

**LIST OF SCIENTIFIC WORKS**  
**on the whole activity**  
**Lecturer PhD. Geza-Mihai Erdodi**

**A. Doctoral thesis**

Lucrare cu titlul: **Cercetări în dinamica agregatelor aeroelectice**,  
Conducător Științific: Prof. Dr. ing. Liviu Bereteu – susținută în 05.05.2017 la Universitatea  
Politehnica din Timișoara, în domeniul Inginerie Mecanică.

**B. Books and chapters in books**

[2017] Geza-Mihai Erdodi, **Cercetări în dinamica agregatelor aeroelectice**, Ed. Politehnica,  
Seria 9: Inginerie Mecanică, nr. 178, ISSN: 1842-4937. ISBN 978-606-35-0178-4, nr. pag. 277,  
2017

[2019] Erdodi Geza-Mihai, Muncut Elena-Stela, Babescu Marius, **Autovehicule electrice si  
hibride**, Editura Politehnica Timisoara, 2019, nr. pagini 241, ISBN 978-606-35-0330-6

**C. ISI/BDI indexed works**

**C.1 ISI Journal**

[2017] Mihon, Nicolae Liviu; **Erdodi, Geza-Mihai**; Lontis, Nicolae Stelian, **Diagnosis of  
the unit injection pump's elements**, Ingineria Automobilului Issue:42, Published: MAR 2017,  
pages: 23-26., <http://siar.ro/wp-content/uploads/2017/03/ria42-nr-42-2017-martie.pdf>,  
<https://www.webofscience.com/wos/woscc/full-record/WOS:000409240200010>

[2020] Mihaela-Codruta Ancuti, Mihaela-Codruta Ancuti, Sorin Musuroi ,Ciprian  
Sorandaru, Marian Dordescu and Geza Mihai Erdodi, **Wind Turbines Optimal Operation at  
Time Variable Wind Speeds**, APPLIED SCIENCES-BASEL, Volume: 10, Issue: 12,  
Article Number: 4232, Published: JUN 2020, IF 2.474, ISSN:eISSN:2076-3417,  
<https://www.mdpi.com/2076-3417/10/12/4232> , <https://doi.org/10.3390/app10124232> ,  
<https://www.webofscience.com/wos/woscc/full-record/WOS:000554583800001>

[2024] Lavinia Cuda, Elena Stela Wisznovszky, **Erdodi, Geza-Mihai**, **SMART  
LABELLING, MORE CONTROL OVER AUTOMATED CAR PRODUCTION**,  
Ingineria automobilului, nr.72/septembrie 2024, ISSN 1842-4074, pp23-27.

**Isi** [2024] Elena Stela WISZNOVSZKY, Attila GEROCS, Lavinia Ioana CULDA, Andrei KOMJATY, ERDODI, Geza-Mihai, **CHAIN TRANSMISSION MECHANISM USED TO REDUCE THE REACTION MOMENT FOR MACHINERY THAT PERFORMS ROTATIONAL MOVEMENT AROUND ITS OWN**, Series: Applied Mathematics, Mechanics, and Engineering, Vol. XX, Issue 2, sept., 2024.

## **C.2 Scientific works published in the volumes of scientific events (Proceedings) indexed Web of Science-WoS (ISI) Proceedings**

**Isi** [2018] Ioan Zaharie, Marius Dudu and Geza-Mihai Erdodi, **The functioning of a Wind System at its maximum power – SACI 2018**, 12<sup>th</sup> IEEE International Symposium on Applied Computational Intelligence and Informatics, Timișoara, Romania, 978-1-5386-4640-3/18/©2018 IEEE, May 17 – 19, 2018, <https://ieeexplore.ieee.org/document/8440955> , DOI: 10.1109/SACI.2018.8440955, <https://www.webofscience.com/wos/woscc/full-record/WOS:000448144200101>

**Isi** [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, <https://doi.org/10.1051/mateconf/201929008006>  
[https://www.matec-conferences.org/articles/mateconf/pdf/2019/39/mateconf\\_mse2019\\_08006.pdf](https://www.matec-conferences.org/articles/mateconf/pdf/2019/39/mateconf_mse2019_08006.pdf),  
<https://www.webofscience.com/wos/woscc/full-record/WOS:000569367700096>

**isi** [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 SCIENCE AND EDUCATION -MSE 2019- June 5-7, Sibiu, Romania, vol. II,2019, Ed. a IX – a, ISSN 2559-2963, ISSN-L 2559-2963, DOI10.1051/mateconf/201929008014,  
[https://www.matec-conferences.org/articles/mateconf/pdf/2019/39/mateconf\\_mse2019\\_08014.pdf](https://www.matec-conferences.org/articles/mateconf/pdf/2019/39/mateconf_mse2019_08014.pdf) ,  
<https://www.webofscience.com/wos/woscc/full-record/WOS:000569367700104>

### C.3 Scientific works published in specialist journals indexed BDI (with BDI specification)

[2014]. Horia Ciocarlie, Florica Balog, Gheza-Mihai Erdodi, Marius Babescu, „**Basic specification regarding the wind power systems control**”, INTERNATIONAL JOURNAL OF COMPUTERS & TECHNOLOGY/ ISSN 2277-3601, Vol 12, No. 9, Page(s): 3927- 3944, 2014., ISSN 2277-3601, DOI: <https://doi.org/10.24297/ijct.v12i9.2834> , <https://rajpub.com/index.php/ijct/article/view/2834>

[2014] Florica Balog, Horia Ciocarlie, Marius Babescu, Gheza-Mihai Erdodi, “**The Dynamics of Wind System at the Optimum Load**”, Buletinul Institutului Politehnic din Iasi, Publicat de Universitatea Tehnică „Gheorghe Asachi” din Iasi, Tomul LX (LXIV), Fasc. 2, 2014, Sectia Automatică si Calculatoare, 2014., [https://ac.tuiasi.ro/wp-content/uploads/2019/09/Abstract\\_fasc2\\_2014\\_link.pdf](https://ac.tuiasi.ro/wp-content/uploads/2019/09/Abstract_fasc2_2014_link.pdf)

### C.4 Scientific works published in the volumes of scientific events (Proceedings) indexed by BDI (with BDI specification)

[2014] Gheza-Mihai Erdodi; Doru-Ionut Petrescu; Ciprian Sorandaru; Sorin Musuroi, **The determination of the maximum energetic zones for a wind system, operating at variable wind speeds**, 18th International Conference on System Theory, Control and Computing (ICSTCC), Sinaia 2014, Pages: 256 - 261, DOI: 10.1109/ICSTCC.2014.6982425, indexat IEEE Explore, DOI:10.1109/ICSTCC.2014.6982425, <https://ieeexplore.ieee.org/document/6982425>

[2014] Horia Ciocarlie; Florica Balog; Gheza-Mihai Erdodi; Doru-Ionut Petrescu, **Peak energy determination by a sample at idle mode operation**, 2014 IEEE 9th IEEE International Symposium on Applied Computational Intelligence and Informatics (SACI), Pages: 295 - 298, DOI: 10.1109/SACI.2014.6840080, , indexat IEEE Explore, <https://ieeexplore.ieee.org/abstract/document/6840080/similar#similar>, DOI:10.1109/SACI.2014.6840080

[2015] Ciprian Sorandaru, Sorin Musuroi, Mihaela-Codruta Ancuti, Gheza-Mihai Erdodi, Doru-Ionut Petrescu, **The Control of the Wind Power Systems by Imposing the DC Current**, 10th Jubilee IEEE International Symposium on Applied Computational Intelligence and Informatics, May 21-23, 2015, Timisoara, Romania, pp. 259-264, ISBN: 978-1-4799-9910-1, <https://ieeexplore.ieee.org/document/7208209>, DOI:10.1109/SACI.2015.7208209.

[2015] Sorin Musuroi, Ciprian Sorandaru, Gheza-Mihai Erdodi, Doru-Ionut Petrescu, **Wind System with Storage in Electrical Accumulators**, The 9th International Symposium on

ADVANCED TOPICS IN ELECTRICAL ENGINEERING, Bucharest, May 7-9, 2015, ISBN: 978-1-4799-7514-3/15, ISBN: 978-1-4673-8093-5, pag. 797-802, <https://ieeexplore.ieee.org/document/7133911>, DOI: 10.1109/ATEE.2015.7133911, WOS:000368159800147

[2015] Cristian-Paul Chioncel; Gheza-Mihai Erdodi; Doru-Ionut Petrescu; Elisabeta Spunei; Nicoleta Gillich, **Control of wind power systems imposing the current in the intermediate circuit of the converter at variable wind speed**, The 9th International Symposium on ADVANCED TOPICS IN ELECTRICAL ENGINEERING, Bucharest, May 7-9, 2015, ISBN: 978-1-4799-7514-3/15, ISBN: 978-1-4673-8093-5, pag. 923-928, <https://ieeexplore.ieee.org/document/7133934>, DOI: 10.1109/ATEE.2015.7133934, WOS:000368159800171

[2016] Ciprian Sorandaru; Sorin Musuroi; Mihaela-Codruta Ancuti; Gheza-Mihai Erdodi; Doru-Ionut Petrescu, **Equivalent power for a wind power system**, 2016 IEEE 11th International Symposium on Applied Computational Intelligence and Informatics (SACI), Date of Conference: 12-14 May 2016, DOI: [10.1109/SACI.2016.7507374](https://doi.org/10.1109/SACI.2016.7507374), Pages: 225 – 228, <https://ieeexplore.ieee.org/document/7507374>, DOI: 10.1109/SACI.2016.7507374

[2016] Florica Balog, Horia Ciocarlie, Marius Babescu, Gheza-Mihai Erdodi, “**Equivalent speed and equivalent power of the wind systems working at variable wind speed**”, Scopus, Advances in Intelligent Systems and Computing, Volume 357, Pages 1325-1336, 2016, [https://link.springer.com/chapter/10.1007/978-3-319-18416-6\\_106](https://link.springer.com/chapter/10.1007/978-3-319-18416-6_106)

[2016] Horia Ciocarlie, Florica Balog, Gheza-Mihai Erdodi, Doru-Ionut Petrescu, “**Behavior of the wind systems optimally controlled at variable wind speeds**”, Scopus, Advances in Intelligent Systems and Computing, Volume 357, Pages 1337-1351, 2016, <https://www.springerprofessional.de/en/behavior-of-the-wind-systems-optimally-controlled-at-variable-wi/6844472?searchResult=7.%20Horia%20Ciocarlie&searchBackButton=true>

[2019] E S Muncut, L I Culda G M Erdodi and G Sima, **8D complaint solving method in an automotive component processing company**, International Conference ANNUAL SESSION OF SCIENTIFIC PAPERS “IMT Oradea 2019”, The Proceedings of Conference IMT Oradea 2019, ISSN 2501-5769(CD edition), pp 102-106. DOI: 10.15660/AUOFMTE.2019-1.3412 [https://imt.uoradea.ro/auo.fmte/files-2019-v1/20-S%20Muncut\\_8D%20complaint%20solving%20method%20in%20an%20automotive%20component%20processing%20company.pdf](https://imt.uoradea.ro/auo.fmte/files-2019-v1/20-S%20Muncut_8D%20complaint%20solving%20method%20in%20an%20automotive%20component%20processing%20company.pdf)

[2020] C P Chioncel, G Erdodi and O G Tirian, **Energy efficiency of wind power plants in various wind condition**, Journal of Physics: Conference Series, Volume 1781, International

Conference on Applied Sciences (ICAS 2020) 20-22 May 2020, Hunedoara, Romania, DOI 10.1088/1742-6596/1781/1/012035,

<https://iopscience.iop.org/article/10.1088/1742-6596/1781/1/012035/pdf>

[2020] Paul Chioncel Cristian; Geza-Mihai Erdodi); Dordescu, Marian, **Energy Losses at Wind Turbines Operating in Variable Wind Speed Conditions**, INTERNATIONAL SYMPOSIUM ON FUNDAMENTALS OF ELECTRICAL ENGINEERING (ISFEE), Published 2020, Indexed 2020-01-01, Document Type Proceedings Paper, <https://ieeexplore.ieee.org/document/9756167> , DOI:[10.1109/ISFEE51261.2020.9756167](https://doi.org/10.1109/ISFEE51261.2020.9756167)  
<https://www.mdpi.com/2076-3417/10/12/4232>

[2020] 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**, eLearning sustainment for never-ending learning Proceedings of the 16th International Scientific Conference "eLearning and Software for Education" Bucharest, April 30 - May 1, 2020 Volume 2, , Pages: 420-434, DOI: 10.12753/2066-026X-21-140

<https://proceedings.elseconference.eu/index.php?paper=bcac72291e1e35ceb132b934e47da8ca>

[2021] LI Culda, ES Muncut (Wisznovszky) and GM Erdodi, **Transforming 3D printed CNC prototype into a plotter**, IOP Conference Series: Materials Science and Engineering, Volume 1169, The Annual Session Of Scientific Papers (IMT Oradea 2021) 27th-28th May 2021, Oradea, Romania, DOI 10.1088/1757-899X/1169/1/012013, <https://iopscience.iop.org/article/10.1088/1757-899X/1169/1/012013/meta>

[2022] Ciprian Sorandaru; Mihaela-Codruta Ancuti; Sorin Musuroi; Marcus Svoboda; Valentin Muller; Mihai Geza Erdodi; Emil Ronald Edu, **Fundamental Issue for Wind Power Systems Operating at Variable Wind Speeds: the Dependence of the Optimal Angular Speed on the Wind Speed**, International Conference and Exposition on Electrical And Power Engineering (EPE), **Paginile**167-171, 2022, <https://ieeexplore.ieee.org/document/9959751>, DOI:[10.1109/EPE56121.2022.9959751](https://doi.org/10.1109/EPE56121.2022.9959751)

[2022] A Geröcs, E Muncut (Wisznovszky), D Glăvan1, A Komjaty, V Muller, GM Erdodi and L Culda, **Mathematical and graphical modelling of an inertial system that uses the force of inertia of a liquid**, IOP Conference Series: Materials Science and Engineering, Volume 1256, Annual Session of Scientific Papers (IMT Oradea 2022) 07/07/2022 - 08/07/2022 Baile Felix SPA, Oradea, Romania, **Volumul 1 Numărul 1256, Anul publicării 2022**, DOI: 10.15660/AUOFMTE.2022-1.3633

<https://imt.uoradea.ro/auo.fmte/files-2022->

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[2022] Ciprian Sorandaru; Mihaela-Codruta Ancuti; Sorin Musuroi; Marcus Svoboda; Valentin Muller; Mihai Geza Erdodi; Emil Ronal Edu, **Fundamental Issue for Wind Power Systems Operating at Variable Wind Speeds: the Dependence of the Optimal Angular Speed on the Wind Speed**, Published in: 2022 International Conference and Exposition on Electrical And Power Engineering (EPE), Electronic ISBN:978-1-6654-8994-2, USB ISBN:978-1-6654-8993-5, Print on Demand(PoD) ISBN:978-1-6654-8995-9, DOI: 10.1109/EPE56121.2022.9959751, <https://ieeexplore.ieee.org/document/9959751>

[2023] Florinel Butaru; Mihaela Codruta Ancuti; Geza Mihai Erdodi; Ciprian Sorandaru; Sorin Musuroi; Razvan Ancuti, **Wind System Control at Time-Varying Wind Speeds Using the Perturb and Observe Method**, Date Added to IEEE Xplore: 27 June 2023, DOI: 10.1109/SACI58269.2023.10158538, <https://ieeexplore.ieee.org/abstract/document/10158538>

#### **D. Works published in journals and conference volumes with referees (not indexed)**

[2019] 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, *Analele Univ. "Aurel Vlaicu" Arad*

[2019] Elena Stela MUNCUT, Ioan RADU, Geza Mihai ERDODI **The production of steering wheels**, ISREIE Edition Arad 2019, 23-25 May, UAV Arad, *Analele Univ. "Aurel Vlaicu" Arad*

[2019] Geza Mihai ERDODI, Elena Stela MUNCUT, Lavinia CULDA, Andrei Komjaty **Presentation of a robotic manufacturing line**, ISREIE Edition Arad 2019, 23-25 May, UAV Arad, *Analele Univ. "Aurel Vlaicu" Arad*

[2019] Lavinia CULDA, Andrei KOMJATY, Geza ERDODI, Stela MUNCUT, **Calibration in the company specializes in straightening components before performing heat treatments or machining**, ISREIE Edition Arad 2019, 23-25 May, UAV Arad, *Analele Univ. "Aurel Vlaicu" Arad*

#### Prizes

[2020] Premii ale Academiei Romane, AGIR, ASAS, AOSR, Academii de ramura

Premierea rezultatelor cercetării – articole - Cod depunere - PN-III-P1-1.1- PRECISI-2020-51358 data 2020-11-05, Instituția care a acordat premiul:UEFISCDI Subprogram 1.1 - Resurse Umane - Premierea rezultatelor cercetării - Articole, Competitia 2020 Rezultate evaluare Lista 4- Cereri premiere depuse pentru articole publicate in anul 2020\_02.12.2020\_

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Semnătura

