

CONTENTS

• Realigning of Hydraulic Engineering Education to Actual Industrial Requirements Peter Heidrich, Niklas Weiß, Mirko Rothhaar	1 - 8
• Fluid-Mechatronic Systems in Sea and Ocean Wave Power-Take-off Processes Alexander Skvorchevsky	9 - 14
• Improving the Reliability of an Automated Pneumatic Bearing Press Equipment Used in the Automotive Industry Roxana-Luiza Bahna, Ioan-Lucian Marcu, Daniel-Vasile Banyai	15 - 20
• Aspects related to Axial Piston Pump Operation within a Hydraulic Circuit Fănel Dorel Șcheaua	21 - 26
• Comparison of Experimental Results with Simulation Studies of "Digital" Hydrostatic Transmission Ahmed Jan Zubair, Krzysztof Kędzia, Paweł Śliwiński	27 - 35
• Analysis of a Pneumatic Band Braking System for Industrial Winches Georgiana-Alexandra Moroșanu, George-Ștefan Leoca, Doina Boazu, Nicușor Baroiu	36 - 48
• Water Running Engine Nicușor Niculae	49 - 59
• Aspects related to Fluid Viscous Dissipation Devices Used for Seismic Protection of Structures Fănel Dorel Șcheaua	60 - 67
• Theoretical Aspects Regarding the Development of a Method for Internal Volume Determination of Externally Geared Pumps Ionela-Mihaela Popescu, Mihai Avram, Victor Constantin, Alexandra-Gabriela Vasilescu, Bogdan Grămescu	68 - 75
• Solutions for Wind Resource Estimation on Different Terrain Models Fănel Dorel Șcheaua	76 - 82
• Method and Means of Testing Low-Head Hydraulic Turbines Teodor Costinel Popescu, Alina-Iolanda Popescu, Rareș-Andrei Chihaia	83 - 89
• Using Modern CAD-CAE Design Methods to Design a Seeder for Direct Sowing into Meadow Field Ștefan Dumitru, Nicolae-Valentin Vlăduț, Eugen Marin, Dragoș Manea, Radu-Iulian Rădoi	90 - 97
• Practical Aspects regarding Implementation of PID Controller on a Programmable Logic Controller Marian Blejan, Robert Blejan	98 - 103
• Analysis of the Dynamic Behavior of the Hydraulic Vibration System of the Compactor Equipment, under Different Operating Conditions Daniel Sorin Miron, Carmen Nicoleta Debeleac	104 - 108
• Hydrogen Production via Steam Reforming of Natural Gas with Integrated Carbon Capture: A Brief Overview Mihaela Ionela Bian, Paula Veronica Ungureșan, Dan Opruța	109 - 114
• Efficiency of LED Bulbs Compared to Conventional Bulbs - Energy Consumption Study Emina Pašić, Nusret Imamović	115 - 122
• System for Recovering and Converting Potential Energy into Electrical Energy from a Digital Hydraulic Cylinder Ioan Pavel, Radu-Iulian Rădoi, Gabriela Matache, Ștefan-Mihai Șefu	123 - 127

• Using a New CAD-CAE Design Method for Designing a Microhydropower System for Hydro Energy Recovery Eugen Marin, Dragoș Manea, Iulian-Florin Voicea, Liliana Dumitrescu	128 - 136
• The Architecture of Intelligent Mechatronic System Used for Increasing the Neuromuscular Control Cristian Radu Badea, Sorin Ionuț Badea, Florentina Badea, Tudor Cătălin Apostolescu, Dana Mirela Văleanu	137 - 145
• Environmental Assessment of Floating Photovoltaic Systems Used in Irrigation in Dobrogea Region Gabriela Larisa Maravela, Sanda Budea	146 - 152
• Development and Laboratory Testing of a Digital Flow Control Unit Bogdan Tudor, Radu-Iulian Rădoi, Robert Blejan, Ioana Ilie, Ștefan Dumitru	153 - 158
• Electric Platform for Transporting Small Objects on Sustainable Construction Sites Cătălin Frâncu, Mihail Savaniu, Oana Tonciu	159 - 164
• Recovery of Potentially Toxic Compounds from Phosphoric Ester-Based Hydraulic Fluids (HFDR) Used in the Mining Industry Adriana Mariana Borș, Liliana Dumitrescu, Iuliana Găgeanu, Alina-Iolanda Popescu, Tudor Vasile Blaga	165 - 174
• Preliminary Steps for Investigating the Air Pressure Inside the Tyre Gabriel Sofrone, Gabriel Anghelache, Severus Olteanu	175 - 182
• Utilization of Manure from Poultry Farms Using the Pyrolytic Process Gheorghe Șovăială, Ioan Pavel, Gabriela Matache, Alina Popescu, Vasilica Ștefan	183 - 194
• Simcenter Amesim-Based Optimization of an Experimental Test Stand for Ultra-Low Head Hydraulic Turbines Optimization Alexandru-Polifron Chiriță	195 - 202
• Adhesion of Cold Gas-Sprayed Coatings and the Workability of the Applied Substrate Medard Makrenek, Wojciech Żórawski	203 - 214
• Considerations regarding the Implementation of Hydrostatic Transmissions in Wind Turbine Power Transmission Systems Liliana Dumitrescu, Alexandru-Polifron Chiriță, Radu-Iulian Rădoi, Ștefan-Mihai Șefu, Adriana Mariana Borș, Ionaș Cătălin Dumitrescu, Eugen Marin	215 - 219
