Lista de lucrări în domeniul de ştiinţă definit de disciplinele din postul scos la concurs

NUMELE ŞI PRENUMELE: Gergely Attila Levente

I. LISTA PUBLICAȚIILOR RELEVANTE

1. Bitay E, **Gergely AL***, Szabó Z-I. Optimization and Production of Aceclofenac-Loaded Microfiber Solid Dispersion by Centrifugal Spinning. *Pharmaceutics.* **2023**; 15(9):2256. **IF: 5.4;** https://doi.org/10.3390/pharmaceutics15092256
2. Kántor J., Farmos R.L., **Gergely A.L.***, Optimization of Oil Sorbent Thermoplastic Elastomer Microfiber Production by Centrifugal Spinning. *Polymers.* **2023**; 15, 3368. **IF: 5.0;** https://doi.org/10.3390/polym15163368,
3. **Gergely A.L.***, Farmos R.L., Kántor J.*, Kántor A. É., Hodagyi N., Recycled PET nanofiber membranes for air filtration. In *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)* IEEE, **2022**, 57-62.
4. Kántor J.*, **Gergely A.L.***, Farmos R.L., Hodgyai N., Poly (styrene-b-isobutylene-b-styrene) Triblock Copolymer Fiber Generation with Centrifugal Spinning, and its Potential Application in Oil Collection. In *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)* IEEE, **2022**, 77-82.
5. Bitay E, **Gergely A.L*.**, Kántor J., Szabó ZI, Evaluation of Lapatinib-Loaded Microfibers Prepared by Centrifugal Spinning. *Polymers*. **2022**; 14(24):5557-5570. **IF: 4.967**
6. Bitay E, **Gergely AL**, Bálint I, Molnar K, Fulop I, Fogarasi E, Szabó ZI. Preparation and characterization of lapatinib-loaded PVP nanofiber amorphous solid dispersion by electrospinning. eXPRESS Polymer Letters. 2021;15(11):1041-50.
7. Bitay E, Szabó ZI, Kántor J, Molnar K, **Gergely AL.** Scale-up and optimization of fenofibrate-loaded fibers electrospun by corona-electrospinning. eXPRESS Polymer Letters. 2021;15(4):375-87.
8. Sipos, E.; Csatári, T.; Kazsoki, A.; **Gergely, A.**; Bitay, E.; Szabó, Z. I.; Zelkó, R. Preparation and Characterization of Fenofibrate-Loaded PVP Electrospun Microfibrous Sheets. *Pharmaceutics*, 12(7), **2020**, 612.
9. **Gergely, A.L.**; Kántor, J.: Bitay, E.; Bíró, D. Electrospinning of Polymer Fibres Using Recycled PET, Acta Materialia Transylvanica, 2(1), 2019, 19-26. ISSN:2601-8799 https://doi.org/10.33924/amt-2019-01-04

II. LISTA COMPLETĂ DE PUBLICAȚII, CREAȚII, INVENȚII

A. Teza de doctorat.

Synthesis and characterization of poly(alloocimene-*b*-isobutylene) thermoplastic elastomers, Dr Puskás Judit, Universitatea din Akron, Facultatea Știința și Ingineria Polimerilor, 2014.

B. Cărții

B2. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS/CNCS.

1. **Gergely Attila Levente,** *Polimer anyagok anyagtudományi és feldolgozástechnikai laboratóriuma,* MTF18, ISSN 2068 – 3081, ISBN 978-606-739-229-6, EME, Cluj-Napoca, 2022. 106 p. https://eme.ro/publication-hu/mtf/borito+pdf/mtf18.pdf

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

1. **Gergely Attila Levente,** *Bevezetés a polimer anyagok anyagtudományába*, uz intern, electronic: 163p. \\gorgenyi\tanaroktoldiakoknak\Gergely Attila\Polimerek tulajdonsaga es tesztelese\Jegyzet

C. Lucrări ştiinţifice publicate

C1. Lucrări ştiinţifice publicate în reviste cotate ISI

1. Bitay E, **Gergely AL***, Szabó Z-I. Optimization and Production of Aceclofenac-Loaded Microfiber Solid Dispersion by Centrifugal Spinning. *Pharmaceutics.* **2023**; 15(9):2256. **IF: 5.4;** https://doi.org/10.3390/pharmaceutics15092256
2. Kántor J., Farmos R.L., **Gergely A.L.***, Optimization of Oil Sorbent Thermoplastic Elastomer Microfiber Production by Centrifugal Spinning. *Polymers.* **2023**; 15, 3368. **IF: 5.0;** https://doi.org/10.3390/polym15163368,
3. **Gergely A.L.***, Farmos R.L., Kántor J.*, Kántor A. É., Hodagyi N., Recycled PET nanofiber membranes for air filtration. In *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)* IEEE, **2022**, 57-62.
4. Kántor J.*, **Gergely A.L.***, Farmos R.L., Hodgyai N., Poly (styrene-b-isobutylene-b-styrene) Triblock Copolymer Fiber Generation with Centrifugal Spinning, and its Potential Application in Oil Collection. In *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)* IEEE, **2022**, 77-82.
5. Bitay E, **Gergely A.L*.**, Kántor J., Szabó ZI, Evaluation of Lapatinib-Loaded Microfibers Prepared by Centrifugal Spinning. *Polymers*. **2022**; 14(24):5557-5570. **IF: 4.967**
6. Rédai E.M., Kovács O., Szabó Z.I., **Gergely A.L.**, Antonoaea1 P., Todoran N., Vlad R.A., Ciurba A., Dónáth-Nagy G., Sipos E., Fluoxetin containing PVP-based electrospun nanofibers. *Acta Poloniae Pharmaceutica – Drug Research*, **2021**, 78(4):563–571. IF: 0.578.
7. Bitay E, Tóth L, Kovács TA, Nyikes Z, **Gergely AL.** Experimental Study on the Influence of TiN/AlTiN PVD Layer on the Surface Characteristics of Hot Work Tool Steel. *Applied Sciences.* **2021**; 11(19):9309. IF: 2.679
8. Bitay E, **Gergely AL**, Bálint I, Molnar K, Fulop I, Fogarasi E, Szabó ZI. Preparation and characterization of lapatinib-loaded PVP nanofiber amorphous solid dispersion by electrospinning. *eXPRESS Polymer Letters*. **2021**; 15(11):1041-50. IF: 4.161
9. Bitay E, Szabó ZI, Kántor J, Molnar K, **Gergely AL.** Scale-up and optimization of fenofibrate-loaded fibers electrospun by corona-electrospinning. *eXPRESS Polymer Letters*. **2021**; 15(4):375-87. IF: 4.161
10. Sipos, E.; Csatári, T.; Kazsoki, A.; **Gergely, A.**; Bitay, E.; Szabó, Z. I.; Zelkó, R. Preparation and Characterization of Fenofibrate-Loaded PVP Electrospun Microfibrous Sheets. *Pharmaceutics*, 12(7), **2020**, 612. IF: 6.321

11. Bitay, E.; Pilbat, A-M.; Indreac, E.; Kacsóc, I.; Máté, M.; **Gergely, A.L.**; Veress, E. Influence of the Ball Milling Process and Air Sintering Conditions on the Synthesis of $La_{0.7}Sr_{0.3}MnO_3$ Ceramics, *STUDIA UBB CHEMIA*, LXIV, 2, Tom II, **2019**, 447-456. IF: 0.305
12. **Gergely, A.L.**; Puskas, J.E. Synthesis and Characterization of Thermoplastic Elastomers with Polyisobutylene and Polyalloocimene Blocks *J. Polym. Sci. Part A: Polym. Chem., 53*, **2015**, 1567-1574. IF: 3.113
13. Roh, J.H.; Doy, D.; Lee, W.K.; **Gergely, A.L.**; Puskas, J.E.; Roland, C.M. Thermoplastic Elastomers of Alloocimene and Isobutylene Triblock Copolymers, *Polymer, 56*, **2015**, 280-283. IF: 3.562
14. Judit E. Puskas, Marcela Castano, **Attila L. Gergely** Enzyme-catalyzed Polymer Functionalization In Green Polymer Chemistry: Biobased Materials and Biocatalysis, Ed(s): H. N. Cheng, Richard A. Gross, Patrick B. Smith, ACS Symposium Series, Vol. 1192, ISBN13: 9780841230651 eISBN: 9780841230668, 2015
15. **Gergely, A.L.;** Turkarslan, O.; Puskas, J.E.; Kaszas, G. The Role of Electron Pair Donors in the Carbocationic Copolymerization of Isobutylene with Alloocimene, *J. Polym. Sci. Part A: Polym. Chem., 51*, **2013**, 4717-4721. IF: 3.113
16. Puskas, J.E.; **Gergely, A.L.;** Kaszas,G. Controlled/Living Carbocationic Copolymerization of Isobutylene with Alloocimene, *J. Polym. Sci. Part A: Polym. Chem., 51*, **2013**, 29-33. IF: 3.113

C2. Lucrări ştiinţifice publicate în reviste indexate în baze de date internaţionale (indicaţi şi baza de date).

1. Fábián, H., **Gergely A.L.** Design of a High Performance Fiber-producing Machine, *Acta Materialia Transylvanica,* 5(2), **2022**, 62-65. ISSN:2601-8799 https://doi.org/10.33924/amt-2022-02-03
2. **Gergely A.L.**, Kántor J. Process Optimization of PVDF Piezoelectric Nanofiber Production via Electrospinning, Acta Universitatis Sapientiae, 13, 2021, 1-13. ISSN: 2066-8910. DOI: 10.2478/auseme-2021-0001
3. Birton B., **Gergely A.L.** Design and Implementation of a Vacuum Forming Machine, Acta Materialia Transylvanica 4(2)., 2021, 75–78. ISSN:2601-8799. https://doi.org/10.33924/amt-2021-02-03
4. **Gergely A.L.** The Production of Polyethylene Terephthalate Nanofibers by Electrospinning with Minimum Amount of Trifluoroacetic Acid. Biomedical Journal of Scientific & Technical Research. 2020;29(3):22399-401. http://dx.doi.org/10.26717/BJSTR.2020.29.004795
5. Fábián, H., **Gergely, A.L.** Design and implementation of a tensile testing machine**,** Műszaki Tudományos Közlemények vol. 13., 2020, 50-53. ISBN 2393-1280. https://doi.org/10.33894/mtk-2020.13.06
6. Hodgyai, N., **Gergely, A.L.**; Farmos, R.L. The design and implementation of a disk electrospinning device**,** Műszaki Tudományos Közlemények vol. 13., 2020, 81-85. ISBN 2393-1280. https://doi.org/10.33894/mtk-2020.13.13
7. **Gergely, A.L.**; Kántor, J.: Bitay, E.; Bíró, D. Electrospinning of Polymer Fibres Using Recycled PET, Acta Materialia Transylvanica, 2(1), 2019, 19-26. ISSN:2601-8799 https://doi.org/10.33924/amt-2019-01-04
8. Gyárfás, A., **Gergely, A.L.** Laboratóriumi műanyag extruder gép tervezése**,** FMTÜ XXIV., Március 28-29 **2019**. Cluj-Napoca, Romania. Proceedings 73-77, ISBN 2393-1280 (XXIV. Fiatal Műszakiak Tudományos Ülésszaka (FMTÜ)), **2019**. Cluj-Napoca, Romania. https://doi.org/10.33894/mtk-2019.11.14
9. Hodgyai, N., **Gergely, A.L.** Ágaprító berendezés gép tervezése**,** FMTÜ XXIV., Március 28-29 **2019**. Cluj-Napoca, Romania. Proceedings 85-89, ISBN 2393-1280

(XXIV. Fiatal Műszakiak Tudományos Ülésszaka (FMTÜ)), **2019**. Cluj-Napoca, Romania. https://doi.org/10.33894/mtk-2019.11.17

10. Kedves, B., **Gergely, A.L.** Laboratóriumi műanyag granulátum készítő gép tervezése**,** FMTÜ XXIV., Március 28-29 **2019**. Cluj-Napoca, Romania. Proceedings 105-109, ISBN 2393-1280 (XXIV. Fiatal Műszakiak Tudományos Ülésszaka (FMTÜ)), **2019**. Cluj-Napoca, Romania. https://doi.org/10.33894/mtk-2019.11.22
11. **Gergely, A.L.** Crosslinking of thermoplastic leastomers**,** FMTU XXII., March 22-23 **2017**. Cluj-Napoca, Romania. Proceedings 175-179, ISBN 2393-1280 (XXII. Fiatal Műszakiak Tudományos Ülésszaka (FMTU)), **2017**. Cluj-Napoca, Romania.
12. **Gergely A. L.;** Papp, I. Determination the movement equation of the Pétervar-i screw using the method of constraint equations Proceedings 131-136, ISBN 973-8231-50-7 (XI. Fiatal Műszakiak Tudományos Ülésszaka (FMTU)), **2006**. Cluj-Napoca, Romania.

C3. Lucrări ştiinţifice publicate în reviste din străinătate (altele decât cele menţionate anterior).

1. **Gergely, A.L**.; Puskas, J.E; Altstadt, V. Dynamic Fatigue Properties of Polyiosbutylene-based Thermoplastic Elastomers: The Effect of Carbon Black Reinforcement, *TPE Magazin*, **2015**, *2*, 121-123.
2. **Gergely, A.L.**; Puskas, J.E. A New Class of Polyisobutylene-based Thermoplastic Elastomers, *TPE Magazin*, **2015**, *1*, 37-39.

C4. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS (altele decât cele din baze de date internaţionale).

1. Balika R.M.; **Gergely A.L.** Hőre lágyuló polimerek folyási mutatószámának (MFI) mérésére alkalmas kapilláris plasztométer tervezése és kivitelezése: Design and Implementation of a Laboratory Melt-Flow Indexer. Nemzetközi Gépészeti Konferencia–OGÉT. 2021 Apr 20:97-100. **ISSN: 2068-1267.**
2. Főcze, A.; Sipos, B.; **Gergely, A.L.** Optimization of injection molding parameters based on cavity pressure**,** XXVIII. Nemzetközi Gépész Találkozó. The XXVIII.-th International Conference of Mechanical Engineering, p.53-56, Odorheiu-Secuiesc, April 25, 2020, Romania. Proceedings of the Conference. **ISSN: 2068-1267.**
3. **Gergely, A.L.** The investigation of polymer-filler interaction**,** XXV. Nemzetközi Gépész Találkozó. The XXV.-th International Conference of Mechanical Engineering, p.307-310, Cluj-Napoca, April 27-30, 2017, Romania. Proceedings of the Conference. **ISSN: 2068-1267** 2068-1267**.**
4. **Gergely, A.L.** Korszerű műanyagok mechanikai tulajdonságainak lehetséges javítása (Possible improvement of the mechanical properties of novel thermoplastic elastomers). XXIV. Nemzetközi Gépész Találkozó. The XXIV.-th International Conference of Mechanical Engineering, p.307-310, Deva, April 21-24, 2016. Proceedings of the Conference. **ISSN: 2068-1267.**

G. Contracte de cercetare (menţionaţi calitatea de director sau membru)

2023	Șef de proiect: Facbricare structuri fibroase din sticle PET reciclate, 4500 RON
2023	Membru al echipei de cercetare Productia febre polimerice continand clorzoxanona cu metoda centrifugala. DOMUS, 1000000 HUF.
2022-2023	Șef de proiect: Fabricarea fibre polimerice cu metoda ‘centrifugal spinning’, IPC, 10000 EURO.

2022	Membru al echipei de cercetare: Productia febre ciclodexrin cu metoda electrospinning. DOMUS, 1500000 HUF.
2022	Șef de proiect: Fabricarea fibre polimerice SIBS biocompatibile cu metoda “centrifugal spinning”, 3500 RON
2021	Membru al echipei de cercetare: Productia febre polimerice continand Lapatinib cu metoda „centrifugal spinning”. DOMUS, 1000000 HUF.
2021	Șef de proiect: Fabricarea fibre polimerice PVDF piezoelectrice cu metoda “centrifugal spinning”, 4000 RON
2020	Membru al echipei de cercetare: Productia febre polimerice continand Lapatinib. DOMUS, 1200000 HUF.
2020	Șef de proiect: Fabricarea fibre polimerice PVDF piezoelectrice cu PVDF PET, 4500 RON
2019	Membru al echipei de cercetare: Productia febre polimerice continand fenofibrate. DOMUS, 1000000 HUF.
2019	Șef de proiect: Efectul compoziției solventului asupra diametrul fibrelor polimerice fabricată din sticla PET, 1700 RON
2017-2018	Șef de proiect: Producția fibrelor polimerice la scara nanometrică din sticle PET reciclate, IPC: 13/14/17.05.2017, 19000 RON
2014-2015	Șef de proiect: Scaling up the Synthesis of Novel Poly(ethylene glycol) Based Dendrimers for Targeted Drug Delivery Applications, NSF SBIR Phase II, $790000
2014-2015	Membru al echipei de cercetare: UV Curable Rubbers, LG Hausys, $250000
2014-2015	Membru al echipei de cercetare: Novel Halogen-free Replacement for Halobutyl Rubber, NSF, PFI-AIR, $800000
2014-2015	Membru al echipei de cercetare: Investigate the feasibility of replacement of the methyl chloride diluent with a diluent having a smaller carbon footprint, Honeywell, $25000
2011-2013	Membru al echipei de cercetare: Diene-functionalized Polyisobutylene and Butyl Rubber for Improved Filler Interaction, NSF Center for Tire Research, $70000
2010	Membru al echipei de cercetare: Filler Reactive Butyl, Goodyear, $120000
2006	Membru al echipei de cercetare: Developing a universal method for determining the movement equations of mechanisms.

III. RECUNOAȘTEREA

I. Premii, distincţii.

2023

1. Bursa de cercetare stagiara: Prepararea fibrelor ciclodextrină ca baza unui sistem de eliberare a medicamentelor prin metoda „centrifugal spinning”, Agentia de Credit si Bursa de Studii
2. Conducator stiintific: student Keresztes Kristof, Bursa Klebelsberg Kuno Tehetséggondozó.
3. Kántor Miklós, MTDK2023, mențiune
4. Keresztes Kristof, OTDK2023, mențiune

2022

1. Keresztes Kristof, MTDK2022, Locul I (OTDK nominalizare)

2. Keresztes Kristóf, TDK Sapientia EMTE XXI. Conferinței Cercurilor Studențești din domeniul Științelor Tehnice, locul I
3. Erszény Péter-Tibor, Simon Hunor, TDK Sapientia EMTE XX. Conferinței Cercurilor Studențești din domeniul Științelor Tehnice locul II

2021

1. Zátyi Tibor MTDK2021, Locul III
2. Nagy-Serbán Albert TDK Sapientia EMTE XX. Conferinței Cercurilor Studențești din domeniul Științelor Tehnice, locul II
3. Zátyi Tibor TDK Sapientia EMTE XX. Conferinței Cercurilor Studențești din domeniul Științelor Tehnice locul III
4. Conducator stiintific: student Főcze Attila, Bursa Klebelsberg Kuno Tehetséggondozó.
5. Conducator stiintific: student Balika Róbert Márton, Bursa Klebelsberg Kuno Tehetséggondozó.

2020

1. Fábián Hunor Sapientia EMTE, XXI. Conferinței Cercurilor Studențești din domeniul Științelor Tehnice locul II.: Műanyagok szakitószilárdságának mérésére alkalmas berendezés tervezése és kivitelezése. (OTDK nominalizare)
2. Conducator stiintific: student Fábián Hunor, Bursa Klebelsberg Kuno Tehetséggondozó.

2019

1. Premiu Maros Dezső – EME
2. Bursa Szülőföldi Fiatal Oktatói, Magyarország Emberi Erőforrások Minisztériuma, Eötvös Loránd Tudományegyetem
3. Hodgyai Norbert Sapientia EMTE, Facultatea de Științe Tehnice și Umaniste CSS locul II.: Ágaprító gép tervezése és kivitelezése
4. Gyárfás Attila Sapientia EMTE, Facultatea de Științe Tehnice și Umaniste CSS locul III.: Laboratóriumi extruder gép tervezése és kivitelezése

2018

1. Bursa Szülőföldi Fiatal Oktatói, Magyarország Emberi Erőforrások Minisztériuma, Eötvös Loránd Tudományegyetem
2. Boros Albert Sapientia EMTE Facultatea de Științe Tehnice și Umaniste CSS locul III.: Laboratóriumi fröccsöntő berendezés építése és kivitelezése.

2014

5. Cea mai bună prezentare orală: 186th Technical Meeting and Educational Symposium of the Rubber Division Meeting & Educational Symposium, 2014, Nashville, TN, USA.

2012

6. Cea mai bună prezentare de poster: Rubber Expo and 182nd Technical Meeting & Educational Symposium, 2012, Cincinnati, OH, USA.

J. Citări

Puskas, J.E.; **Gergely, A.L.;** Kaszas,G. Controlled/Living Carbocationic Copolymerization of Isobutylene with Alloocimene, *J. Polym. Sci. Part A: Polym. Chem., 51*, **2013**, 29-33. FI: 3.113

1. Ke Yang, Hui Niu, Hui Yu, Jinghan Dong, Jing Wang, Jialin Yu, Kaihua Shen and Yang Li, Synthesis of high molecular weight isobutylene-α-methylstyrene copolymers containing alkenyl groups with a half sandwich scandium initiator system under mild conditions, *Polymer Chemistry*, 10.1039/C8PY01749B, (2019).
2. Weiyu Wang, Wei Lu, Andrew Goodwin, Huiqun Wang, Panchao Yin, Nam-Goo Kang, Kunlun Hong and Jimmy W. Mays, Recent Advances in Thermoplastic

Elastomers from Living Polymerizations: Macromolecular Architectures and Supramolecular Chemistry, *Progress in Polymer Science*, 10.1016/j.progpolymsci.2019.04.002, (2019).
3. Preetom Sarkar and Anil K. Bhowmick, Sustainable rubbers and rubber additives, *Journal of Applied Polymer Science*, **135**, 24, (2017).
4. C. Garrett Campbell and Robson F. Storey, Carbocationic Copolymerization of Isobutylene and 2,4-Dimethyl-1,3-Pentadiene, *Macromolecules*, 10.1021/acs.macromol.8b01258, **51**, 16, (6430-6439), (2018).
5. Judit E. Puskas, RUBBER CITY GIRL: THE PATH TO THE GOODYEAR MEDAL, *Rubber Chemistry and Technology*, 10.5254/rct.17.82588, **91**, 1, (1-26), (2018).
6. Yi Xie, Jin-jie Chang, Yi-bo Wu, Dan Yang, Hao Wang, Tao Zhang, Shu-xin Li and Wen-li Guo, Synthesis and properties of bromide- functionalized poly(isobutylene-co-p- methylstyrene) random copolymer, *Polymer International*, **66**, 3, (468-476), (2016).
7. Alexei V. Radchenko, Hassen Bouchekif and Frédéric Peruch, Triflate esters as in-situ generated initiating system for carbocationic polymerization of vinyl ethers, isoprene, myrcene and ocimene, *European Polymer Journal*, 10.1016/j.eurpolymj.2017.02.001, **89**, (34-41), (2017).
8. Masami Kamigaito and Kotaro Satoh, Sustainable Vinyl Polymers via Controlled Polymerization of Terpenes, Sustainable Polymers from Biomass, (55-90), (2017).
9. Pranabesh Sahu, Preetom Sarkar and Anil K. Bhowmick, Synthesis and Characterization of a Terpene-Based Sustainable Polymer: Poly-alloocimene, *ACS Sustainable Chemistry & Engineering*, 10.1021/acssuschemeng.7b00990, **5**, 9, (7659-7669), (2017).
10. John F. Trant, Mahmoud M. Abd Rabo Moustafa, Inderpreet Sran and Elizabeth R. Gillies, Polyisobutylene-paclitaxel conjugates with pendant carboxylic acids and polystyrene chains: Towards multifunctional stent coatings with slow drug release, *Journal of Polymer Science Part A: Polymer Chemistry*, **54**, 14, (2209-2219), (2016).
11. Attila L. Gergely and Judit E. Puskas, Synthesis and characterization of thermoplastic elastomers with polyisobutylene and polyalloocimene blocks, *Journal of Polymer Science Part A: Polymer Chemistry*, **53**, 13, (1567-1574), (2015).
12. John F. Trant, Inderpreet Sran, John R. de Bruyn, Mark Ingratta, Aneta Borecki and Elizabeth R. Gillies, Synthesis and properties of arborescent polyisobutylene derivatives and a paclitaxel conjugate: Towards stent coatings with prolonged drug release, *European Polymer Journal*, 10.1016/j.eurpolymj.2015.09.012, **72**, (148-162), (2015).
13. J.H. Roh, D. Roy, W.K. Lee, A.L. Gergely, J.E. Puskas and C.M. Roland, Thermoplastic elastomers of alloocimene and isobutylene triblock copolymers, *Polymer*, 10.1016/j.polymer.2014.11.015, **56**, (280-283), (2015).
14. Preetom Sarkar and Anil K. Bhowmick, Synthesis, characterization and properties of a bio-based elastomer: polymyrcene, *RSC Adv.*, 10.1039/C4RA09475A, **4**, 106, (61343-61354), (2014).
15. Attila L. Gergely, Ozlem Turkarslan, Judit E. Puskas and Gabor Kaszas, The role of electron pair donors in the carbocationic copolymerization of isobutylene with alloocimene, *Journal of Polymer Science Part A: Polymer Chemistry*, **51**, 22, (4717-4721), (2013).
16. Victor A. Rozentsvet, Valery G. Kozlov, Nelly A. Korovina and Sergei V. Kostjuk, A New Insight into the Mechanism of 1,3-Dienes Cationic Polymerization I: Polymerization of 1,3-Pentadiene with BuCl/TiCl4 Initiating System: Kinetic and

Mechanistic Study, *Macromolecular Chemistry and Physics*, **214**, 23, (2694-2704), (2013).

17. Judit E. Puskas and Gabor Kaszas, Carbocationic Polymerization, Encyclopedia of Polymer Science and Technology, (1-43), (2016).
18. Jozsef Kantor, Judit E Puskas and Gabor Kaszas, The Effect of Reaction Conditions on the Synthesis of Thermoplastic Elastomers Containing Polyalloocimene, Polyisobutylene and Tapered Blocks, *Chinese Journal of Polymer Science*, 10.1007/s10118-019-2254-8, (2019).

Gergely, A.L.; Turkarslan, O.; Puskas, J.E.; Kaszas, G. The Role of Electron Pair Donors in the Carbocationic Copolymerization of Isobutylene with Alloocimene, *J. Polym. Sci. Part A: Polym. Chem., 51*, **2013**, 4717-4721. Factorul de impact: 3.113

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K. Alte realizări semnificative.
Conferinții naționale și internaționale

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2. **Gergely, A.L**, Farmos, R.L., Kántor, J., Kántor, A.E., Hodgyai, N. Recycled PET nanofiber membranes for air filtration, Joint CINTI – MACRo 2022, Noiembrie, 21, 2022, Targu-Mures, Romania

3. Kántor, J., **Gergely, A.L,** Farmos, R.L, Hodgyai, N. Poly(styrene-b-isobutylene-b-styrene) Triblock Copolymer Fiber Generation withCentrifugal Spinning, and its Potential Application in Oil Collection, Joint CINTI – MACRo 2022, Noiembrie, 21, 2022, Targu-Mures, Romania
4. Fábián, H., **Gergely, A.L.** Nagy teljesítményű szálképző berendezés tervezése és kivitelezése**,** FMTÜ XXVII., Martie 17, **2022**. Cluj-Napoca, Romania.

2021

1. Birton B., **Gergely, A.L.** Vákuumformázó berendezés tervezése és kivitelezése**,** FMTÜ XXVI., Martie 18 **2021**. Cluj-Napoca, Romania.
2. Balika, R.M.; **Gergely, A.L** Design and Implementation of a Laboratory Melt-Flow Indexer, XXIX. Nemzetközi Gépész Találkozó, Odorheiu-Secuiesc, Aprile 23, 2021, Romania.
3. **Gergely, A.L.** Piezoelectric Nanofiber Production Using Electrospinning, 5th ISCMP, Burdur, Sept 28- Oct. 1, Turkey.

2020

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2. Hodgyai, N., **Gergely, A.L.**; Farmos, R.L. Tárcsás elektrosztatikus berendezés tervezése és kivitelezése**,** FMTÜ XXV., Március 26 **2020**. Cluj-Napoca, Románia.
3. Főcze, A.; Sipos, B.; **Gergely, A.L.** Optimization of injection molding parameters based on cavity pressure**,** XXVIII. Nemzetközi Gépész Találkozó, Odorheiu-Secuiesc, Aprile 25, 2020, Romania.

2019

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2. Hodgyai, N., **Gergely, A.L.** Ágaprító berendezés gép tervezése**,** FMTU XXIV., Március 28-29 **2019**. Cluj-Napoca, Romania.
3. Kedves, B., **Gergely, A.L.** Laboratóriumi műanyag granulátum készítő gép tervezése**,** FMTU XXIV., Március 28-29 **2019**. Cluj-Napoca, Romania.

2018

1. **Gergely, A.L.** Nanométer nagyságrendű polimer szálak előállítása PET palackból. XIX. Műszaki Tudományos Ülésszak, November 24 **2018**. Cluj-Napoca, Romania.
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5. Ilyés, A.; **Gergely, A.L.** Laboratóriumi műanyag daraboló gép tervezése és kivitelezése. Sapientia EMTE, XVII TDK, apr. 13-14, 2018.

2017

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2. **Gergely, A.L.** Crosslinking of thermoplastic leastomers**,** FMTU XXII., March 22-23 **2017**. Cluj-Napoca, Romania.
3. **Gergely, A.L.** The investigation of polymer-filler interaction**,** OGÉT XXV, April 27-30, **2017**, Cluj-Napoca, Romania.

2016

1. **Gergely, A.L.** Possible improvement of the mechanical properties of novel thermoplastic elastomers, OGÉT XXIV, Aprile 21-24, **2016**, Deva, Romania.

2015

1. **Gergely, A.L.**; Puskas, J.E.* Polyisobutylene-based Thermoplastic Elastomers by Two-phase Living Cationic Polymerization, International Symposium of Ionic Polymerization. July 5-10, 2015, Bordeaux, France.
2. **Gergely, A.L.**; Collister, E.; Das, D.;McLennan, G.; Drazba, J.; Puskas, J.E. Synthesis and Characterization of Folate Targeted Polymeric Cancer Diagnostic Agents, Cancer Nanotechnology, Gordon Research Conference June 28 - July 3, 2015, West Dover, VT
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4. Sen, S.**; Gergely, A.L.**; Collister, E.; Shrikhande, G.; Puskas, J.E. Green Fluorescein Compounds for Cancer Diagnosis, Midwest ASB Regional Meeting, February 17-18, 2015, Akron, OH.
5. Jindal, A.; Charif, A.; **Gergely, A.L.**; Puskas, J.E. Drug Eluting Electrospun Rubbery Fiber Mats, Midwest ASB Regional Meeting, February 17-18, 2015, Akron, OH.

2014

1. **Gergely, A.L.***; Puskas, J.E. Novel Filler-interactive Butyl-type Thermoplastic Elastomers: Potential Replacement of Halobutyl Rubber**,** 186th Technical Meeting and Educational Symposium of the Rubber Division of the American Society, October 14-16, 2014, Nashville, TN, USA**.**
2. **Gergely, A.L.***; Puskas, J.E. Synthesis of block copolymers of isobutylene and alloocimene**,** 247th ACS Technical Meeting, March 16-20, 2014, Dallas, TX, USA.
3. Jindal, A.; Charif, A.; **Gergely, A.L.**; Puskas, J.E. Drug Eluting Electrospun Rubbery Fiber Mats, ACS Rubber Division, 186th Technical Meeting, October 14-16, **2014,** Nashville, TN, USA.
4. **Gergely, A.L**.*; Puskas, J.E., Altstädt, V**.** Dynamic Fatigue Properties of Polyisobutylene-based Thermoplastic Elastomers**,** PPS-30, Polymer Processing Society, June 8 – 12, 2014, Cleveland, OH, USA.

2013

1. **Gergely, A.L.***; Puskas, J.E.; Kaszas, G. A New Class of Polyisobutylene-Based Thermoplastic Elastomers, PPS-29, July 15-19, 2013, Nuremberg, Germany.
2. Puskas, J.E.*; **Gergely, A.L.**; Kaszas, G. Living Carbocationic Polymerization in a Two-phase System, 10th IUPAC APME, August 18-23, 2013, Durham, United Kingdom.
3. **Gergely, A.L.**; Puskas, J.E.*; Kaszas, G. Novel Two-Phase Living Carbocationic Polymerization, IP'13, 2013, Awaji, Japan.
4. **Gergely, A.L.***; Puskas, J.E.; Kaszas, G. Novel Filler Reinforced Polyisobutylene-based Thermoplastic Elastomers, International Elastomer Conference, October 7 – 11, 2013, Cleveland, OH, USA.
5. Puskas, J.E; **Gergely, A.L.*** Diene-functionalized Polyisobutylene and Butyl Rubber for Improved Filler Interaction, Center for Tire Research Fall 2013 Meeting, 2013, October 15 – 16, Akron, OH, USA.
6. Puskas, J.E; **Gergely, A.L.*** Diene-functionalized Polyisobutylene and Butyl Rubber for Improved Filler Interaction, Center for Tire Research Spring 2012 Meeting, 2013, June 3 – 5, Akron, OH, USA.

2012

1. **Gergely A.L**.*; Puskas, J.E., Altstädt, V. Dynamic Fatigue Properties of Polyisobutylene-based Thermoplastic Elastomers: The Effect Of Carbon Black

Reinforcement, PPS-29, Polymer Processing Society, July 14 – 19, 2012, Nuremberg, Germany, Europe.

2. Puskas, J.E; **Gergely, A.L.*** Diene-functionalized Polyisobutylene and Butyl Rubber for Improved Filler Interaction, Center for Tire Research Fall 2012 Meeting, 2012, October 15 – 16, Akron, OH, USA.
3. **Gergely, A.L.***; Puskas, J.E.; Kaszas, G. A New Polyisobutylene Based Thermoplastic Elastomer Rubber Expo and 182nd Technical Meeting & Educational Symposium, 2012, October 9 – 12, Cincinnati, OH, USA. (Best poster)
4. **Gergely, A.L*.**; Puskas, J.E.; Kaszas, G. Controlled Carbocationic Copolymerization of Isobutylene with Alloocimene, MACRO2012, World Polymer Congress, **2012**, June 24 – 29 Blacksburg, VA, USA.

2006

1. **Gergely, A.L.*;** Papp, I. Determination the movement equation of the Pétervar-i screw using the method of constraint equations, FMTU, 2006, Cluj-Napoca, Romania.

Data, **Semnătura,**

04.10.2023