

Lista de lucrări în domeniul de studii universitare de licență

Numele și prenumele: Szilveszter Szabolcs

A. Teza de doctorat

Theoretical and Experimental Contributions in the Study of Biological Processes in Aqueous Environment, Prof.dr.ing. Dan Robescu Niculae, Universitatea Politehnica din Bucuresti, Facultatea Energetica, Catedra de Hidraulica, Masini Hidraulice si Ingineria Mediului

B. Cărți și capitole de cărți

1. Orbán Kálmán-Csongor, **Szilveszter Szabolcs**, Számítógépes grafika – AutoCAD, 2022, pp. 97, ISBN 978-973-0-36554-2
2. **Szilveszter Sz.**, Climate Security pp. 167-182, Security, Resilience and Sustainability of the European Union. Ed. Anna Molnár, Harnos Éva Jakusné, and Mónika Szenté-Varga. Budapest: Ludovika University Press, ISBN: 9786156598042, 2023.

C. Lucrări științifice publicate

C1. Lucrări științifice publicate în reviste cotate ISI

1. Fikó DR, Ráduly B, Máthé I, Felföldi T, Lányi S, **Szilveszter S**. Bioaugmentation Potential Investigation Using a Phenol Affinity Analysis of Three Acinetobacter Strains in a Multi-Carbon-Source Condition. Water. 2023 Aug 3;15(15):2815.
2. **Szilveszter, SZ.**, Fikó, D. R., Máthé, I., Felföldi, T., & Ráduly, B. (2023). Kinetic characterization of a new phenol degrading Acinetobacter towneri strain isolated from landfill leachate treating bioreactor. World Journal of Microbiology and Biotechnology, 39(3), 79.
3. **Szilveszter, Sz.**, Beltran, R., & Fuentes, A. Performance analysis of the domestic water meter park in water supply network of Ibarra, Ecuador. Urban Water Journal, 14(1), 85-96, 2017.
4. B. Ráduly, L. Gyenge, **Sz. Szilveszter**, A. Kedves, S. Crognale, Treatment of corn ethanol distillery wastewater using two-stage anaerobic digestion, Water Sci Technol. 74(2):431-7, 2016.
5. Felföldi, T., Kovács, E., Fikó, D.R., Tankó, Gy., Szabó, A., Nagymáté, Zs., **Sz. Szilveszter**, Máthé, I. 2015. Applying unconventional techniques for the laboratory cultivation of new bacterial strains\Hagyományostól eltérő eljárások alkalmazása új baktériumtörzsek laboratóriumi tenyésztése érdekében. Hidrológiai Közlöny Journal of the Hungarian Hydrological Society 95:19-21, 2015.
6. **Sz. Szilveszter**, Raduly, B., Abraham, B., Lanyi, Sz., In Situ Imaging of Biopolymers and Extracellular Enzymes in Activated Sludge Flocs of a Municipal Wastewater Treatment Plant, J Chem Technol Biot, Vol. 88, Issue 7, pp 1295–1304, 2013. Cited by: 7.
7. Kibédi-Szabó, Cs.Z., Stroescu, M., Stoica-Guzun, A., Jinga, S.I., **Sz. Szilveszter**, Jipa, I., Dobre, T., Biodegradation Behavior of Composite Films with Poly (Vinyl Alcohol) Matrix, J Polym Environ, 20(2), pp. 422-430, 2012. Cited by: 10.
8. Sz. Szilveszter, Raduly, B., Abraham, B., Lanyi, Sz., Robescu D.N., “Mathematical models for domestic biological wastewater treatment process”, EEMJ, 9(5), pp. 629-635, 2010. Cited by: 10.
9. **Sz. Szilveszter**, Raduly, B., Bucs,Sz., Abraham, B., Szabolcs Lanyi, Lanyi, Sz., Robescu D.N., Activated Sludge Floc Characterization by Confocal Laser Scanning Microscopy, EEMJ, 11 (3): 669-674, 2012. Cited by: 5.
10. **Sz. Szilveszter**, Raduly, B., Miklossy, I., Lanyi, Sz., Robescu D.N., “Enzymatic activity studies of biological wastewater treatment”, Studia Universitatis Babes-Bolyai Seria Chemia, Vol. 54 Special Issue 2,pp.113-122, 2009. Cited by: 1.
11. Raduly, B., Corognale, S., **Sz. Szilveszter**, Meszaros A., “Modeling of the Biochemical Processes of the Activated Sludge Wastewater Treatment Technology”, Studia Universitatis Babes-Bolyai Seria Chemia, Vol. 54 Special Issue 2, pp 135-146, 2009.
12. Sz. Szilveszter, Raduly, B., Miklossy, I., Abraham, B., Lanyi, Sz., Robescu D.N., “Lab scale sequencing batch reactor (sbr) construction and characterization for dynamic modeling with activated sludge model (ASM).” Studia Universitatis Babes-Bolyai Seria Chemia, Vol. 55 Special Issue, pp 119-133, 2010. Cited by: 1.

13. **Sz. Szilveszter**, Miklóssy, I., Mészáros, A., Ábrahám, B., Raduly, B., Robescu D.N., Lányi, Sz., "Enzyme activities and distribution in activated sludge in a lab-scale sequencing batch reactor (SBR)", University Politehnica Of Bucharest, Scientific Bulletin Series B: Chemistry And Materials Science, Vol. 72 Issue 2., pp 141-150, 2010. Cited by: 1.
14. Harai (Molnos), É., **Sz. Szilveszter**, Abraham, B., Nagy, I., Lányi, Sz., Munteanu, O., "Biohydrogen production with photosynthetic bacteria." Studia Universitatis Babes-Bolyai Seria Chemia, Vol. 54, Special Issue 2, pp 61-68, 2010.
15. Miklóssy, I., Szilágyi, L., Ábrahám, B., **Sz. Szilveszter**, Lányi, Sz., "Obtention of the Ancestral Proteinase Stemzyme-IDP- β by Heterologous Expression." , Studia Universitatis Babes-Bolyai Seria Chemia, Vol. 54, Special Issue 2, pp 11-20, 2010.

C2. Lucrări științifice publicate în reviste indexate în baze de date internaționale (indicați și baza de date)

C4. Lucrări științifice publicate în reviste din țară, recunoscute CNCSIS (altele decât cele din baze de date internaționale)

1. Szilágyi Laszlo, Ábrahám Beata, Miklóssy Ildiko, **Szilveszter Szabolcs**, Gálicza Judit, Lányi Szabolcs, "Modeling studies on the ancestral proteinase stemzyme IDP-B", University Politehnica Of Bucharest, Scientific Bulletin Series B: Chemistry And Materials Science, Vol. 72 Issue 2., 161-168, 2010
2. **Szilveszter Szabolcs**, Miklóssy Ildiko, Mészáros Alexandru, Ábrahám Beata, Ráduly Botond, Robescu Dan Niculae, Lányi Szabolcs, "Enzyme activities and distribution in activated sludge in a lab-scale sequencing batch reactor (SBR)", University Politehnica Of Bucharest, Scientific Bulletin Series B: Chemistry And Materials Science, Vol. 72 Issue 2., pp 141-150, 2010
3. Beata Ábrahám ; Ildikó Miklóssy ; Erika Kovács ; Éva Tamás ; Ildikó Mészáros ; **Szabolcs Szilveszter** ; Aurelia Brezeanu ; Szabolcs Lányi, "Genetic Analysis of Pinus sylvestris L. and Pinus sylvestris forma turfosa L. Using RAPD Markers", Notulae Scientia Biologicae, Vol 2, No 1, 129-132, 2010.

C5. Lucrări științifice publicate în reviste, altele decât cele menționate anterior

C6. Lucrări științifice publicate în volumele manifestărilor științifice

1. **Szabolcs Szilveszter**, Botond Raduly, Szilard Bucs, Dan Robescu Niculae, Szabolcs Lanyi, Characterization of activated sludge flocs by CLSM microscopy with different staining methods, 1st Danube – Black Sea Regional Young Water Professionals Conference, Innovations in the field of water supply, sanitation and water quality, Palace of parliament Bucharest, 2011, june 14-15.
2. A. Szabó, I. Máthé, **Sz. Szilveszter**, Laura Jurecska, B. Vajna, K. Márialigeti, T. Felföldi, Next generation amplicon sequencing of the microbial community of a crater lake (Lake Saint Ana, Romania), Acta Microbiologica et Immunologica Hungarica, 60, pp: 236, 2013, Proceeding of the 4th Central European Forum for Microbiology.

F. Invenții:

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

1. Programe 4, 31/048 Programe /"Microbial inoculants for sustainable agriculture systems." MIMOSA – Cercetator;
2. Programe 4 -PNCDI2/"Redesigning enzyme specificity by directed evolution: elaboration of a serine protease with specificity to the C-terminal cleavage of phosphotyrosine containing proteins." PHOSPHOTYRASE – Cercetator;
3. "BIOPREP Microbial biopreparates for increasing the productivity and crop protection" research funded by Sectorial Operational Programme, Increase of Economic Competitiveness Operation 2.1.1. of the Romanian Ministry of Labour, Family and Social Protection, through financial agreement POSCEE No. 469/11817. – Cercetator;
4. Chemical and microbiological analysis of Saint Anne Lake, 2011-2014, SOIPC (KPI) Hungarian University of Transylvania - Cercetator;

5. Retrieving new bacterial isolates for potential bioremediation and biotechnological applications, Romanian National Authority for Scientific Research, CNCS – UEFISCDI; project number PN-II-RU-TE-2012-3-0319 - Cercetator;
6. Water network sectorization and non-revenue water loss analysis of water supply network in Ibarra city Ecuador / Actualizacion de la sectorizacion hidraulica y programa de reduccion de perdidas de agua en la Ciudad de Ibarra y asesoramiento en su implementacion y puesta en marcha, Senescyt – Prometeo Project, Ecuador; Financial Agreement No. 2013-11, 28.8.2013; Bugetul proiectului: 93.267,86 \$ –Director de proiect.
7. Aerobic granular sludge phenol removal intensification with bioaugmentation 2017-2018, SOIPC (KPI) Hungarian University of Transylvania, Project Budget: 10.000 € - Project director;
8. Interdisciplinary Training on EU Security, Resilience and Sustainability - A Simulation Supported Massive Open Online Course (EUSecure). Id: 2020-1-HU01-KA203-078719, Buget:335.070 Eur, Sapientia University 42.350 Eur – Researcher
9. Developing innovative processes and products in the forestry sector to increase competitiveness and quality of life. Consultancy in bacterial isolation, testing and composting technology, contract manager, Contract No. 95/15.06.2022, Ocolul Silvic de Regim Gheorgheni SA, Project budget: 49742 RON ≈ 9999.6 EUR.

K. Participări la conferințe naționale și internaționale

1. Ndeba-Nganongo, L. N.A., Ntawmpe, S.K.O., **Szabolcs, S.**, Itoba-Tombo, E.F., 2018. The Application of ADM/ASM Interface in Sumo Wide Plant Model. Paper presented at the 10th International Conference on Advances in science, Engineering, Technology and Healthcare, South Africa, 19-20 November 2018, Cape Town, South Africa. Pp. 231-235. ISBN - 978-81-938365-2-1
2. D.R Fikó, I. Máthé, T. Felföldi, **Sz. Szilveszter**, Microcosm studies on phenol degradation affinity of different bacterial strains in multiple carbon source environment, 10th Eastern European Young Water Professionals Conference, IWA, Zagreb, Croatia, 7-11 May, 2018;
3. Fikó, D.R., **Sz. Szilveszter**, Kovacs E., Máthé, I., Phenolic wastewater treatment potential of bacteria isolated from landfill leachate treating bioreactor. 20th Romanian International Conference on Chemistry and Chemical Engineering (RICCCE 2017), Poiana Braşov, Romania, 06-09 June, 2017;
4. **Sz. Szilveszter**, Fikó D.R., Máthé I., Ráduly B., Felföldi T. Kinetics of phenol degradation by acinetobacter towneri strain isolated from activated sludge 9th Eastern European Young Water Professionals Conference, IWA, Budapest, Hungary, 24-27 May, 2017;
5. **Sz. Szilveszter**, Fikó, D.R., Máthé, I., Felföldi, T., Phenol Removal and Bioaugmentation Potential Analysis of Different Bacterial Strains in Wastewater, 1st International Conference on Air, Water, and Soil Pollution and Treatment (AWSPT'16), Prague, Czech Republic, March 30-31, 2016;
6. Fikó, D.R., Kovacs, E., **Sz. Szilveszter**, Felföldi, T., Máthé, I., Phenol Degradation Potential of Bacteria Isolated From Extreme Habitats, 1st International Conference on Air, Water, and Soil Pollution and Treatment (AWSPT'16), Prague, Czech Republic, March 30-31, 2016;
7. Felföldi T*, Kovács E, Fikó DR, Tankó Gy, Szabó A, Nagymáté Zs, **Sz. Szilveszter**, Máthé I. Unconventional strategies for the cultivation of new bacterial strains from aquatic environments. 17th International Congress of the Hungarian Society for Microbiology, Budapest (Hungary), 8-10 July 2015.
8. Felföldi T, Kovács E, Fikó DR, Tankó Gy, Szabó A, Nagymáté Zs, **Sz. Szilveszter**, Máthé I. Applying unconventional techniques for the laboratory cultivation of new bacterial strains. 13th Symposium on Bacterial Genetics and Ecology (BAGECO-13), Milan (Italy), 14-18 June 2015.
9. **Sz. Szilveszter**, Máthé, I., Abraham, B., Silvia Crognale, Ráduly, B., Effect of Salinity on Activated Sludge Treatment Performance and Floc Morphology, 7th Eastern European Young Water Professionals Conference, IWA, Belgrade, Serbia, 17-19 September, 2015;
10. Ráduly, B., Gyenge, L., **Sz. Szilveszter**, Orsolya Varga, Abraham, B., Crognale Silvia, Treatment of Corn Ethanol Distillery Wastewater Using Two-Stage Anaerobic Digestion, 7th Eastern European Young Water Professionals Conference, IWA, Belgrade, Serbia, 17-19 September, 2015;
11. **Sz. Szilveszter**, Mogos, G., Raul Beltran, Intrinsic error and economic analysis in domestic water meter park, The International Exhibition & Conference on Water Technology and Environmental Control (WATEC-Peru), Lima, Peru, 17-19 September, 2014;
12. Máthé, I., Kovács, E., Róbert Dezső Fikó, György Tankó, Zsuzsanna Nagymáté, Attila Szabó, **Sz. Szilveszter**, Tamás Felföldi, Enhancing the cultivability of bacteria with the combination of simple but unconventional methods, 15th International Symposium on Microbial Ecology (ISME), Seoul, South Korea, 24-29 August, 2014;

13. A. Szabó, I. Máthé, **Sz. Szilveszter**, Laura Jurecska, B. Vajna, K. Márialigeti, T. Felföldi, Next generation amplicon sequencing of the microbial community of a crater lake (Lake Saint Ana, Romania), 4th Central European Forum for Microbiology, Keszthely, Hungary, 16-18 October, 2013;
14. **Sz. Szilveszter**, Miklóssy Ildiko, Mészáros Alexandru, Ábrahám Beata, Raduly, B., Robescu Dan Niculae, Lanyi, Sz., Enzyme activities and distribution in activated sludge in a lab-scale sequencing batch reactor (SBR), 16th Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, 9-12 sept. 2009;
15. **Sz. Szilveszter**, Rásuly Botond, Miklóssy Ildiko, Lanyi, Sz., Dan Robesc Niculae, Enzymatic activity studies of biological wastewater treatment (Enzimek tanulmányozása biológiai szennyvíztisztításkor) 15th International Conference of Chemistry, Tg-Mureş, Romania, 12-15 november, 2009;
16. Raduly, B., Crogonale Silvia, **Sz. Szilveszter**, Mészáros Sandor, Modeling of the biochemical processes of the activated sludge wastewater treatment technology (Az eleveniszapos szennyvíztisztítás biokémiai folyamatainak modellezése) 15th International Conference of Chemistry, Tg-Mureş, 2009, noiembrie 12-15.
17. **Sz. Szilveszter**, Rásuly Botond, Miklóssy Ildiko, Lanyi, Sz., Dan Robesc Niculae, Enzim aktivitás vizsgálat eleveniszap pelyhekben, Műszaki Kémiai Napok/Conference of Chemical Engineering 2010, Veszprém apr. 27-29 – Hungary
18. **Sz. Szilveszter**, Miklóssy Ildikó, Orbán Csongor, Bodor Zsolt, Lanyi, Sz., Dan Robescu Nicolae: Az alfa-glükózidáz és alkáli foszfatáz extrakciója és aktivitásvizsgálata eleveniszap pelyhekben. Magyar Tudomány Napja Erdélyben, Őszi természettudományi konferencia, 2009 nov. 21, Kolozsvár
19. **Sz. Szilveszter**, Raduly, B., Miklóssy Ildiko, Abraham Beata, Lanyi, Sz., Dan Robescu Niculae, Lab Scale Sequencing Batch Reactor Characterization For Dynamic Modelling with Activated Sludge Models (ASM) 16th International Conference of Chemistry, Cluj Napoca, 2010, nov. 11-14.
20. Bucs Szilard, **Sz. Szilveszter**, Lavric Vasile, Experimental study of free and partially flock's entrapped enzymes in activated sludge wastewater treatment system, 16th International Conference of Chemistry, Cluj Napoca, 2010, nov. 11-14.
21. **Sz. Szilveszter**, Botond Raduly, Szilard Bucs, Dan Robescu Niculae, Szabolcs Lanyi, Characterization of activated sludge flocs by CLSM microscopy with different staining methods, 1st Danube – Black Sea Regional Young Water Professionals Conference, Innovations in the field of water supply, sanitation and water quality, Palace of parliament Bucharest, 2011, June 14-15.
22. **Sz. Szilveszter**, Szilard Bucs, Botond Raduly, Beata Abraham, Szabolcs Lanyi, Dan Robescu Niculae, Activated sludge floc characterization by Confocal Laser Scanning Microscopy, 6th International Conference on Environmental Engineering and Management – Green Future, Balatonalmádi, Hungary, 2011, September 1-4
23. Szilágyi, Laszlo, Ábrahám Beata, Miklóssy Ildiko, **Sz. Szilveszter**, Gálicza Judit, Lanyi, Sz., "Modeling studies on the ancestral proteinase stemzyme IDP-B", 16th Romanian International Conference on Chemistry and Chemical Engineering, Sinaia, 9-12 sept. 2009
24. Bodor Zsolt, Kovács Erika, Miklóssy Ildikó, Abraham, B., Bálint Emese-Éva, Orbán Kálmán Csongor, Tamás Éva, **Sz. Szilveszter**, Lanyi, Sz.: Termosztabil enzimek extracelluláris heterológ expressziója keményítő tartalmú hulladékok kezelésére. Magyar Tudomány Napja Erdélyben, Őszi természettudományi konferencia, 2009 nov. 21, Kolozsvár
25. Bodor Zsolt, Kovács Erika, Miklóssy Ildiko, Ábrahám Beata, Bálint Emese, Orbán Csongor, Tamás Éva., **Sz. Szilveszter**, Lányi Sz., Heterologous expression of alpha-amylase in E. Coli (Alfa-amiláz heterológ expressziója E. Coli-ban) 15th International Conference of Chemistry, Tg-Mureş, 2009, noiembrie 12-15.
26. **Sz. Szilveszter**, Raduly, B., Abraham Beata, Activated sludge floc characterization by Confocal Laser Microscopy, 18th International Conference on Chemistry, Baile Felix, Romania, 22-25 November, 2012.

III. RECUNOAȘTEREA

I. Premii, distincții.

- 2016 - Best Paper Award, World Congress on Civil, Structural and Environmental Engineering (CSEE'16), Prague, Czech Republic.
- 2017 - Young University Lecturer Scholarship, Ministry of Human Capacities (Hungarian Government) and Eötvös Loránd University, 500000 HUF (≈1600€) scholarship award.
- 2018 - Young University Lecturer Scholarship, Ministry of Human Capacities (Hungarian Government) and Eötvös Loránd University, 500000 HUF (≈1600€) scholarship award.
- Seal of Excellence for project proposal 841974 DI-AGS submitted to H2020-MSCA-IF-2018 of 12 September 2018. Certificate delivered by the European Commission as the institution managing Horizon 2020, the EU Framework Program for Research and Innovation 2014-2020.

J. Citări

Citări Google Scholar

Citări: 154

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Nume Prenume

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