECTIVE COATINGS.....	364
Chernenko P.V., Bondar Ye.V., Kruglov O.V. PROPOSALS FOR CREATING AN AUTOMATED WORKPLACE FOR MATERIAL AND TECHNICAL ACCOUNTING TOOLS FOR THE REPAIR OF ARMORED TANK VEHICLES ...	370
Shapenko Ye.M., Kotova S.O., Bilonoh O.V., Yaroshevskyy V.V. THE ROLE OF INTELLIGENT TRANSPORT SYSTEMS IN THE DEVELOPMENT OF URBAN LOGISTICS UNDER THE SMART CITY CONCEPT.....	376
Shevchenko A.P., Yakusevych Yu.H., Dorofieieva Z.Ia., Tryshyn V.V. SOME PROBLEMS OF SEAFARER TRAINING AGAINST THE BACKGROUND OF THE INTRODUCTION OF MODERN INFORMATION TECHNOLOGIES IN THE MARITIME TRANSPORT	382
Shpak N.G., Pavlovska L.A., Korobkova O.M. DIGITAL TRANSFORMATION OF THE SEA PORT MANAGEMENT SYSTEM: THE NEWEST OPPORTUNITIES AND CHALLENGES IN THE CONDITIONS OF THE STATE OF MARTIAL.....	389
INFORMATION ABOUT AUTHORS.....	395