

LISTA LUCRĂRILOR ȘTIINȚIFICE SUB AFILIEREA

Universității „Aurel Vlaicu” din Arad

Elena Stela Wisznovszky

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Teza de doctorat

Contribuții la **Optimizarea procesului de sudobrazare MIG/MAG-CMT a îmbinărilor disimilare din table subțiri**,

Conducător Științific: Prof. Dr. ing. Dorin Dehelean – susținută în 29.01.2013 la Universitatea Politehnica din Timișoara.

A1 - ACTIVITATEA DIDACTICĂ ȘI PROFESIONALĂ

A1.1 Cărți și capitole în cărți de specialitate

1.1.1. Cărți/manuale/monografii/ capitole de specialitate ca autor

1.1.1.2 Naționale (Ed.recunoscute CNCSIS);

1.1.1.2.1 E. MUNCUȚ, Gh. Sima, D. Mortoiu, Sisteme de fabricație flexibile-Roboți industriali, Ed. Universității Aurel Vlaicu, 2013, ISBN 978-973-752-670-0, pagini 141.

1.1.1.2.2 E. MUNCUȚ, Optimizarea procesului de sudobrazare MIG/MAG-CMT a îmbinărilor disimilare din table subțiri, 130 pagini, Ed. Politehnica - Timisoara, 2013, ISBN 978-606-554-587-8, ISSN 1842-8967

1.1.1.2.3 Erdodi Geza-Mihai, MUNCUT ELENA-STELA, Babescu Marius, Autovehicule electrice si hibride, Editura Politehnica Timisoara, 2019, ISBN 978-606-35-0330-6, nr. pagini 241.

1.1.1.2.4 WISZNOVSZKY (MUNCUT) ELENA-STELA, Termeni și elemente introductive de statistică, Ed. Guttenberg Univers, Arad, Romania 2024, ISBN , pag 108.

A1.2. Alte materiale didactice . Material didactic / Lucrări didactice

1.2.1 Manuale didactice / Monografii

1.2.1.1 E. MUNCUȚ, Gh. Sima, B.F. Tănăsioiu, Dispozitive de asamblare a construcțiilor metalice, Ed. Guttenberg Univers, Arad, Romania 2017, ISBN 978-606-675-155-1, pag 189.

1.2.1.2 WISZNOVSZKY (MUNCUT) ELENA-STELA, Sima Gheorghe, Tehnologii de control în procedee industriale, Arad 2020, ISBN 978-606-675-292-3, nr. pagini 259.

1.2.1.3 Culda Lavinia Ioana, WISZNOVSZKY (MUNCUT) ELENA STELA, Geröcs Attila, Noțiuni introductive în roboți industriali, Editura Gutenberg Univers, 2023, ISBN 978-606-675-365-4, nr pagini 322

1.2.1.4 Wisznovszky Elena Stela, Erdodi Geza Mihai, Îndrumător de laborator pentru mecanica an 1 Inginerie, Arad, Ed. Gutenberg Univers, 2025, ISBN 978-606-675-428-6, nr. pagini

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A1.3. Coordonare de programe de studii, organizare și coordonare programe de formare continuă

1.3.1 Responsabil program de studii - Ingineria Sudării (Facultatea de Inginerie) – studii de licență

1.3.2 Presedinte Comisia de monitorizare, revizuire și actualizare a planului de învățământ

De la A1.4 Dezvoltare de noi discipline

1.4.1 Designul produselor sudate (2020-2021) anul II Ingineria Sudării

1.4.2 Verificarea procedeelor de sudare (2020-2021) anul IV Ingineria Sudării

1.4.3 Procedece neconvenționale de sudare (2020-2021) anul IV Ingineria Sudării

1.4.4 Tehnologii și echipamente de control (2021-2022) anul III Ingineria Sudării

1.4.5 Mecanizarea și automatizarea procedeelor de sudare (2020-2021) anul IV Ingineria Sudării

A1.5 Proiecte educaționale (Erasmus, Leonardo etc.) - Director/Responsabil/Membru

1.5.1. Titlul proiectului: „Parteneriat dezvoltat pentru CONSilierea și PRACTica Studenților în vederea creșterii angajabilității lor - CONPRACTIS” Contract nr. POSDRU/189/2.1/G/156607, Perioada 04.08.2015-29.12.2015, pentru funcția de **Responsabil de practică** COR 242104 - **Muncuț Elena**.

1.5.2 Titlul proiectului: Dezvoltarea competențelor de cercetare avansată și aplicată în logica STEAM + Health POCU/993/6/13/153310,,Contract nr. POSDRU/189/2.1/G/156607, Perioada 21.10.2022 pentru durata de 12 luni, pentru funcția de **Mentor postdoctorat - Wisznovszky (Muncuț) Elena**.

A2. ACTIVITATEA DE CERCETARE

A2.1 Articole în reviste cotate ISI Thomsom Reuters și în volume indexate ISI Proceedings

2.1.1 Reviste

[2022] Adrian Marcel MORARIU, Dan Ovidiu GLAVAN, **Elena MUNCUT (WISZNOVSZKY)**, Ioan RADU, Andrei KOMJATY, COMPARATIVE 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. <https://www.webofscience.com/wos/alldb/full-record/WOS:000773188500015>

[2023] Attila Geröcs, **Elena Muncut (Wisznovszky)**, Andrei Komjaty, Ramona Lile, István Bíró, Kinematic and Dynamic Study of an Inertial System Transforming Rotational Motion into Unidirectional Linear Motion, Technical gazette, Vol. 30 No. 3, 2023, pag. 980-987, FI=0,864, ISSN 1848-6339 (Online), ISSN 1330-3651 (Print), data 23.04.2023. <https://www.webofscience.com/wos/alldb/full-record/WOS:000975513400036>

[2023] Andrei KOMJATY, Attila GERÖCS, **Elena WISZNOVSZKY**, Lavinia CULDA, SYSTEM FOR TRANSFORMING ROTATIONAL MOTION INTO UNIDIRECTIONAL LINEAR MOTION WITH THE HELP OF WEIGHTS MOUNTED ON RADIALLY SLIDING RODS, FOR AUTOMOTIVE,

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Ingineria automobilului Nr. 68 / septembrie 2023, ISSN 1842 – 4074, pag 16- 19,
<https://www.webofscience.com/wos/alldb/full-record/WOS:001101879400004>

[2024] Lavinia Culda, **Elena Stela Muncut Wisznovszky** și Attila Gerőcs, SIMULATION OF FEEDING OF MACHINE TOOLS USING ROBOT ARMS, Acta Technica Napocensis. Series: Applied Mathematics, Mechanics and Engineering, Vol 67, No 3 Page, 411-418 SI (NOV 2024), ISBN 1221-5872.
<https://www.webofscience.com/wos/alldb/full-record/WOS:001340317100005>

[2024] **Elena Stela WISZNOVSZKY**, Attila GEROCS, 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. <https://atna-mam.utcluj.ro/index.php/Acta/article/view/2478>

[2024] Lavinia Culda, **Elena Stela Muncut Wisznovszky** și Attila Gerőcs, SIMULATION OF FEEDING OF MACHINE TOOLS USING ROBOT ARMS, Acta Technica Napocensis. Series: Applied Mathematics, Mechanics and Engineering, Vol- Numar Special, No IVPage, (NOV 2024), ISBN 1221-5872.

[2025] **Muncut (Wisznovszky), Elena**; Gerocs, 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>

[2025] **Elena Stela WISZNOVSZKY**, Aurel Ion PERIANU, Valentin MULLER, Geza-Mihai ERDODI, Destructive Examination of Solder Joints on an SMT Manufacturing Line, ACTA TECHNICA NAPOCENSIS, Vol. 68, Issue II Special, Series: APPLIED MATHEMATICS, MECHANICS, AND ENGINEERING, July, 2025, Both ISSN 1221 – 5872-L, pag.99-104,
<https://www.webofscience.com/wos/woscc/full-record/WOS:001652046500007>

[2025] Geza-Mihai ERDODI, **Elena Stela WISZNOVSZKY**, Valentin MULLER, Aurel Ion PERIANU, Study on Thermal Control of Technological Flow in Surface-Mount Technology Soldering of Electronic Components, ACTA TECHNICA NAPOCENSIS, Vol. 68, Issue II Special, Series: APPLIED MATHEMATICS, MECHANICS, AND ENGINEERING, July, 2025, Both ISSN 1221 – 5872-L, pag.105-110.,
<https://www.webofscience.com/wos/woscc/full-record/WOS:001652046500008>

2.1.2. Conferinte (Proceedings)

[2019] **ELENA-STELA MUNCUT**, Lavinia-Ioana Culda, Geza-Mihai Erdodi and Gheorghe Sima, THE WELDING PROGRAM OPTIMIZATION OF A S355 STEEL ASSEMBLY USED IN AGRICULTURAL MACHINERY, 9th INTERNATIONAL CONFERENCE ON MANUFACTURING

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SCIENCE AND EDUCATION -MSE 2019- June 5-7, Sibiu, Romania, vol. II,2019, Ed. a IX – a, ISSN 2559-2963, ISSN-L 2559-2963, MATEC Web of Conferences 290, 08014 (2019), EDP Sciences, DOI: 10.1051/mateconf/201929008014, 10 pags.<https://doi.org/10.1051/mateconf/201929008014> **WOS:000569367700104**

[2019]Lavinia-Ioana Culda, **ELENA-STELA MUNCUT** and Geza-Mihai Erdodi, THE ANALYSIS OF THE ROBOTIZED HANDLING OF OXYGEN GAS TANKS WITH THE HELP OF THE PETRI NETWORKS, 9th INTERNATIONAL CONFERENCE ON MANUFACTURING SCIENCE AND EDUCATION -MSE 2019- June 5-7, Sibiu, Romania, vol. II,2019, Ed. a IX – a, ISSN 2559-2963, ISSN-L 2559-2963, MATEC Web of Conferences 290, 08006 (2019), EDP Sciences, DOI: 10.1051/mateconf/201929008006, 9 pags.
<https://doi.org/10.1051/mateconf/201929008006> **WOS:000569367700096**

[2017]Gheorghe Sima, ELENA MUNCUT, Aurelia Tanasoiu and Adriana Motica, The Process of Weld Brazing CMT (Cold Metal Transfer Pulse) for Assembly of the Different Thin Sheets, The 21th edition of IManEE 2017 International Conference, 03 July 2017, Iasi, Romania, vol. 112 ISSN 2067-3604, <https://doi.org/10.1051/mateconf/201711203010> **WOS:000579349600045**

[2016]Gheorghe Sima, Ramona Lile, Glavan Dan and **ELENA MUNCUT**, MANAGEMENT, TRACEABILITY AND CONTROL OF INDUSTRIAL PROCESSES, Proceedings of the 6th International Workshop on Soft Computing Applications SOFA 2014, Volume 1, Series: Advances in Intelligent Systems and Computing, Vol. 357, Editors: Valentina E. Balas, Lakhmi C. Jain, Branko Kovačević, Springer Verlag, 2016, ISBN 978-3-319-18415-9 (ARC Cat. C, SCOPUS, ISI Proceedings), DOI:10.1007/978-3-319-18416-6_77
<https://www.webofscience.com/wos/woscc/full-record/> **WOS:000452854600021**

[2016] Sima Gheorghe, Dan Glăvan, Alexandru Popa, **ELENA MUNCUT**, HARD AS A ROCK OR DEFORMATION CONTROLLED? Proceedings of the 6th International Workshop on Soft Computing Applications SOFA 2014, Volume 2, Series: Advances in Intelligent Systems and Computing, Vol. 356, Editors: Valentina E. Balas, Lakhmi C. Jain, Branko Kovačević, Springer Verlag, 2016, ISBN 978-3-319-18295-7, WOS:000452853200011(ARC Cat. C, SCOPUS, ISI Proceedings), DOI: 10.1007/978-3-319-18296-4_11
<https://www.webofscience.com/wos/woscc/full-record/> **WOS:000452853200011**

2.2. Articole în reviste și volumele unor manifestări științifice indexate în alte baze de date internaționale

2.2.1 Reviste BDI/B+

[2025] Attila Geroacs, 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

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[2025] Geröcs Attila, KomjátýAndrás, **Wisznovszky (Muncuť) Elena Stela**, 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) **REAKCIÓNYOMATÉK CSÖKKENTŐ RENDSZER**
https://ojs.bibl.u-szeged.hu/index.php/jelenkori_tars-gazd_folyamatok/article/view/46418/45587

[2025] **Elena Stela Muncut**, Mihail Aurel Titu, Lavinia Ioana Culda, Geza Mihai Erdodi, TECHNOLOGICAL FLOW IN ULTRASONIC WELDING OF COPPER CONDUCTORS USED IN THE AUTOMOTIVE FIELD, Vol 29 No 2 (2025): Nonconventional Technologies Review, Print: ISSN 2359-8646, On-line: ISSN 2359-8654, pag.21-26, <https://www.revtn.ro/index.php/revtn/article/view/521/463>

[2025] **Elena Stela Muncut**, Mihail Aurel Titu, Lavinia Ioana Culda, Geza Mihai Erdodi, CLASSIC AND MODERN TECHNOLOGIES FOR THE DESIGN AND PROCESSING OF A PART WITH MEDIUM DIAMETERS BASED ON MEASUREMENTS IN 3D COORDINATES, Vol 29 No 2 (2025): Nonconventional Technologies Review, Print: ISSN 2359-8646, On-line: ISSN 2359-8654, pag.4-9, <https://www.revtn.ro/index.php/revtn/article/view/518/460>

[2023] Lavinia Culda, **Elena Stela Muncut (Wisznovszky)**, **RFID Technology in Production and Post Production for the Automotive Industry**, Robotica & Management, Vol. 28, No. 1, pp. 21-28, DOI: <https://doi.org/10.24193/rm.2023.1.3>, International Journal, ISSN-L: 1453-2069; Print ISSN: 1453-2069; Online ISSN: 2359-9855, <https://rm.reviste.ubbcluj.ro/issues/vol-28-no-1-june-2023/rfid-technology-in-production-and-post-production-for-the-automotive-industry/>

[2023] 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** (Tehetelenségi 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, jun 21, 2023, ISSN 1788-7593 / Print, ISSN 2676-9867/ Online, DOI: <https://doi.org/10.14232/jtgf.2023.kulonszam.173-182>, https://ojs.bibl.u-szeged.hu/index.php/jelenkori_tars-gazd_folyamatok/article/view/44427

[2022] **Muncut E.S.**, Culda L.I., **Automation of the process for obtaining the safety panel used on a road vehicle**, Robotica & Management, International Journal, ISSN-L: 1453-2069; Print ISSN: 1453-2069; Online ISSN: 2359-9855, Vol. 27, No. 1, June 2022, DOI: <https://doi.org/10.24193/rm.2022.1> <https://rm.reviste.ubbcluj.ro/issues/vol-27-no-1-june-2022/>

[2022] Stelica Timofte, Zoltan Korka, Attila Geröcs, **Elena Stela Muncut** and Camelia Rodica Sfetcu, **KINEMATIC AND DYNAMIC INVESTIGATION OF A NOVEL INERTIAL PROPULSION DRIVE**, Published August 2022, Analecta Technica Szegedinensia Vol. 16 No. 1(2022): pp. 27-32, Project: Inertial drives, DOI: 10.14232/analecta.2022.1.27-33, <https://www.analecta.hu/index.php/analecta/article/view/43901>

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[2021]**Elena Stela Muncuț**, Florin Pîrvu, PNEUMATIC ACTUATION OF LASER BEARING ENGRAVING STATION, Vol 25 No 4 (2021), Nonconventional Technologies Review, Published: 2021-12-31, ISSN 2359 – 8654; ISSN-L 2359 – 8646, pp.20-24, <https://revtn.ro/index.php/revtn/article/view/355>

[2020]Culda, Lavinia Ioana; **Muncut, Elena Stela**; Komjaty, Andrei, ROBOTS E-LEARNING AND USE OF LEGO KITS WHEN BUILDING HEXAPOD, Robotica & Management . Dec2020, Vol. 25 Issue 2, ISSN-L: 1453-2069; Print ISSN: 1453-2069; Online ISSN: 2359-9855 Editura Eftimie Murgu, Resita p12-17. 6p, http://robotica-management.uem.ro/fileadmin/Robotica/2020_2/RM_2020_2_Pag_12_Culda.pdf

[2019] Andrei Komjaty, **Elena Stela Muncut**, Geza Mihai Erdodi, FLEXIBLE ROBOTIC LINE FOR THE PROCESSING OF CAR RIMS AND PRODUCT IMPROVEMENT USING FINITE ELEMENT SIMULATION, Vol 23 No 4 (2019): Nonconventional Technologies Review, Dec 2019, Print: ISSN 2359-8646, On-line: ISSN 2359-8654. <https://revtn.ro/index.php/revtn/article/view/239>

[2019]**Elena Stela Muncut**, Bogdan Tănăsioiu, and Aurelia Tănăsioiu, Trasability of an automobile battery sensor assembly, Nonconventional Technologies Review, **June 2019**, Vol.23, Issue 2, Print: ISSN 2359 – 8646; ISSN-L 2359 – 8646; On-line: ISSN 2359 – 8654; ISSN-L 2359 – 8646, pag31-35, 5p., <https://revtn.ro/index.php/revtn/article/view/216>

[2019]Doina Mortoiu , Bogdan Tănăsioiu, Aurelia Tănăsioiu, **Elena Stela Muncut** and Lucian Gal, Choosing method of composite material for the production of vehicles hood, Nonconventional Technologies Review, **June 2019**, Vol.22, Issue 2, Print: ISSN 2359 – 8646; ISSN-L 2359 – 8646; On-line: ISSN 2359 – 8654; ISSN-L 2359 – 8646, pag31-35, 5p., <https://revtn.ro/index.php/revtn/article/view/217>

[2018] Daniel Dragu; Ioan Emeric Köles, **Elena Muncut**, The rise, shine and decay of topic maps, Nonconventional Technologies Review, June 2018, Vol.22, Issue 2, Print: ISSN 2359 – 8646; ISSN-L 2359 – 8646; On-line: ISSN 2359 – 8654; ISSN-L 2359 – 8646, pag31-35, 5p., <https://revtn.ro/index.php/revtn/article/view/56>

[2018]**Elena Stela Muncut**, Gheorghe Sima, Ioan Radu, Conceiving and implementation a workstation, Nonconventional Technologies Review, **Martie 2018**, Vol.22, Issue 1, Print: ISSN 2359 – 8646; ISSN-L 2359 – 8646; On-line: ISSN 2359 – 8654; ISSN-L 2359 – 8646, pag 8-12, 5p., <https://www.revtn.ro/index.php/revtn/article/view/64>

[2017]**Elena Stela Muncut**, Aurelia Tanasoiu and Valentin Muller, The modeling of the ultrasonic welding process of the airbag's sealing elements, Nonconventional Technologies Review, **Martie 2017**, Vol.21, Issue 1, Print: ISSN 2359 – 8646; ISSN-L 2359 – 8646; On-line: ISSN 2359 – 8654; ISSN-L 2359 – 8646, pag35-39, 5p., <https://www.revtn.ro/index.php/revtn/article/view/169>

[2014] Doina Mortoiu, Lucian Gal, **Elena Stela Muncut**, Odeta Belei, Study of optimum parameters of thermal plasma cutting, Nonconventional Technologies Review, „Politehnica” Publishing House volume XVIII no. **2/2014** Print: ISSN 2359 – 8646; ISSN-L 2359 – 8646; On-line: ISSN 2359 – 8654; ISSN-L 2359 – 8646, pag.27-33.

<http://www.revtn.ro/no2-2014.html>
https://openurl.ebsco.com/EPDB%3Aagd%3A6%3A29521590/detailv2?sid=ebsco%3Aplink%3Ascholar&id=ebsco%3Aagd%3A100601946&crl=c&link_origin=scholar.google.ro

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[2013] **Elena Stela Muncut**, Culda Lavinia Ioana, Sima Gheorghe, Mortoiu Doina, The study of increased height at MIG-CMT continuous or pulse combined braze-welding of the thin sheets of galvanized steel and aluminum, Nonconventional Technologies Review, „Politehnica” Publishing House volume XVII no. 2/2013 ISSN: 1454-3087, pag.46-50.

https://openurl.ebsco.com/EPDB%3Aacd%3A6%3A29521526/detailv2?sid=ebsco%3Aplink%3Ascholar&id=ebsco%3Aacd%3A100596925&crl=c&link_origin=scholar.google.ro

2.2.2. Volumele unor manifestări științifice indexate în alte baze de date internaționale

[2025]WISZNOVSZKY Elena Stela, Culda Lavinia Ioana, PERIANU Ion-Aurel, ERDODI G, Dissimilar Welding Process Flow Between a Low Alloy Steel Material S355J2+N And 42CrMo4 Used in the Aerospace Field, International Conference Innovative technologies for joining advanced materials - TIMA25 November 06-07, 2025

https://www.isim.ro/images/TIMA/TIMA25/251104%20-%20AGENDA%20TIMA_FINAL.pdf

[2025]Culda Lavinia Ioana, Wisznovszky Elena Stela and Erdodi Geza, PRINTING WITH THE METAL X PRINTER IN THE UNIVERSITY ENVIRONMENT, INTERNATIONAL CONFERENCE ICNcT, 2025, 24th Edition OF NONCONVENTIONAL TECHNOLOGIES 22th–24th October 2025, Timișoara, ISSN 2359-8654

http://artn.ro/conference2025/Programe/Program%20ICNcT%202025_21.10.2025_final%208pg_A5.pdf

[2025]Erdodi Geza, **Wisznovszky Elena Stela** and Culda Lavinia Ioana, DESCRIPTION AND OPTIMIZATION OF AN SMD PRODUCTION LINE: PROCESSES, THERMAL CONTROL AND AUTOMATED INSPECTION, INTERNATIONAL CONFERENCE ICNcT, 2025, 24th Edition OF NONCONVENTIONAL TECHNOLOGIES 22th–24th October 2025, Timișoara, ISSN 2359-8654

http://artn.ro/conference2025/Programe/Program%20ICNcT%202025_21.10.2025_final%208pg_A5.pdf

[2025] Geza Mihai ERDODI*, Lavinia Ioana CULDA, **Elena Stela Muncut (Wisznovszky)**, Using Unitree R1 Humanoid Robot in the Automotive, Industry The 3rd International Conference on Mechanical System Dynamics, Robotic system dynamics,

<https://www.bagevent.com/accountcenter/#/8296126/personalCenter>

[2023] Attila GERÖCS, Lavinia CULDA, **Elena Muncut WISZNOVSZKY**, Andrei KOMJATY, Designing an Inertial System for Transforming Rotational Motion into Unidirectional Linear Motion, Book Title: Acoustics and Vibration of Mechanical Structures — AVMS-2023, Book Subtitle: Proceedings of the 17th AVMS, Timișoara, Romania, May 26–27, 2023, Springer Proceedings Phys., Chapter 23, Vol. 302, ebook ISBN: 978-3-031-48086-7., https://link.springer.com/chapter/10.1007/978-3-031-48087-4_23

[2022]A Geröcs, **E Muncut (Wisznovszky)**, D Glăvan, A Komjaty, V Muller, GM Erdodi,L Culda, Mathematical and graphical modelling of an inertial system that uses the force of inertia of a liquid, Annual Session of Scientific Papers - IMT Oradea 2022, IOP Conf. Series: Materials

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Science and Engineering, 1256 (2022) 012005, doi:10.1088/1757-899X/1256/1/012005, <https://iopscience.iop.org/article/10.1088/1757-899X/1256/1/012005/pdf>

[2021] LI Culda, **ES Muncut (Wisznovszky)**, GM Erdodi, Transforming 3D printed CNC prototype into a plotter, The Annual Session Of Scientific Papers - IMT Oradea 2021, IOP Conf. Series: Materials Science and Engineering, doi:10.1088/1757-899X/1169/1/012013, <https://iopscience.iop.org/article/10.1088/1757-899X/1169/1/012013/pdf>

[2020] **Elena Muncut**, Geza Mihai Erdodi, Lavinia Culda, Andrei Komjaty, Cecilia Sirghie, DETERMINATION OF SPEED AND ACCELARATION 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 23-24, 2020 , DOI: 10.12753/2066-026X-22-140 | Pages: 420-434, <https://proceedings.elseconference.eu/index.php?paper=bcac72291e1e35ceb132b934e47da8ca>

[2019] **E S Muncut**, L I Culda, G M Erdodi and G Sima, 8D complaint solving method in an automotive component processing company, IOP Conference Series: Materials Science and Engineering, Volume 568, Annual Session of Scientific Papers "IMT ORADEA 2019", 30–31 May 2019, Oradea, Felix SPA, Romania, DOI 10.1088/1757-899X/568/1/012020, <https://iopscience.iop.org/article/10.1088/1757-899X/568/1/012020>

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[2013] Lavinia Ioana Culda, Elena Stela Muncuț, Gheorghe Sima, Doina Mortoiu, CAD/CAM Modeling and simulation, with the CATIA, ANNALS of the Oradea University, Fascicle of Mechanical and Technological Engineering, 2013 ISSN 1583-0691. <http://imtuoradea.ro/auo.fmte/files-2013-v1>

2.3. Articole in extenso în reviste/ Proceedings naționale/internaționale neindexate

2.3.1. Reviste naționale / internaționale neindexate. Se admit maxim două articole la aceeași ediție

2.3.2. Proceedings naționale / internaționale neindexate. Se admit maxim două articole la aceeași ediție

2.3.2.1. Gheorghe SIMA, **ELENA STELA MUNCUT**, Geza Mihai ERDODI, Levels of progressive bearings that occur in the manufacturing line, ISREIE Edition Arad 2019, 23-25 May, UAV Arad

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2.3.2.2 **ELENA STELA MUNCUT**, Ioan RADU, Geza Mihai ERDODI The production of steering wheels, ISREIE Edition Arad 2019, 23-25 May, UAV Arad

2.3.2.3 Sima Gh., **MUNCUT E.**, Tanasoiu A., Moțica A., „Thermite welding of aluminotermia”, Conferinta internationala – „International symposium research and education in innovation ERA 6th edition Arad, Romania, December 08-10, 2016.

2.3.2.4 Tanasoiu A., Sima Gh., **MUNCUT E.**, Moțica A., „Railway vehicles torsional rigidity” - „International symposium research and education in innovation ERA 6th edition Arad, Romania, December 08-10, 2016

2.4. Proprietate intelectuală, brevete de invenție și inovație etc.

2.4.1. Internaționale

2.4.2. Naționale (standarde omologate intern)

[2025] Patent 1. GEROCS A; KOMJATY A; WISZNOVSZKY E S; BIRO I; LILE R, 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

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[2025] Patent 2. GEROCS A; KOMJATY A; WISZNOVSZKY E S, 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)

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[2025] Patent 3. GEROCS A; LILE R; KOMJATY A; WISZNOVSZKY E S 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/allidx/full-record/DIIDX:202566949R>

[2025] Patent 4. GEROCS A; LILE R; WISZNOVSZKY E S, Inertial system for converting rotary motion into unidirectional linear motion using weights for e.g. motor vehicle, has chain wheel mounted on axle, and chain portion provided with disk-shaped weights that are mounted at bolts, nr. Brevet 137467

<https://www.webofscience.com/wos/allidx/full-record/DIIDX:202359086K>

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[2015] Contract de cesiune neexclusivă a drepturilor patrimoniale de autor nr. 623/25.02.2015, încheiat pentru perioada 2 martie – 31 septembrie 2015, cu CNIPMMR – filiala Arad(cesionar) și Muncuț Elena (cedent). Pentru cesiunea neexclusivă a drepturilor patrimoniale de autor în domeniul proiectării asistate pe calculator expuse sub forma de: studii, proiecte și documentațiile științifice, comunicări scrise și orale. Urmărit de susținerea a 100 ore de curs practic în „Proiectarea asistată pe calculator”.

2.5 Granturi/proiecte câștigate prin competiție sau contracte cu mediul socio-economic

[2024] Director de proiect Contract de cercetare științifică - Dezvoltare și consultanță ”Proiectarea unui laborator pentru curățarea filtrelor de particule folosite la motoare Diesel” Executant UAV din Arad nr. 5074/27.06.2024, Beneficiar Service Blue SRL nr. 119/26.06.2024. (5231.38Euro)

[2024] Membru în echipă Contract de cercetare științifică - Dezvoltare și consultață ”Proiectarea unui laborator pentru recondiționarea turbosufletelor” Executant UAV din Arad nr. 5073/27.06.2024, Beneficiar Service Blue SRL nr. 118/26.06.2024. (5231.38Euro)

[2010] Sudobrazarea cu arcul electric, în mediu de gaze protectoare ISIM Timișoara, Perioadă derulare 01.03.2009 – 15.11.2010, PN 09-160103, director proiect: ing. Draguț Lucian, Participare colectiv ing. Muncuț Elena Stela

[2005] Studiul privind tehnologiile de sudare necesare elaborării și reparării ansamblurilor sudate, beneficiar CET Arad SA, nr. 378 / 27.01.2005, respectiv nr.29 / 01.02.2005, Val. 20.050 mii lei. F. TUSZ - responsabil de contract - Colaboratori G. MESZAR, Muncuț Elena Stela

A3 Recunoașterea și impactul activității

3.3 Membru în colectivele de redacție sau comitete științifice ale revistelor și manifestărilor științifice, organizator de manifestări științifice/ Recenzent pentru reviste și manifestări științifice naționale și internaționale

3.3.1. Indexate ISI

3.3.2 Indexate BDI

[2023] Ms. Ref. No.: ISM 2023-2397 Title: Autonomous Fault Monitoring for Efficient Multi-Actuator Compressed Air Systems: Data Analytics of Demand-Oriented Parameters 5th International Conference on Industry 4.0 and Smart Manufacturing - ISM 2023

3.3.3. Naționale și internaționale neindexate

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3.3.3.1 Membru in comitetul de organizare al manifestărilor științifice, co-organizator de manifestări științifice naționale, neindexate

3.3.3.1.1 Membru in colectivul de organizare The 19th Edition of the International Students Scientific Communications Session of the Engineering Faculty of Aurel Vlaicu University from Arad , Editia XXV - 7-8 Iunie 2023, ARAD, ROMANIA
<https://cdn.uav.ro/documente-inginerie/Manisfestari-Studentesti/Program-Sesiunea-studenti-XXV-2023.pdf/>

3.3.3.1.2 Membru in colectivul de organizare -Sesiunea Internațională de comunicări științifice studențești a Facultății de Inginerie UAV, ediția XXIV – 2022, ARAD, 15-16 June 2022
<https://cdn.uav.ro/documente-inginerie/Manisfestari-Studentesti/Program-Sesiunea-studenti-XXIV-2022.pdf>

3.3.3.1.3 Membru in colectivul de organizare Sesiunea internationala de comunicari stiintifi ce studentesti a Facultatii de Inginerie din cadrulUniversitatii "Aurel Vlaicu" din Arad, editia a XXIII-a,2021 ARAD, ROMANIA

3.3.3.1.4 Membru in colectivul de organizare The 22th Edition of the International Students Scientific Communications Session of the Engineering Faculty of Aurel Vlaicu University from Arad June 27 2020, ARAD, ROMANIA
https://issscarad2020.webnode.ro/?fbclid=IwAR1cyWaAfnJinOjCIJMlsLk-GyXeHIS_rYuyJwoi4NL94ZICG2v_9_4hwGc

3.3.3.1.5 Membru in colectivul de organizare The 21th Edition of the International Students Scientific Communications Session of the Engineering Faculty of Aurel Vlaicu University from Arad 17 -19 Iunie 2019, ARAD, ROMANIA
<https://sicssarad2019.webnode.ro/comitet/>

3.3.3.1.6 Membru in colectivul de organizare The 20th Edition of the International Students Scientific Communications Session of the Engineering Faculty of Aurel Vlaicu University from Arad 7-9 Iunie 2018, ARAD, ROMANIA
<https://sicssarad2018.webnode.ro/comitet/>

3.3.3.1.7 Membru in colectivul de organizare The 19th Edition of the International Students Scientific Communications Session of the Engineering Faculty of Aurel Vlaicu University from Arad June 6-8 Iunie 2017, ARAD, ROMANIA
<https://sesiunea-de-comunicari-stiintifice-studentesti.webnode.ro/comitet/>
<https://issscarad2021.netlify.app/>

3.6. Membru în academii, organizații, asociații profesionale de prestigiu, naționale și internaționale, apartenența la organizații din domeniul educației și cercetării

3.6.4. Asociații profesionale

3.6.4.1. Internaționale

3.6.4.2. Naționale

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MEMBRU ASR DIN 2001- PRESENT
MEMBRU ÎN ASOCIAȚIA ROMÂNĂ PENTRU TEHNOLOGII ALTERNATIVE
SIBIU –ARTA DIN 2021 PRESENT
MEMBRU IN SIAR DIN ANUL 2022- PRESENT

14.01.2026

Wisznovszky Elena Stela

