

LISTA LUCRĂRILOR ȘTIINȚIFICE
Șef de lucrări Dr. Ing. Komjaty Andrei

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A. Teza de doctorat:	
	KOMJATY Andrei, Programarea off-line a robotilor industriali pe baza modelului matematic al proceselor tehnologice de slefuire – Timisoara, 2009
B. Lucrări științifice publicate în reviste cotate ISI/WOS:	
B1	[2025] Muncut (Wisznovszky), Elena; Geroacs, Attila ; Erdodi, Geza; Culda, Lavinia ; Komjaty, Andrei , USING A VOLUME OF MERCURY [Hg] IN AN INERTIAL SYSTEM FOR TRANSFORMING ROTATIONAL MOTION INTO UNIDIRECTIONAL LINEAR MOTION, INGINERIA AUTOMOBILULUI, 2025-04-11, https://www.webofscience.com/wos/woscc/full-record/WOS:001460116200005
B2	[2024] Timofte, S; Korka, ZI ; Geroacs, A; Komjaty, A ; Bulzan, F, Dynamic Computation of an Innovative Device for Reducing Reaction Torque, Computation (Computation), Volume 12, Issue 11, FI=1,9, Q2, 2024-12-03, DOI 10.3390/computation12110219, https://www.webofscience.com/wos/woscc/full-record/WOS:001364149100001
B3	[2024] Elena Stela WISZNOVSZKY, Attila GERÖCS, Lavinia Ioana CULDA, Andrei KOMJATY , Geza-Mihai ERDODI, Aurel Mihail TITU ,CHAIN TRANSMISSION MECHANISM USED TO REDUCE THE REACTION MOMENT FOR MACHINERY THAT PERFORMS ROTATIONAL MOVEMENT AROUND ITS OWN, Acta Technica Napocensis. Series: Applied Mathematics, Mechanics and Engineering, Vol 67, No. 4 Page, 2024, ISBN 1221-5872, FI=0,2 https://atna-mam.utcluj.ro/index.php/Acta/article/view/2478
B4	[2023] Andrei KOMJATY , Attila GERÖCS, Elena WISZNOVSZKY, Lavinia CULDA, SYSTEM FOR TRANSFORMING ROTATIONAL MOTION INTO UNIDIRECTIONAL LINEAR MOTION ITH THE HELP OF WEIGHTS MOUNTED ON RADIALLY SLIDING RODS, FOR AUTOMOTIVE, Ingineria automobilului Nr. 68 / septembrie 2023, ISSN 1842 – 4074, pag 16- 19, FI=0.3, https://www.webofscience.com/wos/alldb/full-record/WOS:001101879400004
B5	Geröcs, A ; Muncut (Wisznovszky), Elena); Komjaty, A ; Lile, R; Bíró, I, Kinematic and Dynamic Study of an Inertial System Transforming Rotational Motion into Unidirectional Linear Motion, TEHNICKI VJESNIK-TECHNICAL GAZETTE, FI= 1 , Volume 30, Issue 3, Page 980-987, DOI10.17559/TV-20220915105456, Published APR 2023, WOS:000975513400036, ISSN 1330-3651, eISSN 1848-6339, IDS Number E4UR1.
B6	Adrian Marcel MORARIU, Dan Ovidiu GLAVAN, Elena MUNCUT (WISZNOVSZKY), Ioan RADU, Andrei KOMJATY, COMPARARTIVE STUDY BETWEEN PROGRAMMING IN A DESIGN PROGRAM

	AND A CNC PROGRAM , Acta Technica Napocensis. Series: Applied Mathematics, Mechanics and Engineering, Vol 65, No 1 Page 133-142 SI (FEB 2022), ISBN 1221-5872 / 2022, FI=0.07
C. Lucrări prezentate în cadrul unor conferințe de profil fiind publicate în proceedings-uri indexate SCOPUS:	
C1	Geröcs Attila, Wisznovszky (Muncut) Elena Stela, Dan Ovidiu Glavan, Komjaty Andrei , Muller Valentin, Erdodi Geza-Mihai, Lavinia Culda, Mathematical and graphical modelling of an inertial system that uses the force of inertia of a liquid, mechanical engineering technology , International Engineering Conference, ANNUAL SESSION OF SCIENTIFIC PAPERS "IMT Oradea 2022", Data publicării 2022/10/1, Volumul 1256, Numărul 1, Pagini 012005, doi:10.1088/1757-899X/1256/1/012005
C2	Magdalena Simona FOGORASI, PhD., Andrei KOMJATY, PhD. , Adina BUCEVSCHI, PhD., Ionel BARBU, PhD., e-learning – a Tool for Exploitation of Textile Tensile Testing Machine, The 16th International Scientific Conference eLearning and Software for Education Bucharest, April 30th - May 1st, 2020,
C3	BARBU, Ionel; KOMJATY, Andrei ; FOGORASI, Magdalena Simona; CULDA, Lavinia; BUCEVSCHI, Adina; KAMINSZKY, Teaching And E-Learning About Open-End Spinning Machine, The 16th International Scientific Conference eLearning and Software for Education Bucharest, April 30th - May 1st, 2020,
C4	E. S. MUNCUT, G. M. ERDODI, L. I. CULDA, A. KOMJATY , C. SIRGHIE, Determination Of Speed And Acceleration For A Plane Mechanism With The Instantaneous Rotation Center Method And Euler's Graf-Analytical Method Using Autocad Mechanical., The 16th International Scientific Conference eLearning and Software for Education Bucharest, April 30th - May 1st, 2020,
D. Lucrări publicate în reviste indexate BDI	
D1	Attila Geröcs, Andras Komjaty , Wisznovszky (Muncut) Elena, Erdodi Geza Mihai, Culda (Săbăilă) Lavinia Ioana, Analytical investigation of inertial drive and its application possibilities in vehicle propulsion , Jelenkori társadalmi és gazdasági folyamatok, Vol. 20, No. 4 (2025) Technical and energy innovations, https://ojs.bibl.u-szeged.hu/index.php/jelenkori_tars-gazd_folyamatok/article/view/46420
D2	Geröcs Attila, KomjátýAndrás , Wisznovszky (Muncuť) Elena Stela, REAKCIÓNYOMATÉK CSÖKKENTŐ RENDSZER , Jelenkori társadalmi és gazdasági folyamatok, (2025) XX. évfolyam, 3. szám, pp. 75–84.ISSN 1788-7593 (Nyomtatott) DOI: https://doi.org/10.14232/jtgf.2025.3.75-84 ISSN 2676-9867 (Online), https://ojs.bibl.u-szeged.hu/index.php/jelenkori_tars-gazd_folyamatok/article/view/46418/45587
D3	Attila Geröcs, Elena Stela Wisznovszky, Andrei Komjaty, Inertia system (inertia

	system) for converting back-and-forth motion on a semicircular track into unidirectional linear motion (Tehetatlenségi rendszer (inerciarendszer) a félkör pályán történő oda-vissza mozgás egyirányú lineáris mozgássá való alakításához), , Journal of the Institute of Engineering Management and Economics of the Faculty of Engineering of the University of Szeged, ISSN 1788-7593 / Print, ISSN 2676-9867 / Online, jun 21, 2023 , DOI: https://doi.org/10.14232/jtgf.2023.kulonszam.173-182
D4	Gerőcs Attila – Komjátý András – Wisznovszky Elena Stela – Erdődi Géza Mihai – Cúlđa Lavinia Ioana, INERCIÁLIS HAJTÓMŰ ANALITIKUS VIZSGÁLATA ÉS ALKALMAZÁSI LEHETŐSÉGEI A JÁRMŰMEGHAJTÁSBAN, 2025
D5	Cúlđa, Lavinia Ioana; Muncut, Elena Stela; Komjátý, Andrei , ROBOTS E-LEARNING AND USE OF LEGO KITS WHEN BUILDING HEXAPOD, ISSN-L: 1453-2069; PRINT ISSN: 1453-2069; ONLINE ISSN: 2359-985, 2021

E. Cereri de brevete de invenție depuse la OSIM:

E1	[2025] Patent 1. <u>GEROCS A</u> ; <u>KOMJATY A</u> ; <u>WISZNOVSZKY E S</u> ; <u>BIRO I</u> ; <u>LILE R</u> , Module subassembly for preventing cylinder ovalization in internal combustion engines of ships, submarines and diesel locomotives, in which kinematic linkage is carried out by reciprocating rods mounted with one end on cranked semi-shafts and with other ends on common piston, Nr. RO138312-A2 https://www.webofscience.com/wos/diidx/full-record/DIIXW:2025714628
E2	[2025] Patent 2. <u>GEROCS A</u> ; <u>KOMJATY A</u> ; <u>WISZNOVSZKY E S</u> , Inertial system for converting rotation motion into unidirectional linear motion by using a volume of mercury, has cam whose profile is set according to relationships set in documentation by rotating entire cylinder assembly and vessel, NR. Brevet 138214(A2) https://www.webofscience.com/wos/alldb/full-record/DIIXW:202569704V
E3	[2025] Patent 3. <u>GEROCS A</u> ; <u>LILE R</u> ; <u>KOMJATY A</u> ; <u>WISZNOVSZKY E S</u> System for removing reaction moment by lever and gear with cylindrical gears, has cylindrical gear wheel with internal teeth that is designed in such way that hollow cylinder is made whose active portion comes into contact with roller mounted on one end of lever on opposite side of teeth, nr. Brevet 137976 https://www.webofscience.com/wos/alldb/full-record/DIIXW:202566949R

E1. Cereri de brevete de invenție eliberate de la OSIM

Radu Dana Gina, Sirghe Cecilia **Komjátý Andrei**, Patrut Ionel, Maxi Rodica, Linie integrata de topire-epurare pentru prelucrarea tulpinelor de canepa, Brevet nr. 133182, 30.10.2024.

F. Cărți publicate:

F1	Komjátý Andrei , Programarea Off-line a robotilor industriali pe baza modelului matematic al proceselor tehnologice de slefuire, Teze de doctoratale UPT, seria 8, nr 23, ISSN 1842-8967, Editura Politehnica.
F2	Dan Sobol, Adriana Motica, Andrei Komjátý , Dezvoltarea turbinelor verticale (VAWT). Concepte noi de turbomasini, ISBN 978-360-66-88-09-8, Editura Rebeca,

	2025.

Data, 17.01.2026

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