

## Obsah

<b>Lukáš BARTALSKÝ, Gabriel HULKÓ</b> Modeling and Design of Mechatronic Control Preheating Foundry Mold as a System with Distributed Parameters	<b>1</b>
<b>František FOJTÍK, Radim HALAMA</b> The Scalar, Vector and Tensor Fields in Theory of Elasticity and Plasticity	<b>13</b>
<b>Ján HALGAŠ, Rastislav PIRNÍK and Tomáš ŠARINA</b> Tracking of Vehicle Movement on a Parking Lot Based on Video Detection	<b>23</b>
<b>Daniel HIMR</b> Numerical Model of Air Valve For Computation of One-dimensional Flow	<b>29</b>
<b>Marián HRUBOŠ, Lenka HRUBOŠOVÁ, Aleš JANOTA</b> Expert System as Prevention of Falls in Medical Centers	<b>39</b>
<b>Jana JABLONSKÁ, Jiří KUKELKA, Matěj PETROVIČ</b> Flow in the Non-return Flap	<b>45</b>
<b>Pavel KALENDA, Libor NEUMANN</b> The Tilt of the Elevator Shaft of Bunker Skutina	<b>55</b>
<b>Jaroslav KRUTIL, František POCHYLÝ, Simona FIALOVÁ</b> CFD Modeling Two-phase Flow in the Rotationally Symmetric Bodies	<b>63</b>
<b>Marián LÁZÁR, Marta LENGYELOVÁ, Mária ČARNOGURSKÁ, Eubomíra ŠIRILLOVÁ</b> Refuse-derived Fuel Energy Recovery by Plasma Technology	<b>69</b>
<b>Martin MAŤAS, PAVOL NOVÁK, PAVOL BALCO</b> Analysing of Sealing Properties on a Bolted Joint with a Steel Gasket by Using Finite Element Method	<b>77</b>
<b>Dan PILBAUER, Jaroslav BUŠEK, Vladimír KUČERA, Tomáš VYHLÍDAL</b> Laboratory Set-up Design for Testing Vibration Suppression Algorithms with Time Delays	<b>87</b>
<b>Ján VACHÁLEK, Filip TÓTH, Pavol KRASŇANSKÝ, Eubomír ČAPUCHA</b> Design and Construction of a Robotic Vehicle with Omni-directional Mecanum Wheels	<b>97</b>