

Lista de lucrări în domeniul de studii universitare de licență:*
Științe ingineresti-Inginerie industrială-Tehnologia construcțiilor de mașini
cod 120-130-010

Numele și prenumele: TOLVALY-ROȘCA FERENC

A. Teza de doctorat.

Studiul preciziei angrenajelor conice prin metoda modelării parametrice solide. Universitatea Transilvania Brașov, 2006.

B. Cărți publicate

B2. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate în țară, la edituri recunoscute CNCSIS.

1. **Tolvaly-Roșca, F.** *A számítógépes tervezés alapjai. AutoLisp és Autodesk Inventor alapismeretek.* (Bazele proiectării asistate de calculator. Cunoștințe de bază din AutoLisp și Autodesk Inventor), Societatea Muzeului Ardelean. Erdélyi Múzeum Egyesület, Cluj Napoca, 2009, ISBN 978-973-8231-81-8.
2. **Tolvaly-Roșca, F., Gépelemek** (Organe de mașini) Societatea Muzeului Ardelean 2019, , 380 pagini, ISBN 978-606-739-120-6.

B3. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate la alte edituri sau pe plan local.

1. Hollanda D., Tolvaly-Roșca F., *Forgácsolás és szerszámgépeken generált felületek elmélete. Laboratóriumi gyakorlatok.* (Bazele așchierii și generării suprafețelor. Îndrumar de laborator) Universitatea Sapientia, Facultatea de Științe Tehnice și Umaniste, Tg. Mureș, 2006.

B4. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

1. Tolvaly-Roșca Ferenc, *A számítógépes tervezés alapjai. (Bazele proiectării asistate de calculator).* <http://mek.oszk.hu/07300/07399/>. (200 p.)
2. Tolvaly-Roșca Ferenc, *CNC szerszámgépek programozása, (Programarea mașinilor-unelte cu CNC.)* Intranet www.ms.sapientia.ro, 2008. (300 p.)
3. Tolvaly-Rosca Ferenc, *Gépelemek. Laboratóriumi gyakorlatok. (Organe de mașini. Lucrări de laborator).* Intranet. www.ms.sapientia.ro, 2009 (30 p.).
4. Tolvaly-Rosca Ferenc, *CNC vezérlés. Laboratóriumi gyakorlatok. (Conducerea CNC. Lucrări de laborator).* Intranet. www.ms.sapientia.ro, 2009 (30 p.).
5. Tolvaly-Rosca Ferenc, *A Reverse Engineering alapjai, (Bazele Reverse Engineering-ului)* Intranet www.ms.sapientia.ro, 2017 (30 p.)
6. Tolvaly-Rosca Ferenc, *Speciális hajtások a mechatronikában. Laboratóriumi gyakorlatok. (Transmisii speciale în mecatronică. Lucrări de laborator).* Intranet www.ms.sapientia.ro, 2014 (20 p.)

C1. Lucrări științifice publicate indexate ISI

1. F. Tolvaly-Rosca, Z. Forgó, *Mixed CAD Method to Develop Gear Surfaces Using the Relative Cutting Movements and NURBS Surfaces*, Science Direct: <http://www.sciencedirect.com/science/article/pii/S2212017315000055>, <http://dx.doi.org/10.1016/j.protcy.2015.02.004>.
2. F. Tolvaly-Rosca F., Z. Forgó Z., M. Máté, *Evaluation of a Mixed CAD Gear Modeling from Time and Precision Point of View*, <http://www.sciencedirect.com/science/article/pii/S2212017315000067>, <http://dx.doi.org/10.1016/j.protcy.2015.02.005>

3. Z. Forgó, F. Tolvaly-Rosca, *Analytical and Numerical Model of Low DOF Manipulators*, <http://www.sciencedirect.com/science/article/pii/S2212017315000080>, <http://dx.doi.org/10.1016/j.protec.2015.02.007>
4. F. Tolvaly-Rosca, I. Papp, *Kinematic Analysis of 2 DoF Spherical Mechanism Applying Constraint Equations*, MACRo 2015. Volume 1, Issue 1, Pages 235–244, ISSN (Online) 2247-0948, DOI: 10.1515/macro-2015-0023, May 2015
5. F. Tolvaly-Rosca, M. Máté, Z. Forgó, A. Kakucs, *Development of Helical Teethed Involute Gear Meshed with a Multi-Edge Cutting Tool Using a Mixed Gear Teeth Modeling Method*, Elsevier, Procedia Engineering, 2017, Vol. 181, pp.153-158., <https://doi.org/10.1016/J.PROENG.2017.02.421> <https://doi.org/10.1016/j.proeng.2017.02.421>
6. Sz. Sütő, Z. Forgó, F. Tolvaly-Rosca, *Simulation Based Human-robot Co-working*, Elsevier, Procedia Engineering, 2017, Vol. 181, pp.503-508. <https://doi.org/10.1016/j.proeng.2017.02.425>
7. E. Bitay, B. Kiss-Pataki, E. Indrea, I. Kacsó, F. Tolvaly-Rosca, I. Bratuc E. Veress, *Provenance Study on a Small Selection of Roman Potshards (Tășnad-Sere Site, Satu Mare County, Romania)*. 2, Studia Universitatis Babes Bolyai, Studia Chemia, Issue nr.2/2019, ISSN 2065-9520, pp. 483-497. Articol revistă cotate WOS, MJL, IF 0.494., DOI: 10.24193/subbchem.2019.2.41, articol WOS
8. F. Tolvaly-Rosca, J. Pásztor, *The Work Process Analysis of the Machines with Driven Work Organs Used in Preparation Works of the Seedbed*, INMATEH-Agricultural Engineering, vol. 58, No.2/ 2019, ISSN 2068 – 2239, pp 9-16, DOI: 10.35633/INMATEH-58-01, articol revistă indexată WOS, ESCI
9. M. Máté, D. Hollanda, F. Tolvaly-Rosca, Z. Forgó, E. Egyed-Faluvégi, *Synthesis of a Profile Errorless Involute Shaper Cutter with Cylindrical Rake Face*, 2019 IEEE 19th International Symposium on Computational Intelligence and Informatics and 7th IEEE International Conference on Recent Achievements in Mechatronics, Automation, Computer Sciences and Robotics (CINTI-MACRo), DOI: 10.1109/CINTI-MACRo49179.2019.9105302
10. Z. Forgó, F. Tolvaly-Rosca, J. Pásztor, A. Kovari, *Energy Consumption Evaluation of Active Tillage Machines Using Dynamic Modelling*, Appl. Sci. 2021, 11(14), 6240; <https://doi.org/10.3390/app11146240>, articol revistă cotate WOS, zona galbenă UEFISCDI, IF.2.838
11. M. Máté, F. Tolvaly-Rosca, N. Hodgyai, M.V. Dragoi, *A New Approach of Defining the Grinding Wheel Profile of the Gear Hob's Rake Face*, 2022 IEEE 22nd International Symposium on Computational Intelligence and Informatics And 8th IEEE International Conference on Recent Achievements in Mechatronics, Automation, Computer Science and Robotics (Cinti-Macro), Budapest, HUNGARY nov.21-22, 2022. DOI: 10.1109/CINTI-MACRo57952.2022.10029498.
12. F. Tolvaly-Rosca, Z. Forgó, J. Pásztor, *Energy Consumption Evaluation of Rotary Tiller Using Dynamic Modelling*, INMATEH-AGRICULTURAL ENGINEERING, Volume 68, Issue3, pp. 167-176, DOI: 10.35633/inmateh-68-17. Articol revistă indexat WOS.

C2. Lucrări științifice publicate indexate BDI

1. A. Kakucs, Z. Forgó, P. Dani, F. Tolvaly-Rosca, I. Száva, *Prediction Of Extreme Values Using Artificial Neural Network*, Google Scholar, http://www.researchgate.net/profile/Janos_Ioan_Szava/publication/272943412_Prediction_of_extreme_values_using_artificial_neural_network/links/54f3a9dc0cf24eb8794c31f6.pdf.
2. F. Tolvaly-Rosca, *The Cad-Analysis Of The Contact By The Cylindrical Gears Having Archimedic Spiral Shaped Teeth*, Inter-Eng 2012, Interdisciplinarity in Engineering, Tg. Mureș, Romania 2012. ISSN 2285-0945, ISSN L2285-0945, pp. 130-135. Ulrich's Periodicals Directory™ (U.S.), German National Library of Science and Technology (TIB). <http://jml2012.indexcopernicus.com/passport.php?id=769>
3. A. Kakucs, I. Papp, F. Tolvaly-Rosca, Z. Forgó, *Bolygódugattyús pneumatikus motor*, XIV Műszaki Tudományok Ulésszaka, Kolozsvár 2013, ISBN 978-606-8178-80-6, pp.81-93. Google Academic, Google Scholar, <http://eda.eme.ro/handle/10598/28175>.

4. I. Papp, F. Tolvaly-Rosca, *Új módszer a karos mechanizmusok dinamikus kiegyensúlyozására*, Kolozsvár 2013, ISBN 978-606-8178-80-6, pp.109-121. Google Academic, Google Scholar, http://eda.eme.ro/bitstream/handle/10598/28087/XIV.MTU_Papp-Tolvaly-Rosca.pdf?sequence=1.
5. A. Kakucs, I. Papp, Z. Forgó, F. Tolvaly-Rosca, *Bolygódugattyús pneumatikus motor*, http://eda.eme.ro/xmlui/bitstream/handle/10598/28096/XIV.MTU_Kakucs-Papp-Forgo-Tolvaly-Rosca.pdf?sequence=3
6. Nimród Máriás, Ferenc Tolvaly-Rosca, *Stirling motoros naperőmű*, XX FMTÜ, Kolozsvár 2015, http://eda.eme.ro/xmlui/bitstream/handle/10598/28660/EME_20_FMTU_2015_Marias-Tolvaly-Rosca_211-214old.pdf?sequence=3.
7. Á. L. Péter, B. Faludi, F. Tolvaly-Rosca, *Gantry típusú hobby CNC marógép tervezése és építése*, XX FMTÜ, Kolozsvár 2015, http://eda.eme.ro/xmlui/bitstream/handle/10598/28661/EME_20_FMTU_2015_Peter-Faludi-Tolvaly%20Rosca_255-258old.pdf?sequence=3.
8. Z. László, H. Suteu, F. Tolvaly-Rosca, *Sűrített levegővel hajtott jármű tervezése és építése*, XX FMTÜ, Kolozsvár 2015, http://eda.eme.ro/xmlui/bitstream/handle/10598/28658/EME_20_FMTU_2015_Laszlo_Suteu_Tolvaly-Rosca_199-202old.pdf?sequence=3.
9. F. Tolvaly-Rosca, *Modern fogaskerék-modellezési eljárások összehasonlító tanulmánya*, <http://hdl.handle.net/10598/28546>, ISBN: 978-606-8178-80-6.
10. Forgó Z., Tolvaly-Rosca F. *Gantry típusú, párhuzamos hajtású robot modellezése és vizsgálata*, „A Magyar Tudomány Napja Erdélyben”, 2014, Cluj-Napoca Erdélyi Múzeum Egyesület 2014. ISBN: 978-606-8178-80-6. <http://hdl.handle.net/10598/28552>
11. Forgó Z., Filep R., Tolvaly-Rosca F., *Végtagcsonk és protézis nyomáseloszlásának vizsgálata*, XIV.MTU_2016, Cluj-Napoca Erdélyi Múzeum Egyesület 2014. ISBN: 978-606-8178-80-6.
12. Tolvaly-Rosca F., Forgó Z., *Relatív vágómozgásokkal generált pontfelhők szűrési nehézségei*, A Magyar Tudomány Ünnepe XVII, 2017, <http://hdl.handle.net/10598/30080>.
13. Kakucs, A. Forgó Z., Tolvaly Rosca F., *Pneumatic Motor With Planetary Piston*, Proceedings of 1st Agria Conference on Innovative Pneumatic Vehicles ACIPV 2017, May 05, 2017 Eger, Hungary, Óbuda University, Institute of Mechatronics and Vehicle Engineering, ISBN 978-963-449-022-7, pp.47-50, http://bgk.uni-obuda.hu/sites/default/files/kari_oldal/csatolmany/proc_acipv_2017.pdf
14. Z. Forgó, F. Tolvaly-Rosca, J. Pásztor, *Mathematical and assembly modeling of the mechanism for implementing intermittent rotational motion and speed setting of the metering shaft for seed drill*, Magyar Tudomány Ünnepe 2017, <https://doi.org/10.2478/mtk-2018-0010>.
15. F. Tolvaly-Rosca, Z. Forgó, *Computing Algorithm for the Gear Tooth Space Points Cloud Envelope Generated by the Mixed Cad Method*, MACRo 2017, Proceedings of the 5th International Conference on Recent Achievements in Mechatronics, Automation, Computer Sciences and Robotics, <https://doi.org/10.1515/macro-2017-0013>.
16. F. Tolvaly-Rosca, A. Kakucs, Z. Forgó, M. Máté, *Comparative FEM Analysis of Gears Modeled With Analytical, Solid Subtracting and Mixed CAD Generating Method*, Proceedings of the 5th International Conference on Recent Achievements in Mechatronics, Automation, Computer Sciences and Robotics, <https://doi.org/10.1515/macro-2017-0014>., ISSN 2247-0948.
17. M. Mate, D. Hollanda F. Tolvaly-Rosca, Z. Forgó, E. Faluvegi, *Synthesis of a Profile Errorless Involute Shaper Cutter with Cylindrical Rake Face*, 2019 IEEE 19th International Symposium on Computational Intelligence and Informatics and 7th IEEE International Conference on Recent Achievements in Mechatronics, Automation, Computer Sciences and Robotics (CINTI-MACRo). DOI: 10.1109/CINTI-MACRo49179.2019.9105302, indexat IEEE Xplore.
18. Z. Forgó, F. Tolvaly-Rosca, R. Farnos, *A gyártás digitalizálása – Kihívás az ipar és az oktatás részére (Digitizarea producției-O provocare pentru industrie și educație)*, Műszaki Tudományos Közlemények vol. 12. (2020), pp.38-41, DOI: 10.33895/mtk-2020.12.05. Indexat Sciendo.
19. F. Tolvaly-Rosca, M. Máté, Z. Forgó, J. Pásztor, *Forgácsolószerző-testmodell vágóél-pontjainak meghatározása CAD-módszerekkel (Determinarea punctelor de tăiş pe model solid)*

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20. Z. Forgó, F. Tolvaly-Roşca, R. Farnos, *Digitalization of Production – A Challenge for the Industry and Education*, DOI: <https://doi.org/10.33894/mtk-2020.12.10>, Műszaki Tudományos Közlemények vol. 12. (2020), pp.38-41. Indexat Sciendo.

21. F. Tolvaly-Roşca, M. Máté, Z. Forgó, J. Pásztor, *Forgácsolószerző-módszerekkel vágóél-pontjainak meghatározása CAD-módszerekkel (Determinarea punctelor de tăiş pe modele solide de scule aşchietoare)*, Papers on technical Science vol. 12. (2020), pp.67-70, DOI: <https://doi.org/10.33894/mtk-2020.12.10>, Sciendo, WorldCat.

22. N. Hodgyai, F. Tolvaly-Roşca, M. Máté, *Az alámetszés körülményei lekerekített gyártó fogasléc esetében*, Papers on technical Science vol. 14. (2021), <https://doi.org/10.33895/mtk-2021.14.05>, pp.30-36, Sciendo, WorldCat

23. N. Hodgyai, F. Tolvaly-Roşca, M. Máté, *The conditions of undercut by shaping using A rounded profile gear shaper cutter*, Papers on technical Science vol. 14. (2021), <https://doi.org/10.33894/mtk-2021.14.05>, pp.30-36, Sciendo, WorldCat

24. N. Hodgyai, M. Máté, F. Tolvaly-Roşca, M. Viorel Drăgoi, *Peculiarities of the Grinding Process of a Gear Hob Helical Rake Face*, Acta Universitatis Sapientiae, Electrical and Mechanical Engineering, 13 (2021) 39-51, DOI: 10.2478/auseme-2021-0004. EBSCO Discovery Service, WorldCat.

25. F. Tolvaly-Rosca, J. Pásztor, Z. Forgó, *Kinematic and Dynamic Modeling of the Rotary Harrow*, Acta Universitatis Sapientiae, Electrical and Mechanical Engineering, 13 (2021) 25-38, DOI: 10.2478/auseme-2021-0004. EBSCO Discovery Service, WorldCat.

26. J. Pásztor, F. Tolvaly-Roşca, Z. Forgó, *Study of the Working Parameters of a Spading Machine*, Journal of Applied Technical and Educational Sciences JATES, ISSN 2560-5429, Vol. 11, No. 4, 2021 pp. 1-13, <https://doi.org/10.24368/jates.v11i4.275>, ERIH PLUS, ProQuest Education Collection & ProQuest Education Database, ProQuest Materials Science & Engineering Database, ULRICHSWEB.

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29. J. Pásztor, F. Tolvaly-Roşca, Z. Forgó, *Study of the Effect of Soil Volumetric Weight on the Energy Requirement for a Spading Machine by Simulation*, Papers on technical Science vol. 16. (2022). pp.31–35, <https://doi.org/10.33894/mtk-2022.16.09>.

D. Lucrări științifice publicate în volumele manifestărilor științifice

1. **Tolvaly-Roşca, F.**, *Interaktiv posztprocesszor számvezérlesű szerzőgépekhez. Postprocesor interactiv pentru maşin-unelte cu comandă numerică*, X Országos Gépész Találkozó, Odorheiu Secuiesc, 2002, ISSN 145-0746, pp. 249-251.

2. Hollanda, D., Máté, M., **Tolvaly-Roşca, F.**, *Universal Bevel Gear Tooth Profile Controlling Device*, Production Processes And Systems, Miskolc, 2002, HU, ISSN1215-0851, 115-120.

3. **Tolvaly-Roşca, F.**, *Optimal Design of Bended Sheet Metal Forms In Order to Fit on Revolved Surfaces*, microCAD, Miskolc, 2003, ISBN 963 661 547 0, ISBN 963 661 559 4, pp.209-214.

4. **Tolvaly-Roşca, F.**, *Computer aided designing of fixing and supporting elements on revolution surfaces*, BRAMAT, Braşov, 2003, ISBN 973-635-124-6, pp.134-137.

5. **Tolvaly-Roşca, F.**, *About the gearing modelling, with solid parametrical models*, 11th, International Conference in Mechanical Engineering, Cluj Napoca, 2003, ISBN 973-86097-2-0, pp.240-242.

6. Hollanda, D., **Tolvaly-Rosca, F.**, *Solid modelling of a stright bevel gear drive*. Inter-Ing 2003, Tg. Mures, 2003, ISBN 973-8084-81-4, pp. c.
7. Száva, I., Dani, P., Hollanda, D., Constantin, V., Forgó Z., **Tolvaly-Rosca, F.**, *Some Experimental Results on Thermoprotecting Coats' Evaluation*, 7th International Conference, Mechanical Engineering, Bratislava SK 2003, ISBN 802-271-960-9, pp.70-74
8. Hollanda, D., **Tolvaly-Rosca, F.**, *Measuring Dynamic Parameteres of a Gearing Process, on Solid Model of a Straight Bevel Gear Drive*, microCAD , International Scientific Conference, Miskolc, 2004, HU, ISBN 963-661-608-6, 963-661-617-5, pp. 31-36.
9. Száva, I.; Dani, P.; Enache, V.; Forgó, Z.; **Tolvaly-Rosca, F.**, *Térbeli rácestartó modelljének elemzése induktív elmozdulásmérők és holografikus interferometria segítségével (Analiza modelului unei grinzi spațiale cu zăbrele cu ajutorul senzorilor de deplasare inductivi și a interferometriei holografice)*, Magyarország földrengésbiztonsága. Modellezés, méretezés, Győr, 2004, HU, ISBN 963-7175-24-5, pp. 194-205.
10. **Tolvaly-Rosca, F.**, Forgó, Z., *Solid Modeling of Bevel Gears with Spherical Involute, Octoid I and Octoid II type profiles*, Proceedings of 13th 11th, International Conference in Mechanical Engineering OGET 2005, Satu Mare, 2005, ISBN 973-7840-03-8, pp. 332-335.
11. Száva, I., Hodúr, C., Forgács, E., Enache, V., Forgó, Z., Kakucs, A., Hlipcă, P., **Tolvaly-Rosca, F.**, *Elastical Properties of the Cylindert Head Gaskets Materials*, Annals of the Faculty of Engineering Hunedoara, Tome II, Fascicule 2, Editura Mirton Timișoara, 2005. ISSN 1584-2665, pp. 96-100.
12. Kakucs, A; Forgó, Z.; Dani, P.; Száva, I., **Tolvaly-Rosca, F.**, *Theoretical and experimental reserches of a planar mechanism from vibration's point of view (part two)*, Proceeding od CDM Brașov, may 2005, Universitatea Transilvania, Brașov (2005), ISBN 973-635-513-6, Vol II, pp.225-228.
13. Kakucs, A; Forgó, Z.; Dani, P.; Száva, I., **Tolvaly-Rosca, F.**, *Theoretical and experimental reserches of a planar mechanism from vibration's point of view (part one)*, Proceeding od CDM Brașov, may 2005, Universitatea Transilvania, Brașov (2005), ISBN 973-635-513-6, Vol II, pp.225-228.
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15. Száva, I., V. Enache, E. Forgacs, C. Hodur, A. Kakucs, I. Papp, Forgó, Z., **Tolvaly-Rosca, F.**, *Experimental Investigation of the Main Bearing Zone Elastical Properties from Parametrical Vibrations' point of View Using Holographic Interferometry*, Proceedings of the 3rd International Conference on Dynamics of Civil Engineering and Transport Structures and Wind Engineering, Vratna, Sk, 2005, ISBN 80-8070-352-5, pp. 147-150.
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17. Száva,J., Hodur, C., Forgács, E., Enache, V., Forgó, Z., Kakucs, A., Hlipca, P., **Tolvaly-Rosca, F.**, Lőrincz, A., *Elastical Properties of the Cylinder Head Gaskets Materials*, Annals of the Faculty of Engineering Hunedoara, 2005, Tome III, Fascicule 2, ISSN 1584-2665, pp. 97-100.
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20. **Tolvaly-Rosca, F.**, Hollanda, D., Száva, J., Kakucs, A., Forgó, Z., *Contact Algorythm in VBA, for Kinematic Studies on Rigid, Solid Gear Models*, microCAD International Scientific

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21. Száva, I., Samota, I., Necula, R., Pascu, A., Dani, P., Kakucs A., Tolvaly-Rosca, F., Forgó, Z., *Micro- and Macro Displacement Field Evalution of Fractured Long Human Bones, Using Holographic Interferometry and Electrotensometrical Strain Gauges*, First South-East European Conference on Cumputational Mechanics, SEECCM-06 June 28-30, 2006, Kragujèvac, Serbia, University of Kragujèvac, Proceedings of Conference, Code ISBN: 86-81037-13-7, pp. 454-461.
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G. Contracte de cercetare

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2. Aparat universal de măsurat profilul dinților roților dințate conice. Contract cu Institutul Programelor de Cercetare a Fundației Sapiientia. Nr.415/2002, 2002-2003, 18.000 RON, **membru**. Conducător: Prof. Dr. Ing. Hollanda, D.

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4. Aparat universal de măsurat profilul dinților roților dințate conice. Contract cu Institutul Programelor de Cercetare a Fundației Sapientia. Nr.1330/2004, 2004-2005, 17.710 RON, **membru**. Conducător: Prof. Dr. Ing. Hollanda, D.
5. Proiectarea și fabricarea frezei melc fără eroare de profil teoretic și optimizat. Contract cu Institutul Programelor de Cercetare a Fundației Sapientia, Nr. 1160/2005, 2005-2006, 9.713 RON, **membru**. Conducător: Conf. Dr. Ing. Maté, M.
6. Studiul teoretic (prin M.E.F.) și practic (experimental) al vopselelor termoizolante termosfumante (intumescente). Contract cu Institutul Programelor de Cercetare a Fundației Sapientia. 18.720 RON, **membru**. Conducător: prof.dr.ing. Száva Ioan. 2006-2007.
7. Studiul teoretic (prin M.E.F.) și practic (experimental) al vopselelor termoizolante termosfumante (intumescente). Contract cu Institutul Programelor de Cercetare a Fundației Sapientia, 6.250 RON, **membru**. Conducător: șef.lucr.dr.ing. Kakucs András, 2007-2008.
8. Determinarea accelerațiilor ale elementelor din mecanisme cu bare articulate cu ajutorul ecuațiilor de constrângere. Contract cu Institutul Programelor de Cercetare a Fundației Sapientia, 5.800 RON, **membru**. Conducător: conf.dr.ing. Papp István, 2008-2009.
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11. Dezvoltare motor pneumatic cu piston rotativ. Contract cu Institutul Programelor de Cercetare a Fundației Sapientia, 12.000 RON, **membru**. Conducător: conf.dr.ing. Kakucs András, 2011-2012.
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* Conform H.G. 749/2009

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