18th International Conference Diagnostics of Machines and Vehicles (Diagnostyka 2019)

MATEC Web of Conferences Volume 302 (2019)

Bydgoszcz, Poland
12 December 2019

ISBN: 978-1-5108-9931-5

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

This work is licensed under a Creative Commons Attribution 4.0 International License. License details: http://creativecommons.org/licenses/by/4.0/.

No changes have been made to the content of these proceedings. There may be changes to pagination and minor adjustments for aesthetics.

Printed with permission by Curran Associates, Inc. (2019)

For additional information, please contact EDP Sciences – Web of Conferences
at the address below.

EDP Sciences – Web of Conferences
17, Avenue du Hoggar
Parc d'Activité de Courtabœuf
BP 112
F-91944 Les Ulis Cedex A
France

Phone: +33 (0) 1 69 18 75 75
Fax: +33 (0) 1 69 28 84 91

contact-edps@webofconferences.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

Application of Impact Analysis SDC Method for Verification of Whiplash Injuries 1
Aleksandrowicz Piotr

Ground Vibrations Caused by Wind Power Plant Work as Environmental Pollution - Case Study 8
Borowski Sylwester

The Method of Assessment and Formation the Availability of the Subsystem Ensuring Fitness for Means of Transport..... 13
Borowski Sylwester, Mazurkiewicz Anna, Czyzewska Magda

Diagnostics – Experimental Analysis of Friction Pairs at Stick – Slip Sliding 21
Dykha Aleksandr, Matyukh Sergiy, Kalaczynski Tomasz

Lapping Flat Surfaces with Forced Dosing of Abrasive Suspension..... 29
Gniot Maciej, Barylski Adam

Research of Characteristics of Environmental Energy Carriers by Simulation of Operating Load in Laboratory Conditions..... 37
Janouskova Romana, Kaszkowiak Jerzy, Halenar Marek, Zachar Martin, Nosian Jozef

Impact of the Content of Alcohol in Petroleum on the Level of an Unsupercharged Engine's Noise..... 45
Kaszkowiak Jerzy, Hujo Lubomir, Jablonicky Juraj

Methods for Vibration Reduction in Enclosed Electronic Packages 52
Kovtun Igor, Boiko Juliy, Petrashchuk Svitlana, Kalaczynski Tomasz

Analysis of Changes in the Value of Selected Lubricant Characteristics During Use..... 62
Landowski Bogdan, Baran Monika

Analysis of Selected Results of Engine Oil Tests..... 70
Landowski Bogdan, Baran Monika

Analysis of Vibrodiagnostics Methods in the Technical State Study of Designed Multimedia Mobile Scenes..... 77
Lukasiewicz Marcin, Liss Micha , Dluhunovych Natalia

Impact of Changes in the Fuel Injection Controller Settings on the Power and Torque Performance Depending on the Engine Speed..... 86
Markiewicz Marietta, Dluhunovych Natalia

Diagnostics of Solar Cells 92
Martynyuk Valeriy, Boiko Juliy, Lukasiewicz Marcin, Kuliœ Ewa, Musial Janusz

Diagnostics of Corrosion Protection Potential for Electric Water Heaters 102
Martynyuk Valeriy, Liss Micha , Wilczarska Joanna

Assessment of Friction Pair Elements Condition Based on Changes in the Geometric Surface Structure Isotropicity Degree.....111
Matuszewski Maciej, Slomion Malgorzata, Mazurkiewicz Adam, Pimenov Danil Yu

Method of Assessment of the Transport System Functioning with the Application of the Simulation Model of the Operating Process 119
Migawa Klaudiusz, Soltysiak Agnieszka, Czyzewska Magda

Exploring the Effectiveness of Using Devices that Follow the Sun 131
Musia Janusz, Wilczarska Joanna, Polishchuk Oleg, Ramskyi Andrii

Analysis of the Impact of an Operator's Workstation on the Safety of Functioning of Selected Road Transport Systems 141
Muslewski Lukasz

Principles of Formation of a Vehicle's Remote Diagnostics..... 149
Muslewski Lukasz, Zinko Roman, Polishchuk Oleg

Construction Proposal of Hydraulic Equipment Designed to Test Hydraulic Components and Energy Carriers..... 158
Nosian Jozef, Markiewicz Marietta, Janoušková Romana, Feriancová Patrícia

Evaluation of Linear Losses in Ventilation Ducts with a Rounded Rectangle Cross-Section 167
Peszynski Kazimierz, Tesar Václav, Kulis Ewa

Diagnostics of Emission Condition of Compression Ignition Engine in Utilization of Tested Substance..... 176
Polerecký Ján, Jablonický Juraj, Tulík Juraj, Kosiba Ján, Zastempowski Marcin, Simikic Mirko

Application of the Pareto Front for Risk Control in the Transport System 187
Soltysiak Agnieszka, Migawa Klaudiusz

Exploitation of Car Turbochargers - Selected Problems..... 197
Wojciechowski Hubert, Zoltowski Bogdan

Diagnostics of Sulfur Cement Properties 207
Zoltowski Mariusz, Jeleniewicz Katarzyna

Author Index