

CONTENT

FOREWORD.....	15
Dezső Jenei's memory	17
József András, József Kovács	
<i>The coal mining in Jiu valley at the beginning of the xx.th century.</i>	
<i>The age's up to date innovative technologies.....</i>	39
Levente Bakos	
<i>Study of CSR and health protection in dangerous industrial environments</i>	47
Enikő Bitay, László Márton, Norbert Mohácsi Bugárszki,	
Norbert Angi	
<i>Construction of an ancient grainmill – the rebirth of the treadmill</i>	55
László Dávid, Katalin György, András Kelemen	
<i>Comparisons between applied model predictive control, state dependent Riccati equation, and finite horizon discrete optimal control algorithms</i>	61
Gergely Dezső, Ferenc Szigeti	
<i>A study on chip formation by experiments and simulation</i>	75
Loránd Farkas, Lajos Losonczi	
<i>Embedded system and autonomous communication network development for measurement of biological signal</i>	81
Albert-Zsombor Fekete, László Jakab-Farkas	
<i>Development of an embedded partial pressure measuring system for use in reactive sputtering system</i>	87
Zoltán Forgó, Ferenc Tolvaly-Roșca	
<i>Modelling and analysis of Gantry type, parallel driven robot</i>	91
Ferdinand-Zsongor Gobesz, Lajos Kopenetz	
<i>Current issues of civil engineering education in Cluj-Napoca.....</i>	97

Csaba Gyenge	
<i>Modern technology for manufacturing the special worm gears transmissions.....</i>	107
Zoltán Kacsó, András Kelemen, Mária Imecs	
<i>Induction machine rotor flux identification using sliding mode observer.....</i>	113
Zoltán Kátai	
<i>Algo-rythmics for all.....</i>	121
Lajos Losonczi	
<i>New ways in non-invasive neurobiological signal recording.....</i>	127
László Ferenc Márton, Lóránd Kocsis, Norbert Katona, Péter Szigeti	
<i>New methods in biological signal processing</i>	139
Márton Máté, Dénes Holland	
<i>Aspects of the repartition of the meshed surface manifold by the meshing process of cylindrical gears with archimedean spiral shaped toothline</i>	153
György Orbán	
<i>The important proprieties of Pythagorean means, and its role in the architecture</i>	161
Judit Pásztor, Zoltán Forgó	
<i>Research about the kinematics and the dynamics of the subsoiler's working tool.....</i>	173
Izolda Popa-Müller, István Papp, András Kakucs	
<i>Needle and thread pulling mechanism's position examination with constraint equations</i>	179
Izolda Popa-Müller, István Papp, András Kakucs	
<i>Needle and thread pulling mechanism's Speed examination with constraint equations</i>	187
Sándor Selinger	
<i>GIS use in church history. GIS based event reconstruction of Transylvanian Unitarian Church history</i>	191

Csaba Szabó, Mária Imecs, Enikő Szőke Benk, János Jób Incze	
<i>Implementation of the double field-oriented control structure for sensorless cage induction motor.....</i>	199
János Talpas	
<i>Development of tourism – a manner to preserve the technical creation</i>	207
Károly Tihanyi, Péter Törzsök, János Dobránszky, Enikő Bitay	
<i>Microstructural characterization of Al-C composite wire.....</i>	213
Ferenc Tolvaly-Roșca, Zoltán Forgó	
<i>Comparative study of modern gear modelling methods</i>	219
Dániel Vajdics, Tünde Kovács-Coskun	
<i>Resistance spot welding effect in case of TRIP steel</i>	227
Géza Vekov, László Pokorádi	
<i>Questions regarding the description of the state of technical systems</i>	235
LIST OF AUTHORS	242