

Instituția de învățământ superior: **UNIVERSITATEA „LUCIAN BLAGA” DIN SIBIU**
Facultatea: **Inginerie**
Domeniul de licență: **Inginerie Industrială**
Programul de studii de licență: **Sisteme de producție digitale**
Perioada evaluării:

ANEXA 4.1

Nume Prenume: Racz Sever-Gabriel
Gradul didactic: Prof. univ.
Instituția unde este titular: Universitatea ”Lucian Blaga” din Sibiu
Facultatea: Facultatea de Inginerie
Departamentul: Mașini și Echipamente Industriale

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Contribuții la optimizarea performanțelor tehnologice ale unor elemente componente ale sistemului tehnologic de prelucrare prin presare la rece

B. Cărți și capitole în cărți publicate în ultimii 10 ani

1. **Racz, S.G.**, Biriș, C., Chicea A.L., *Proiectarea asistată a echipamentelor industriale*, Editura Universității „Lucian Blaga” din Sibiu, ISBN 978-606-12-1291-0, 216 pag, 2016
2. **Racz, S.G.**, Gîrjob, Claudia, *Sisteme hidraulice de acționare*, Editura Universității „Lucian Blaga” din Sibiu, ISBN 978-606-12-1292-7, 263 pag, 2016.
3. **Racz, S.G.**, *Sisteme de acționare hidropneumatice*, curs e-learning, ed. electronică, 150 pag, 2015
4. **Racz, S.G.**, *Grafică asistată de calculator*, curs e-learning, ediție electronică, 210 pag, 2014
5. **Racz, S.G.**, Tera, Melania, Chicea, Anca-Lucia, *Mașini și sisteme de prelucrare*, Îndrumar de laborator, Editura Universității „Lucian Blaga” din Sibiu, ISBN 978-606-12-1290-3, 189 pag., 2016.
6. **Racz, S.G.**, Gîrjob, C., Biriș, C., *Sisteme hidraulice de acționare*, Îndrumar de laborator, Editura Universității „Lucian Blaga” din Sibiu, ISBN 978-606-12-1293-4, 206 pag., 2016.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. O. Bologa, R.E. Breaz, **S.G. Racz**, M. Tera, V.Ș. Oleksik, *Using an adaptive neuro-fuzzy inference system (ANFIS) to calculate the vertical force in single point incremental forming*, International Journal of Computers Communications & Control, jurnal cotat Clarivate Analytics, (**FI 1.29/2017**), **autor corespondent** (acceptată spre publicare, ianuarie-februarie 2019)
2. **S.G. Racz**, R.E Breaz, M. Tera, C. Gîrjob, C. Biriș, A.L. Chicea, O. Bologa, *Incremental Forming of Titanium Ti6Al4V Alloy for Cranioplasty Plates—Decision-Making Process and Technological Approaches*, Metals 2018, 8(8), 626; <https://doi.org/10.3390/met8080626>, jurnal cotat Clarivate Analytics, **Q2 – zonă galbenă**, (**FI 1.704/2017**), WOS:000443616400062
3. O. Bologa, R.E. Breaz, **S.G. Racz**, *A Fuzzy-based Decision Support Tool for Engineering Curriculum Design*, International Journal of Computers Communications & Control, Volume: 10 Issue: 6 (December), pp. 803-811, ISSN 1841-9836, jurnal cotat Clarivate Analytics, (**FI 0.746/2015**), <http://univagora.ro/jour/index.php/ijccc/article/view/2071/581>, WOS:000364346600004
4. Chalal, H., **Racz, S.G.**, Balan, T., *Springback of Thick Sheet AHSS Subject to Bending Under Tension*, International Journal of Mechanical Sciences 59 (2012), ISSN 0020-7403, Elsevier Ltd., pp. 104-114, 2012, **Q1 – zonă roșie**, (**FI 2.481/2012**), **autor corespondent**
5. Oleksik, V., Pascu, A., Mara, D., Bologa, O., **Racz, G.**, Breaz, R., *Influence of geometric parameters on strain and thickness reduction in incremental forming process*, The 13th Conference on Metal Forming, Toyohashi - Japan, September 19-22, 2010, published on Journal “Steel Research International”, Vol. 81 (2010), Special Edition, nr. 9, Publishing Company: Verlag Stahleisen GmbH, ISBN 978-3-514-00754-1, pp. 930-933, 2010, jurnal cotat Clarivate Analytics, (**FI 0.453/2010**), WOS:000208594600230

6. Oleksik, V., Bologa, O., Breaz, R.E., **Racz, G.**, *Comparison between the numerical simulations of incremental sheet forming and conventional stretch forming process*, The 11th ESAFORM Conference on Material Forming, 23-25 April 2008, Lyon, France, Published in International Journal of Material Forming, ISSN 1960-6206 (Print) 1960-6214 (Online), Springer Paris DOI: 10.1007/s12289-008-0153-6, Vol. 1 (2008), Supplement 1, paper 433, jurnal cotat Clarivate Analytics, (FI) pp. 1187-1190, 2008, <http://www.springerlink.com/content/w287608252515270/>, WOS:000208613900296
7. Oleksik, V., Bologa, O., Breaz, R., **Racz, G.**, Găvrus, A., *Numerical simulations and experimental researches regards the precision of the incremental forming process*, The 12th Conference on Metal Forming, Krakow - Poland, September 21-24 2008, published on Journal "Steel Research International", No. 79 (2008), Special Edition, Volume 1, Publishing Company: Verlag Stahleisen GmbH, ISBN 978-3-514-00754-3, pp. 591-594, 2008, (FI 0.344/2008), WOS:000267944600082
8. O. Bologa, R.E. Breaz, **S.G. Racz**, *Using the Analytic Hierarchy Process (AHP) and fuzzy logic to evaluate the possibility of introducing single point incremental forming on industrial scale*, Proceedings of the 6th International Conference on Information Technology and Quantitative Management, Omaha, USA, published in Procedia Computer Science, Volume 139, 2018, pp. 408-416, <https://doi.org/10.1016/j.procs.2018.10.262>
9. Breaz R., **Racz G.**, *Using the modern CNC controllers capabilities for estimating the machining forces during the milling process*, Modern Technologies in Manufacturing (MTeM 2017 - AMaTUC), Cluj-Napoca, 2017, ISBN:978-2-7598-9027-9 / ISSN: 2261-236X, DOI: 10.1051/mateconf/201713704003, WOS:000426604200051
10. Breaz R., Bologa O., **Racz G.**, *Selecting between CNC milling, robot milling and DMLS processes using a combined AHP and fuzzy approach*, published in Procedia Computer Science, ISSN: 1877-0509, pp. 796-803, <https://doi.org/10.1016/j.procs.2017.11.439>, WOS:000426698300106
11. Breaz R., Bologa O., **Racz G.**, *Selecting industrial robots for milling applications using AHP*, published in Procedia Computer Science, ISSN: 1877-0509, pp. 346-353, <https://doi.org/10.1016/j.procs.2017.11.379>, WOS:000426698300046
12. C. Biriș, **G. Racz**, *Researches regarding the reducing of burr size by optimising the cutting parameters on a CNC milling machine*, 21st Innovative Manufacturing Engineering & Energy International Conference – IManE&E 2017, <https://doi.org/10.1051/mateconf/201711206004>
13. C. Girjob, **G. Racz**, *Study of the Formability of Laminated Lightweight Metallic Materials*, 8th International Conference on Manufacturing Science and Education – MSE 2017 "Trends in New Industrial Revolution", Volume 121, eISSN: 2261-236X, pp.
14. Vasile, R., **Racz, S.G.**, Bologa, O., *Experimental and numerical investigations of the steel sheets formability with hydroforming*, 4th International Conference on Computing and Solutions in Manufacturing Engineering (CoSME), Brasov, Romania, November 03-04, (2016), WOS:000393034000029
15. R.E. Breaz, **G.S. Racz**, M. Tera, O.C. Bologa, C. Biriș, *Making Mechatronics Study Programme at "Lucian Blaga" University of Sibiu Available for International Students*, INTED2016 Proceedings, 10th International Technology, Education and Development Conference, 7-9 March, 2016, Valencia, Spain, ISBN: 978-84-608-5617-7, ISSN: 2340-1079, doi: 10.21125/inted.2016.1330, pp. 1536-1543, WOS:000402738401086
16. M. Tera, R.E. Breaz, **G.S. Racz**, C. Girjob, A.L. Chicea, *Is Engineering a Male Specific Profession and how this Issue is Addressed at Lucian Blaga University Of Sibiu*, INTED2016 Proceedings, 10th International Technology, Education and Development Conference, 7-9 March, 2016, Valencia, Spain, ISBN: 978-84-608-5617-7, ISSN: 2340-1079, doi: 10.21125/inted.2016.1397, pp. 1907-1915, WOS:000402738401136
17. Crenganiș, M., Breaz, R., **Racz, G.**, Bologa, O., *Adaptive neuro-fuzzy inference system for kinematics solutions of redundant robots*, 6th International Conference on Computers Communications and Control (ICCCC), Oradea, 2016, pp. 271-276, (IEEE Explore), DOI: 10.1109/ICCCC.2016.7496773, WOS:000391251000043
18. Bologa, O., Breaz, R.E., **Racz, S.G.**, Crenganiș, M., *Decision-making Tool for Moving from 3-axes to 5-axes CNC Machine-tool*, lucrare prezentată la 4th International Conference on Information Technology and Quantitative Management (ITQM 2016), publicată în Procedia Computer Science, Volume 91, 2016, pp. 683–689, <http://dx.doi.org/10.1016/j.procs.2016.07.171>
19. R.E. Breaz, O.C. Bologa, **S.G. Racz**, A.L. Chicea, *Mechatronics – Objectives and Main Challenges of The Study Programme and How Are They Addressed at "Lucian Blaga" University of Sibiu*, 9th International Technology, Education and Development Conference INTED 2015, 2-4 March, 2015, Madrid, Spain, ISBN 978-84-606-5763-7, ISSN 2340-1079, pp. 3349-3358, <http://library.iated.org/view/BREAZ2015MEC>
20. Tera, M., Bologa, O., Breaz, R.E., **Racz, S.G.**, *Contributions Regarding Incremental Forming Process of Bimetallic Sheets*, Innovative Manufacturing Engineering International Conference, (IManE 2014), Chisinau, Moldova 29-30 May 2014, Applied Mechanics and Material, Applied Mechanics and Materials, ISSN 1660-9336, Vol 657, pp. 178-182, [doi: 10.4028/www.scientific.net/AMM.657.178](doi:10.4028/www.scientific.net/AMM.657.178)
21. Cotigă, C., **Racz, S.G.**, Bologa, O., Breaz, R.E., *Researches Regarding the Usage of Titanium Alloys in Cranial Implants*, Innovative Manufacturing Engineering International Conference, (IManE 2014), Chisinau, Moldova 29-30 May 2014, Applied Mechanics and Materials, ISSN 1660-9336, Vol 657, pp. 173-177, [doi: 10.4028/www.scientific.net/AMM.657.173](doi:10.4028/www.scientific.net/AMM.657.173)

22. Crenganis, M., Breaz, R.E., **Racz, G.**, Bologa, O., *Inverse Kinematics for a 7 DOF Robotic Arm Using the Redundancy Circle and ANFIS Models*, Innovative Manufacturing Engineering International Conference, (IManE 2014), Chisinau, Moldova 29-30 May 2014, Applied Mechanics and Materials, ISSN 1660-9336, Vol 657, pp. 823-828, [doi: 10.4028/www.scientific.net/AMM.657.823](http://doi.org/10.4028/www.scientific.net/AMM.657.823)
23. C. Girjob, O. Bologa, **G. Racz**, C. Biris, *The Metal Forming Research Centre Of "Lucian Blaga" University Of Sibiu – Acting As Research And Technology Transfer Pole*, 7th International Conference on Education and New Learning Technologies, 6-8 July, 2015, Barcelona, Spain, ISBN 978-84-606-8243-1, ISSN 2340-1117, pp. 5086-5092, <http://library.iated.org/view/GIRJOB2015MET>
24. C. Girjob, **G. Racz**, O. Bologa, C. Biris, *FEM Simulation of Laminated Lightweight Materials Processed through Single Point Incremental Forming*, Applied Mechanics and Materials, ISSN 1660-9336, vol. 772, pp. 38-43, doi:10.4028 <http://www.scientific.net/AMM.772.38>, 2015
25. Tirnovean, S., Breaz, R.E., Tera, M., Bologa, O., **Racz, S.G.**, *Teaching CAD/CAE/CAM Techniques for CNC Profiling and Punching Machines at Master Level*, 7th International Conference of Education, Research and Innovation, 17-19 November, 2014, Seville, Spain, ISBN 978-84-617-2484-0, ISSN 2340-1095, pp. 479-486, <https://library.iated.org/view/TIRNOVEAN2014TEA>
26. Breaz, R.E, Bologa, O., **Racz, S.G.**, *Mechatronics – A Study Program Required By The Industry*, International Technology, Education and Development Conference INTED 2014, 10-12 March 2014, Valencia, Spain, ISBN 978-84-616-8412-0 / ISSN 2340-1079, 2014, pp. 4123-4131, <https://library.iated.org/view/BREAZ2014MEC>
27. Tera, M., **Racz, S.G.**, Tirnovean, S., Biris, C., Gîrjob, C., *Training Specialists Able o Implement the Incremental Forming Process at Industry Level*, 7th International Conference of Education, Research and Innovation, 17-19 November, 2014, Seville, Spain, ISBN 978-84-617-2484-0, ISSN 2340-1095, pp 494-5 <https://library.iated.org/view/TERA2014TEA>
28. Breaz, R., Bologa, O., Tera, M., **Racz, G.**, *Determination of Technological Forces in the Incremental Forming Process*, Applied Mechanics and Materials Vol. 371 (2013), © (2013) Trans Tech Publications, Switzerland, 2013, ISBN 978-3-03785-786-1, pp. 133-137, [doi:10.4028/www.scientific.net/AMM.371.133](http://doi.org/10.4028/www.scientific.net/AMM.371.133), 2013
29. Chera, I., Bologa, O., **Racz, G.**, Breaz, R., *Robot-Forming – An Incremental Forming Process using an Industrial Robot by means of DELMIA software package*, 17th International Conference on Innovative Manufacturing Engineering, IManE 2013, Iasi, Romania, 23-24 May 2013, Applied Mechanics and Materials Vol. 371 (2013), © (2013) Trans Tech Publications, Switzerland, 2013, ISBN 978-3-03785-786-1, pp. 416-421, [doi:10.4028/www.scientific.net/AMM.371.416](http://doi.org/10.4028/www.scientific.net/AMM.371.416), 2013
30. Crenganis, M., Breaz, R.E., **Racz, G.S.**, Bologa, O.C., *Inverse Kinematics of a 7 DOF Manipulator using Adaptive Neuro-Fuzzy Inference Systems*, 12th International Conference on Control, Automation, Robotics and Vision, (ICARCV 2012), Guangzhou, China December 5-7, 2012, ISBN 978-1-4673-1870-9, pp. 1232-1237, 2012, DOI 10.1109/ICARCV.2012.6485351, <http://www.icarcv.org/2012/>
31. Chalal, H., **Racz, G.S.**, Bălan, T., *Investigation of thick sheet AHSS springback in combined bending under tension*, Key Engineering Materials Vols. 504-506 (2012) pp. 791-796, Trans Tech Publications, ISSN 1013-9826 <http://www.scientific.net/KEM.504-506.791>

D. Lucrări publicate în ultimii 10 anii în reviste și volume de conferințe cu referenți (neindexate)

- *Reviste*
- *Selecție cu maximum 20 lucrări în volume de conferințe*

E. Brevete obținute în întreaga activitate

1. Sistem modular flexibil de fixare a semifabricatelor pentru procedeul de deformare incrementală / Cerere de brevet a 2019 00712 /Autori: RACZ Sever-Gabriel, BREAZ Radu-Eugen, OLEKSIK Valentin Ștefan, PASCU Adrian Marius, POPP Ilie Octavian, GÎRJOB Claudia Emilia, TERA Melania, CHICEA Anca Lucia, BIRIȘ Cristina Maria, CRENGANIȘ Mihai

Data:
05.11.2021

Semnătura:
Prof. univ. dr. ing. Sever-Gabriel RACZ