

CONTENTS

Dominika Siwiec, Andrzej Pacana

Method of improve the level of product quality 1

Natalia Baryshnikova, Olga Kiriliuk, Dorota Klimecka-Tatar

Enterprises' strategies transformation in the real sector of the economy in the context
of the COVID-19 pandemic 8

D. Danalakshmi, S. Prathiba, M. Ettappan, D. Mohan Krishna

Reparation of voltage disturbance using PR controller-based DVR in Modern power systems 16

Youcef Abidi

Analysis of the compromise between cutting tool life, productivity and roughness during turning
of C45 hardened steel 30

Jurand Bień

Production and use of waste-derived fuels in Poland: current status and perspectives 36

Rahul S Mor, Dinesh Kumar, Sarika Yadav, Swatantra Kumar Jaiswal

Achieving cost efficiency through increased inventory leanness: Evidence from manufacturing
industry 42

Sirorat Pattanapairoj, Krisanarach Nitisiri, Kanchana Sethanan

A Gap Study between Employers' Expectations in Thailand and Current Competence
of Master's Degree Students in Industrial Engineering under Industry 4.0 50

Jacek Karcz, Beata Ślusarczyk

Criteria of quality requirements deciding on choice of the logistic operator from a perspective
of his customer and the end recipient of goods 58

Laila Oubahman, Szabolcs Duleba

Review of PROMETHEE method in transportation 69

CONTENTS

Vasavi Dadi, Suryadevara Ram Nikhil, Rahul S Mor, Tripti Agarwal, Sapna Arora

Agri-Food 4.0 and Innovations: Revamping the Supply Chain Operations 75

Adam Idzikowski, Tomasz Cierlicki

Economy and energy analysis in the operation of renewable energy installations – a case study 90

Radosław Wolniak

The concept of operation and production control 100

Tomasz Lipiński

Investigation of corrosion rate of X55CrMo14 stainless steel at 65% nitrate acid at 348 K 108

Mohd Faizan Hasan, Prem Kumar Bharti, Mohd Reyaz Ur Rahim

An investigation of wire offset and surface morphology of Die Steel D-3 on Wire EDM
by using RSM-CCD 112

Norbert Radek, Dorota Tokar, Artur Kalinowski, Jacek Pietraszek

Influence of laser texturing on tribological properties of DLC coatings 119

Rapidah Othman, Afiqah Samsul Kamal, N.H. Jabarullah

The effect of changing graphitization temperature toward bio-graphite from Palm Kernel Shell 124

**Willian Nadaleti, Vitor Lourenço, Grzegorz Przybyła, Piotr Kardasz, Radosław Wróbel,
Radostin Dimitrov, Jarosław Trembacz, Zdravko Ivanov**

Production potential of biodiesel, methane and electricity in the largest steamed rice industry
in Rio Grande do Sul, Brazil: case study 130

Krzysztof Knop

Analysing the machines working time utilization for improvement purposes 137

Juhani Anttila, Kari Jussila

ISO 9004 - A stimulating quality management standard for the creative leaders of contemporary
sustainable organizations 148

Monika Kapler

Barriers to the implementation of innovations in information systems in SMEs 156

CONTENTS

Marek Krynke

Management optimizing the costs and duration time of the process in the production system 163

Vasyl Zhelykh, Orest Voznyak, Yuriy Yurkevych, Iryna Sukholova, Oleksandr Dovbush

Enhancing of energetic and economic efficiency of air distribution by swirled-compact air jets 171

Robert Sałek

The importance of telematic information and logistics indicators for the management
of the quality of transport services 176

Irina Vyacheslavovna Larina, Andrey Nikolaevich Larin, Olga Kiriliuk, Manuela Ingaldi

Green logistics - modern transportation process technology 184

Iurii Sidun, Oleksiy Vollis, Volodymyr Hidei, Volodymyr Bidos

Quick-traffic slurry surfacing mix with orthophosphoric acid 191

Joanna Tabor

Ranking of management factors for safe maintenance system based on Grey Systems Theory 196

Desalegn Abdissa

Optimization of oil extraction process from blended sludge and algae for biodiesel production 203

Yaroslav Blikharsky, Jacek Selejdak, Taras Bobalo, Roman Khmil, Mykhailo Volynets

Influence of the percentage of reinforcement by un-stressed rebar on the deformability of pre-
stressed RC beams 212

Katarzyna Midor, Grzegorz Wilkowski

Recertification of a Quality Management System based on ISO 9001 - is it a must for a modern
manufacturing company? 217

Emmanuel Olatunji Olutomilola, Sesan Peter Ayodeji, Michael Kanisuru Adeyeri, Tayo Na-thaniel Fagbemi

Development and Performance Evaluation of a Pulverizer for Plantain Flour Process Plant 223