



ROMÂNIA
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LISTA LUCRĂRILOR PUBLICATE
Conf. univ. dr. ing. habil. Irimia Oana

I. Lista lucrărilor considerate relevante pentru realizările profesionale proprii

1. Eniko Gaspar, **Oana Irimia**, Mirela Stanciu, Narcis Bârsan, Emilian Mosnegutu, Strategies for a Sustainable Economy: Optimizing Processes for BOD, COD and TSS Removal from Wastewater, Water 2025, 17(3), 318; <https://doi.org/10.3390/w17030318>. WOS:001419220600001
2. **Oana Irimia**, Eniko Gaspar, Mirela Stanciu, Emilian Mosnegutu, Narcis Bârsan, Optimizing Nitrogen and Phosphorus Removal from Wastewater in the Context of a Sustainable Economy, Water, 2024, 16, 1585. <https://doi.org/10.3390/w16111585>, WOS:001246975800001.
3. **Oana Irimia**, Mirela Panaite-Lehadus, Claudia Tomozei, Emilian Mosnegutu, Grzegorz Przydatek, Origin-destination traffic survey—Case study: data analyse for Bacau Municipality, Sustainability, vol. 15, no. 6, 4975, 2023; FI 3,9; <https://doi.org/10.3390/su15064975>; WOS:000967792200001;
4. Przydatek Grzegorz, Mosnegutu Emilian, Cabala Adrianan, **Irimia Oana**, Hazardous Waste Advanced Management in a Selected Region of Poland, Processes, vol. 10, no. 10, 2032; 2022; FI 3,5; <https://doi.org/10.3390/pr10122485>; WOS:000902812200001;
5. **Irimia Oana**, Przydatek Grzegorz, Panainte-Lehadus Mirela, Tomozei Claudia, Mosnegutu Emilian Gawron Piotr, Indicators of impact selected municipal units on the air quality - Case Study from Poland and Romania, Processes, vol. 10, no. 12, 2485; 2022; FI 3,5; <https://doi.org/10.3390/pr10122485>; WOS:000902812200001;
6. **Oana Tirtoaca (Irimia)**, Mirela Panainte-Lehadus, Claudia Tomozei, Emilian Mosnegutu, Alexandra-Dana Chitimus, Narcis Barsan, Study regarding the measuring of Particulate matter PM2.5 and PM10 in industrial working environments, Scientific Study & Research. Chemistry & Chemical Engineering, Biotechnology, Food Industry, vol. 21, no. 2, p. 271 – 278, 1582-540X, 2020; FI 0, 3; <https://pubs.ub.ro/?pg=revues&rev=csc6&num=202002&vol=2&aid=5111>; WOS:000546789300012;

7. **Tirtoaca (Irimia) Oana**, Mirela Panainte Lehadus, Nedeff Valentin, Sandu Ion, Tomozei Claudia, Cretu Valentin Vasile; Sandu Andrei Victor, Experimental results regarding the groundwater quality in Bacau City, Romania, Revista de Chimie, Bucharest, vol. 70, no. 9, p. 3378-3382, 2019, FI 0; <https://doi.org/10.37358/RC.19.9.7553>; WOS:000489958900060;
8. Cochiorca Alina, Narcis Barsan, Florin Marian Nedeff, Ion Sandu, Emilian Florin Mosnegutu, Mirela Panainte Lehadus, Dana Chitimus, **Oana Irimia**, Ioan Gabriel Sandu, Surface water quality assessment from a mining area case study, Groapa Burlacu lake, Targu Ocna, Romania, REV.CHIM.(Bucharest), vol. 70, nr. 10, 2019, p. 3678-3680, FI 0, WOS:000500795900049;
9. Mirela Panainte Lehadus, Valentin Nedeff, Narcis Barsan, Andrei Victor Sandu, Emilian Mosnegutu, Claudia Tomozei, **Oana Irimia**, Gabriela Andrioai, Ion Sandu, Monitoring the Particulate Matter (PM10) emissions from Bacau City Termo-Energetic Industry, Revista de Chimie, Bucharest, ISSN 2537-5733, 2019, 70, no. 8, p. 2869-2872; 2019, FI 0; <https://doi.org/10.37358/RC.19.8.7446>; WOS:000489685600035;
10. **Oana Tirtoaca Irimia**, Claudia Tomozei, Mirela Panainte, Emilian Florin Mosnegutu, Narcis Barsan - Efficiency of filters with different filtering materials: comparative study in water treatment, Environmental Engineering and Management Journal, vol. 12, no. 1, p. 35 – 40; January 2013; FI 1,1; DOI:10.30638/eemj.2013.005; WOS:000317803300005;

II. Teza de doctorat

1. “Studii și cercetări privind posibilitățile de creștere a calității apei pentru diferite tipuri de cerințe”, Universitatea „Vasile Alecsandri” din Bacău, Facultatea de Inginerie, 11 noiembrie 2011.

III. Cărți și capitole din cărți

1. Nedeff Valentin, Chitimus Alexandra-Dana, Mosnegutu Emilian, Panainte Lehadus Mirela, Tomozei Claudia, **Irimia Oana**, Barsan Narcis, Nedeff Florin Marian, Proceduri de lucru pentru analiza solului și a altor materiale, vol. 2, Editura Alma Mater Bacau 2018, ISBN 978-606-527-581-2, 978-606-527-583-6, 131 pag.;
2. Valentin Nedeff, Claudia Tomozei, **Irimia Oana**, Nedeff Florin Marian, Panainte Lehadus Mirela, Barsan Narcis, Chitimus Alexandra-Dana, Mosnegutu Emilian, Proceduri de lucru pentru analiza calitatii aerului și a altor compusi gazoși, vol. 1, Editura Alma Mater Bacau, 2018, ISBN 978-606-527-593-5;
3. Valentin Nedeff, Barsan Narcis, **Irimia Oana**, Chitimus Alexandra-Dana, Mosnegutu Emilian, Panainte Lehadus Mirela, Claudia Tomozei, Nedeff Florin Marian, Proceduri de lucru pentru analiza apelor și a altor compusi lichizi, vol. 1, Editura Alma Mater Bacau, 2018, ISBN 978-606-527-589-8;
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IV. Articole/studii în extenso, publicate în reviste din fluxul științific internațional principal

IV.1. Lucrări publicate în reviste cotate ISI

1. Fègbawè Badanaro, Narcis Barsan, Mamatchi Mélila, Kamilou Ouro-Sama, Koami Améyran, Florin-Marian Nedeff, **Oana Irimia**, Valentin Nedeff, Nutritional Potential and Low Heavy Metals Content of *Oryctes monoceros* (Olivier, 1789) and *Rhynchophorus phoenicis* (Fabricius, 1801) Adults, Two Coleopteran Species Consumed in Togo, Appl. Sci. 2025, 15(3), 1317; <https://doi.org/10.3390/app15031317>, WOS:001418454100001
2. Eniko Gaspar, **Oana Irimia**, Mirela Stanciu, Narcis Bârsan, Emilian Mosnegutu, Strategies for a Sustainable Economy: Optimizing Processes for BOD, COD and TSS Removal from Wastewater, Water 2025, 17(3), 318; <https://doi.org/10.3390/w17030318>
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5. Dana Chitimus, Valentin Nedeff, Emilian Mosnegutu, Narcis Barsan, **Oana Irimia**, Florin Nedeff, Studies on the Accumulation, Translocation, and Enrichment Capacity of Soils and the Plant Species *Phragmites Australis* (Common Reed) with Heavy Metals, Sustainability 2023, 15, 8729, FI 3, 9; WOS:001005352300001
6. Grzegorz Przydatek, Andrzej Ryniewicz, **Oana Irimia**, Claudia Tomozei, Emilian Mosnegutu, Marcin Bodziony, Analysis of noise levels in typical passenger cars, Sustainability, vol. 15, p. 7910, 2023; FI: 3,889; <https://doi.org/10.3390/su15107910>;
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8. Hanen Filali, Narcis Barsan, Georg Hörmann, Valentin Nedeff, **Oana Irimia**, Florin Nedeff, Mohamed Hachicha, Greywater Vertical Treatment and Possibility of Reuse in the Fields from Peri-Urban Area, Agronomy, vol. 13, no. 3, 940; 2023; FI 3,7; DOI: 10.3390/agronomy13030940; eISSN 2073-4395; WOS: 000952799300001;

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11. **Irimia Oana**, Przydatek Grzegorz, Panaite-Lehadus Mirela, Tomozei Claudia, Mosnegutu Emilian Gawron Piotr, Indicators of impact selected municipal units on the air quality—Case Study from Poland and Romania, Processes, vol. 10, no. 12, 2485; 2022; FI 3,328; <https://doi.org/10.3390/pr10122485>; WOS:000902812200001;
12. Emilian Moşneguţu, Claudia Tomozei, Mirela Panainte-Lehadus, Dana Chitimus, **Oana Irimia**, Geometric calculation of the influence of an oscillating sieve's actuation mechanism position on its motion, Processes, vol. 10, no. 9, p. 1760; 2022; FI 3,328; <https://doi.org/10.3390/pr10091760>; WOS:000857647700001;
13. Mirela Panainte-Lehăduş, Emilian Moşneguţu, Narcis Bârsan, Gabriela Andrioai, Claudia Tomozei, **Oana Irimia**, Mathematical perspectives in the variable texture products cutting process, Processes, vol. 10, no. 8, 1603, 2022; FI 3,328; <https://doi.org/10.3390/pr10081603>; WOS:000845796500001;
14. Fabian Florina, Nedeff Valentin, Barsan Narcis, Panainte-Lehadus Mirela, Mosnegutu Emilian Florin, Cotirlet Paul Claudiu, Chitimus Dana, Tomozei Claudia, **Irimia Oana**, Estimating the carbon footprint in water treatment case study the treatment plants from Bacau Romania and Turin Italy, Fresenius Environmental Bulletin, vol 30, no. 10, 2021; FI 0,618; https://www.prt-parlar.de/download_feb_2021/; WOS:000704955000039;
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16. **Oana Tirtoaca (Irimia)**, Mirela Panainte-Lehadus, Claudia Tomozei, Emilian Mosnegutu, Alexandra-Dana Chitimus, Narcis Barsan, Study regarding the measuring of Particulate matter PM2.5 and PM10 in industrial working environments, Scientific Study & Research. Chemistry & Chemical Engineering, Biotechnology, Food Industry, vol. 21, no. 2, p. 271 – 278, 1582-540X, 2020; FI 0; <https://pubs.ub.ro/?pg=revues&rev=csc6&num=202002&vol=2&aid=5111>; WOS:000546789300012;
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18. Narcis Barsan, Dana Chitimus, Florin Marian Nedeff, Ion Sandu, Mirela Panainte Lehadus, Andrei Victor Sandu, **Oana Irimia Tartoaca**, Experimental Application of a Laboratory SBR Plant Used for Domestic Wastewater Treatment, REV.CHIM.(Bucharest), vol. 70, nr. 11, 2019, p. 4098-4101, FI 0, WOS:000503185300067

19. **Tirtoaca (Irimia) Oana**, Mirela Panainte Lehadus, Nedeff Valentin, Sandu Ion, Tomozei Claudia, Cretu Valentin Vasile; Sandu Andrei Victor, Experimental results regarding the groundwater quality in Bacau City, Romania, *Revista de Chimie*, Bucharest, vol. 70, no. 9, 2019, p. 3378-3382, FI 0; <https://doi.org/10.37358/RC.19.9.7553>; WOS:000489958900060;
20. Alina Cochiorca, Narcis Barsan, Florin Marian Nedeff, Ion Sandu, Emilian Florin Mosnegutu, Mirela Panainte Lehadus, Dana Chitimus, **Oana Irimia**, Ioan Gabriel Sandu, Surface water quality assessment from a mining area case study, Groapa Burlacu lake, Targu Ocna, Romania, *REV.CHIM.(Bucharest)*, vol. 70, nr. 10, 2019, p. 3678-3680, FI 0, WOS:000500795900049;
21. Mirela Panainte Lehadus, Valentin Nedeff, Narcis Barsan, Andrei Victor Sandu, Emilian Mosnegutu, Claudia Tomozei, **Oana Irimia**, Gabriela Andrioai, Ion Sandu, Monitoring the Particulate Matter (PM10) emissions from Bacau City Thermo-Energetic Industry, *Revista de Chimie*, Bucharest, ISSN 2537-5733, 2019, 70, no. 8, p. 2869-2872; FI 0; <https://doi.org/10.37358/RC.19.8.7446>; WOS:000489685600035;
22. Oana-Maria Muscalu (Plescan), Florin-Marian Nedeff, Elena Partal, Emilian Mosnegutu, Mirela Panainte Lehadus, **Oana Irimia**, Claudia Tomozei, Influence of soil fertilization systems on soil characteristics for a monoculture of sunflower, *Chemistry & Chemical Engineering, Biotechnology, Food Industry*, vol 20, no. 4, 2019, p. 585-595; FI 0; <https://pubs.ub.ro/?pg=revues&rev=csc6&num=201904&vol=4&aid=4958>; WOS:000502846500008;
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25. Claudia Tomozei, Florin Nedeff, Gigel Paraschiv, **Oana Irimia**, Greta Ardeleanu, Alina Conțu Petrovici, Mathematical modelling of sound pressure level attenuation transmitted by an acoustic screen in industrial environment, *Environmental Engineering and Management Journal*, vol. 13, no. 7, p. 1743-1749; 2014; DOI:10.30638/eemj.2014.194; WOS:000344577400024;
26. Mirela Panainte, Marius Stănilă, Emilian Moșneguțu, **Oana Irimia**, Doina Capșa, Florin Nedeff, Claudia Tomozei, Ion Joița, Gabriela Telibașa, Monitoring emissions from large combustion plants, *Environmental Engineering and Management Journal*, vol. 13, no. 7, p. 1657-1664, 2014; FI 0,858; ISSN 1559-1842; DOI:10.30638/eemj.2014.183; WOS:000344577400013;
27. Ovidiu Bontas, Valentin Nedeff, Emilian Florin Mosnegutu, Mirela Panainte, **Oana Tirtoacă Irimia**, Behaviour of solid particles on a flat oscillating surface, *Environmental Engineering and Management Journal*, vol. 12, no. 1, p. 17 – 22; January 2013; FI 1,1; DOI: 10.30638/eemj.2013.003; WOS: WOS:000317803300003;
28. **Oana Tirtoaca Irimia**, Claudia Tomozei, Mirela Panainte, Emilian Florin Mosnegutu, Narcis Barsan, Efficiency of filters with different filtering materials: comparative study in

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IV.2. Lucrări publicate în proceeding cotate ISI

1. Petruț-Liviu Bogdan, Valentin Nedeff, Mirela Panainte-Lehaduș, **Oana Irimia**, Emilian Moșneguțu, Integrated Assessment of Groundwater Quality: A Case Study of the Roman City and its Northern Surroundings, 9th International Conference on Energy Efficiency and Agricultural Engineering (EE&AE), 27-29 June, 2024, Ruse, Bulgaria, ISBN 979-8-3503-6937-3
2. Claudia Tomozei, Emilian Moșnegutu, Valentin Nedeff, **Oana Irimia**, Mirela Panainte-Lehadus, Florin Marian Nedeff, Dana Chitimus, Narcis Barsan, Study of the Noise Level in an Ice Cream Factory Working Environment, 9th International Conference on Energy Efficiency and Agricultural Engineering (EE&AE), 27-29 June, 2024, Ruse, Bulgaria, ISBN 979-8-3503-6937-3
1. Iosif Ioja, Claudia Tomozei, Valentin Nedeff, Emilian Mosnegutu, Mirela Panainte-Lehadus, **Oana Irimia**, Narcis Barsan, Dana Chitimus, Studies and research on the possibilities of implementing ergonomic principles in increasing labor productivity, 2022, 8th International Conference on Energy Efficiency and Agricultural Engineering (EE&AE), 978-1-6654-0709-0/22/\$31.00 ©2022, IEEE 1, 30 June - 2 July 2022, Ruse, Bulgaria. 10.1109/EEAE53789.2022.9831319; ISBN: 978-1-6654-0710-6;
2. Tomozei Claudia, Panainte-Lehadus Mirela, **Irimia Oana**, Nedeff Florin, Public transport in Bacau City, 2020, 7th International Conference on Energy Efficiency and Agricultural Engineering, EE and AE 2020 – Proceedings, 978-172810362-4, 12 November 2020; Article number 9279088; <https://ieeexplore.ieee.org/document/9279088>. 10.1109/EEAE49144.2020.9279088; ISBN: 978-1-7281-0362-4; WOS:000659299700127;
3. **Oana Irimia**, Claudia Tomozei, Mirela Panainte Lehadus, Maria Cristina Dinu, Evaluation of the Potential of Wind Energy as a Source of Electricity Generation: Case Study - Vanatori Wind Power Plant, 7th International Conference on Energy Efficiency and Agricultural Engineering, EE and AE 2020 – Proceedings, 978-172810362-4, 12 November 2020, Article number 9278983, <https://ieeexplore.ieee.org/document/9278983>; WOS:000659299700025; 10.1109/EEAE49144.2020.9278983;
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5. **Oana Irimia**, Claudia Tomozei, Nedeff Valentin, Mirela Panainte-Lehadus, Experimental results regarding the groundwater quality in rural zone in Romania, 17th International Multidisciplinary Scientific GeoConference, SGEM 2017 Conference Proceedings, issue 51, vol. 17, p.465-470; 2017; ISBN 978-619-7408-08-9/ ISSN 1314-2704, 2017, <http://www.sgem.org/>;

6. **Oana Irimia**, Claudia Tomozei, Mirela Panainte-Lehadus, A mathematical model on the efficiency of the mechanical water filtering process, 16th International Multidisciplinary Scientific GeoConference SGEM 2016, SGEM 2016 Conference Proceedings, ISBN 978-619-7105-62-9/ ISSN 1314-2704, 2016, Book 3, vol. 2, p. 695-702, 7 September 2016; <http://www.sgem.org/>; WOS:000391653500091;
7. Greta Ardeleanu, Claudia Tomozei, **Oana Irimia**, Mirela Panainte-Lehadus, Influence of Pollution Factors on River Bistrita Between the Sections Bacau – Neamt, 16th International Multidisciplinary Scientific GeoConference SGEM 2016, Conference Proceedings, book 3, vol. 2, p. 763-774, 2016; ISBN 978-619-7105-62-9/ ISSN 1314-2704; <http://www.sgem.org/>; WOS:000391653500100;

IV.3. Lucrări publicate în reviste indexate în baze de date internaționale (BDI)

1. **Oana Tirtoaca (Irimia)**, Przydatek Grzegorz, Comparative analysis of the waste management system efficiency in some counties from Romania and Poland, Journal of Engineering Studies and Research – Volume 27 (2021) No. 2, 96-106, <https://jesr.ub.ro/1/article/view/279>;
2. Claudia Tomozei, **Oana Irimia**, Mirela Panainte-Lehadus, Florin Nedeff, Shielding of noise sources using acoustic screens composed, Journal of Engineering Studies and Research, vol. 26, no. 1, p. 80-85, 2020, ISSN 2068-7559; ISSN online: 2344-4932; <https://doi.org/10.29081/jesr.v26i1.12>;
3. Florina Fabian, Valentin Nedeff, Mirela Panainte-Lehadus, **Oana Irimia**, Silvia Racovita, Environmental impact of water treatment process. A systematic review of evaluation method, Journal of Engineering Studies and Research, Volumul 22, Numărul 3, Pagini 34-39, 2019, <https://jesr.ub.ro/1/article/view/101>;
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5. Mirela Panainte-Lehadus, Narcis Barsan, **Oana Irimia**, Claudia Tomozei, Emilian Mosnegutu, Florin Nedeff, Application on the workplaces hazards measurement in a bakery unit, Journal of Engineering Studies and Research, vol. 23, no. 4, p. 14-18, 2017, ISSN 2068-7559; ISSN online: 2344-4932; <https://doi.org/10.29081/jesr.v23i4.69>;
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 10. **Oana Irimia**, Mirela Panainte-Lehadus, Valentin Nedeff, Claudia Tomozei, Alexandra Tartoaca, Study concerning the monitoring of particulate matter PM2.5 and PM10 in the library of „Vasile Alecsandri” University of Bacau, Journal of Engineering Studies and Research, vol. 21, no. 2, p. 57-64, 2015, ISSN 2068-7559. ISSN online: 2344-4932;
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 12. Tomozei Claudia, Nedeff Florin Marian, Panainte Mirela, **Irimia Oana**, Sollutions to reduce the noise generated by an air conditioning system, Journal of Engineering Studies and Research, vol. 19, no. 4, p. 71-76, 2013; 2068-7559;
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 14. **Tirtoacă-Irimia Oana**, Nedeff Valentin, Lazăr Gabriel, Panainte Mirela, Theoretical studies viewing the influence of particles'shape from filter layer in the mechanical filtration process, Journal of Engineering Studies and Research Volumul 17, Numărul 1, Pagini 40, 2011, <https://pubs.ub.ro/?pg=revues&rev=jesr&num=201101&vol=17&aid=3355>.

IV.4. Lucrări publicate în volumele unor conferințe naționale și internaționale

1. Enikő Gașpar, **Oana Irimia**, Mirela Stanciu, Narcis Barsan, Emilian Moșneguțu, Strategies for sustainable economy in optimizing the processes for removal of the CBO5, CCOCr and MTS from the used water, Constructive and technological design optimization in the machines building field, Conference Proceedings Abstracts, OPROTEH 2024, May 22-14, 2024;
2. **Oana Irimia**, Claudia Tomozei, Lucian Mihet-Popa, Mirela Panainte-Lehadus, Emilian Mosnegutu, Oana Ojog, Implementation of the circular economy concept in the framework of a retail company with construction materials, Constructive and Technological Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2023, May 11-13, 2023;
3. Claudia Tomozei, Mirela Panainte-Lehadus, **Oana Irimia**, Florin Marian Nedeff, Emilian Mosnegutu, Narcis Barsan, Dana Chitimus, Andreea-Iuliana Mares, Grzegorz Przydatek, Evaluation of noise level in an working environment, Constructive and Technological

- Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2023, May 11-13, 2023;
4. **Oana Irimia**, Claudia Tomozei, Mirela Panainte, Emilian Mosnegutu, Alexandra-Dana Chitimus, Narcis Barsan, Bobarnac Cristina, Study on the efficiency of street lighting in the Commune of Margineni by using solar energy, Constructive and Technological Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2022, May 25-27, 2022;
 5. Mirela Panainte-Lehadus, Claudia Tomozei, **Oana Irimia**, Emilian Mosnegutu, Florin Nedeff, Narcis Barsan, Andreea – Iuliana Mareş, Study on the purchase of green products among consumers, Constructive and Technological Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2022, May 25-27, 2022;
 6. Emilian Mosnegutu, Claudia Tomozei, Valentin Nedeff, Panainte Panainte-Lehadus, **Oana Irimia**, Carp Loredana, Geometric calculation of the influence of an oscillating sieve's actuation mechanism position on it's motion, Constructive and Technological Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2022, May 25-27, 2022;
 7. Claudia Tomozei, **Oana Irimia**, Mirela Panainte-Lehadus, Emilian Mosnegutu, Florin Nedeff, Cosmin Dosoftei, Cristina Vişan, Study Regarding the Determination of the Dust Concentration Level in the Center of Bacau City, Constructive and Technological Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2022, May 25-27, 2022;
 8. Mirela Panainte-Lehadus, Florin-Marian Nedeff, Claudia Tomozei, Narcis Barsan, **Oana Irimia**, Study on urban mobility in Bacau Municipality, Constructive and Technological Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2021, May 25-27, 2021;
 9. Claudia Tomozei, **Oana Irimia**, Mirela Panainte Lehadus, Florin Nedeff, Emilian Mosnegutu, Evaluation of the noise level in the Bacau Bus Station Area, Constructive and Technological Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2021, May 25-27, 2021;
 10. Bogdan Minel, Claudia Tomozei, Mirela Panainte-Lehadus, Valentin Nedeff, **Oana Irimia**, Emergency management at the level of the Bacau Fire Brigade, Constructive and Technological Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2021, May 25-27, 2021;
 11. Claudia Tomozei, **Oana Irimia**, Mirela Panainte Lehadus, Florin Nedeff, Public transport in Bacau City, Constructive and Technological Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2019, May 22 – 24, 2019;
 12. **Oana Tirtoaca (Irimia)**, Valentin Nedeff, Mirela Panainte Lehadus, Claudia Tomozei, An approach for traffic monitoring based on origins – destinations interviews, Constructive and Technological Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2019, May 22 – 24, 2019;
 13. Mirela Panainte Lehadus, Florin Nedeff, Claudia Tomozei, **Oana Irimia**, Alina Mihaela Petrovici, Traffic monitoring in important Bacau City intersection, Constructive and Technological Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2019, May 22 – 24, 2019;
 14. Claudia Tomozei, **Oana Irimia**, Mirela Panainte Lehadus, Florin Nedeff, Comparative study on water quality of Bistrita River (Romania) and Drava River (Slovenia and Croatia),

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15. **Oana Irimia**, Valentin Nedeff, Mirela Panainte Lehadus, Claudia Tomozei, Microplastics pollution in aquatic system and methods for detection a review of recent studies at european level, Constructive and Technological Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2018, June 27-29, 2018;
 16. Mirela Panainte Lehadus, Valentin Nedeff, Emilian Mosnegutu, Claudia Tomozei, **Oana Irimia**, Antonina Temea, Study on consumer attitudes towards the purchase of Eco-labeled products, Constructive and Technological Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2018, June 27-29, 2018;
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 18. **Oana Tartoaca (Irimia)**, Valentin Nedeff, Claudia Tomozei, Mirela Panainte Lehadus, Studies on groundwater quality in Bacau City, Constructive and Technological Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2015, June 02-04, 2016;
 19. Claudia Tomozei, Alina Petrovici, Mirela Panainte, Florin Nedeff, **Oana Irimia**, Evaluation of noise level generated by the road traffic on bridges in urban areas, Constructive and Technological Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2015, June 04-06, 2015;
 20. **Oana (Irimia) Tartoaca**, Valentin Nedeff, Mihai C. Nicolescu, Mirela Panainte Lehadus, Claudia Tomozei, Efficiency of water filtering process depending on the porosity of filter layer and flow of the filter – A mathematical model, Constructive and Technological Design Optimization in the machines Building Field, Conference Proceedings abstracts, OPROTEH 2015, June 04-06, 2015;
 21. Claudia Tomozei, Florin Nedeff, **Oana Irimia**, Mirela Panainte-Lehadus, Sound attenuation of the acoustic wave propagation through a simple acoustic screen, EE&AE'2015 – VIth International Scientific Conference, Energy Efficiency and Agricultural Engineering, „Angel Kanchev” University of Ruse, p. 654-659, November 11 – 12, 2015;
 22. **Oana Irimia**, Valentin Nedeff, Mirela Panainte-Lehadus, Claudia Tomozei, Alexandra Tartoaca, Florina Fabian, Study regarding the measuring of particulate matter PM_{2.5} and PM₁₀ in the printing house of „Vasile Alecsandri” University of Bacau, EE&AE'2015 – VIth International Scientific Conference, Energy Efficiency and Agricultural Engineering, „Angel Kanchev” University of Ruse, p. 701-708, November 11 – 12, 2015;
 23. Mirela Panainte-Lehadus, Valentin Nedeff, Emilian Mosnegutu, Antonina Temea, Claudia Tomozei, **Oana Irimia**, Study regarding occupational health and safety management at the „Vasile Alecsandri” University of Bacau, EE&AE'2015 – VIth International Scientific Conference, Energy Efficiency and Agricultural Engineering, „Angel Kanchev” University of Ruse, p. 599-608, November 11 – 12, 2015;
 24. Claudia Tomozei, Florin Nedeff, Alina Petrovici (Contu), **Oana (Tirtoaca) Irimia**, Doina Capsa, The exterior noise impact on the activities developed in a teaching environment, Abstract publicat al lucrarii prezentate in cadrul Conferintei Second International

- Conference on Natural and Anthropic Risks ICNAR2014, Bacau, Romania, June 4-7, 2014;
25. **Oana Tirtoaca (Irimia)**, Valentin Nedeff, Emilian Mosnegutu, Mirela Panainte, Claudia Tomozei, A mathematical model on the efficiency of the mechanical water filtering process, Abstract publicat al lucrarii prezentate in cadrul Conferintei Second International Conference on Natural and Anthropic Risks ICNAR2014, Bacau, Romania, June 4-7, 2014;
 26. Mirela Panainte, Valentin Nedeff, Marius Stanila, Narcis Birsan, Emilian Mosnegutu, Claudia Tomozei, **Oana Irimia**, Study regarding the monitoring emissions from combustion plants at SC CET SA Bacau platform, Abstract publicat al lucrarii prezentate in cadrul Conferintei Internationale OPROTEH 2013, Universitatea „Vasile Alecsandri” din Bacau, Facultatea de Inginerie, modul D29, ISBN 978-606-527-293-4, May 23-25, 2013;
 27. Tomozei Claudia, Nedeff Florin, Panainte Mirela, Mosnegutu Emilian, **Irimia Oana**, A mathematical model of the attenuation of sound pressure level transmitted by an acoustic screen, Abstract publicat al lucrarii prezentate in cadrul Conferintei Internationale OPROTEH 2013, Universitatea „Vasile Alecsandri” din Bacau, Facultatea de Inginerie, modul D13, ISBN 978-606-527-293-4, May 23-25, 2013;
 28. Mosnegutu Emilian, Panainte Mirela, Nedeff Valentin, Tomozei Claudia, **Irimia Oana**, Waste Management System at „Vasile Alecsandri” University of Bacau, EE&AE 2013, Engineering and Research for Agriculture Conference, „Angel Kanchev” University of Rousse, 17-18 May 2013, p. 496-503.
 29. **Irimia Oana**, Nedeff Valentin, Panainte Lehăduș Mirela, Tomozei Claudia, Microplastics pollution in aquatic systems and methods for detection: a review of recent studies at european level, International Journal of Arts & Sciences, 2-6 March, 2014, University of Malta, Malta.
 30. **Tirtoaca (Irimia) Oana**, Nedeff Valentin, Panainte Mirela, Comparative study viewing the efficiency of the granular filters depending on the type of the filter material, First International Conference on MOLDAVIAN RISKS - FROM GLOBAL TO LOCAL SCALE, 16-19 May, 2012, Bacău, ROMANIA;
 31. **Tirtoaca (Irimia) Oana**, Studies and researches viewing the influence of granular particle's shape from the filter layer during water's filtering process, Proceedings of the 12TH International Conference On Environmental Science & Technology CEST, Session 23, Water treatment and reclamation, Rhodes Island, Dodecanese, Greece, August 2011;
 32. **Tirtoaca (Irimia) Oana**, Nedeff Valentin, Lazar Gabriel, Actual stage to water filtration, International Conference OPROTEH 2011, “Vasile Alecsandri” University of Bacau, Faculty de Engineering, module E21, Optimization in environmental engineering and environmental protection, 24-26 May 2011;
 33. **Tirtoaca (Irimia) Oana**, Studies and researches viewing the influence of flow filtration on water quality in the case of quartz sand granular filters, Conferinta internationala Proceedings of the Scientific Student Session – SSS'11, University „Angel Kanchev”, Ruse, Bulgaria, 2011.

V. Contracte de cercetare științifică

1. Contract nr. 8.330/03.10.2024; Titlu proiect Cooperare bilaterală pentru o colaborare pe termen lung, Finantator: EEA and Norway Grants in Romania, Fonduri pentru relații bilaterale Valoarea totala a proiectului: 54.150 euro, din care fonduri SEE 46.027 euro+cofinantare 8.123 euro, 15 membri in echipa proiectului, director proiect: Irimia Oana, perioada de implementare octombrie 2024 - februarie 2025.
2. Contract nr. CNFIS-FDI-2024-F-0556, Titlu proiect: „Ecosistem antreprenorial competitiv, incluziv și sustenabil la Universitatea „Vasile Alecsandri” din Bacău”, Acronim: iEnterprise@UBc, Valoarea proiectului: total = 375.000 lei, din care valoare aprobată MEN = 250.000 lei și valoare cofinanțare = 125.000 lei, membru echipa proiect, număr membri în echipa proiectului: 26, aprilie-decembrie 2024
3. Contract nr. 11183/18.07.2024, Titlu proiect: „Simulated Enterprises in Food Industry at the „Vasile Alecsandri” University of Bacau”, Acronim: SEiFI@UBc, Valoarea contractului de sponsorizare: 27.370 lei, membru echipa proiect, număr membri în echipa proiectului: 25, perioada de implementare: octombrie 2024 - februarie 2025
4. Contract nr. 22-MOB-0035 Programul de Educație, Burse, Ucenicie și Antreprenoriatul Tinerilor, Granturi SEE 2014-2021, finanțat prin granturile SEE, Mecanismul financiar 2014-2021, 15 luni, valoare contract 35.818 euro, director proiect;
5. Contract nr. 3/2023, Determinarea compoziției deșeurilor menajere reziduale și reciclabile, similare și din piețe și a deșeurilor biodegradabile la nivelul județului Bacău - Raport de activitate la protocol de colaborare 4259/24.03.2023; 1. Asociația de dezvoltare Intercomunitară pentru Salubritate Bacău; 2. S.C. Compania Romprest Service S.A.; 2 luni; valoare contract 0 lei; membru;
6. Contract nr. 4/2023, Determinarea compoziției deșeurilor reziduale, biodegradabile și a deșeurilor reciclabile la nivelul zonei ISPA (municipiul Bacău și 22 de comune limitrofe) din județul Bacău; 1. Asociația de dezvoltare Intercomunitară pentru Salubritate Bacău 2. S.C. SOMA S.R.L.; 2 luni; valoare contract 22745 lei; membru;
7. Proiect CNFIS-FDI-0574, Facultatea de Inginerie, Infrastructură modernă și digitalizată pentru pregătirea practică a studenților UBc; 2021; membru;
8. Contract nr. 1/2019, Cercetări în vederea implementării de procedee și tehnici de laborator și industriale în vederea epurării apelor uzate și tratării nămolurilor; 12 luni; valoare contract 22400 lei; membru;
9. Contract nr. 2/2017, Aplicarea unor cercetări de laborator în vederea tratării nămolurilor de epurare; valoare contract 9400 lei; membru;
10. Contract nr. 1/2017, Aplicarea cercetărilor de laborator în vederea epurării apelor uzate și tratării nămolurilor; 11 luni; valoare contract 27500 lei; membru;
11. Contract nr. 15923/2016, “Vizite de studiu” prin Programul de Burse RO15.
12. Contract nr. 8/2016, Culegere de date de trafic pentru elaborarea planului de mobilitate urbană durabilă, Bacău; SC SEARCH CORPORATION SRL; valoare contract 6000 euro; 27012 lei; membru;
13. Contract nr. 7/2016, Cercetări de laborator cu privire la epurarea apelor uzate și tratarea nămolurilor; 7 luni; valoare contract 13650 lei; membru;
14. Contract nr. 6/2016, Evaluarea în laborator a posibilităților de tratare a nămolurilor de epurare; valoare contract 1.950 lei; membru;

15. Contract nr. 5/2016, Studii cu privire la epurarea apelor uzate; valoare contract 1.950 lei; membru;
16. Contract nr. 4/2016, Analiza posibilităților de epurare a unor ape uzate industrial; valoare contract 1.950 lei; membru;
17. Contract nr. 2/2016, Cercetări asupra epurării apelor uzate din industria alimentară, membru, valoare contract 1.950 lei;
18. Contract nr. 1/2016, Cercetări de laborator cu privire la epurarea apelor uzate industriale folosind floculanți organici; valoare contract 1.950 lei; membru;
19. Contract nr. 20/2015, Cercetări cu privire la tratarea chimică a unor ape uzate industrial; valoare contract 1.950 lei; membru;
20. Contract nr. 19/2015, Studii cu privire la epurarea chimică a unor a apelor uzate rezultate din industria petrolieră; valoare contract 1.950 lei; membru;
21. Contract nr. 18/2015, Cercetări cu privire la epurarea chimică a apelor uzate rezultate industrial cu S.C. ECO Sistem Proiect S.R.L. Bacău; valoare contract 1.950 lei; membru;
22. Contract nr. 17/2015, Studiu privind determinarea noxelor profesionale specifice locului de munca din cadrul SC NADENKA SR, punct de lucru str. 9 mai, Bacău; valoare contract 500 lei; membru;
23. Contract nr. 16/2015, Studii cu privire la epurarea chimică a apelor uzate rezultate din industria textile; valoare contract 1.950 lei; membru;
24. Contract nr. 15/2015, Studiu impact privind apele subterane la cele două puțuri de foraj aflate pe amplasamentul SC Stemar Vaslui, 15-2015; valoare contract 2000 lei; membru;
25. Contract nr. 14/2015, Cercetări privind aplicarea procesului de coagulare și floculare în epurarea apelor uzate cu S.C. ECO Sistem Proiect S.R.L. Bacău; valoare contract 1.950 lei; membru;
26. Contract nr. 12/2015, Cercetări privind tratarea nămolurilor cu S.C. ECO Sistem Proiect S.R.L. Bacău, valoare contract 1.950 lei; membru;
27. Contract nr. 9/2015, Cercetări industriale cu privire la folosirea floculanților organici pentru epurarea apelor uzate industriale cu specific petrolier cu S.C. ECO Sistem Proiect S.R.L. Bacău; valoare contract 1.950 lei; membru;
28. Contract nr. 8/2015, Studii și cercetări cu privire la posibilitățile de tratare chimică a apelor uzate cu S.C. ECO Sistem Proiect S.R.L. Bacău; valoare contract 1.950 lei; membru;
29. Contract nr. 6/2015, Studii și cercetări privind tratarea nămolurilor de epurare folosind floculanți organici cu S.C. ECO Sistem Proiect S.R.L. Bacău; valoare contract 1.950 lei; membru;
30. Contract de cercetare nr. 4/20.03.2015 cu SC ECO SISTEM PROIECT SRL Bacău, Studii și cercetări privind epurarea apelor uzate cu specific petrolier; Valentin Nedeff, Mirela Panainte Lehadus, Emilian Mosnegutu, Narcis Barsan, Claudia Tomozei, Dana Chitimus, Oana Irimia, Florin Marian Nedeff; valoare contract 1950 lei; membru;
31. Contract de cercetare nr. 3/ 16.02.2015 cu SC Romconstructor SA Bacău, Studii și cercetări privind evaluarea impactului asupra mediului la SC Romconstructor SA Bacău; 16.02.2015; Mirela Panainte Lehadus, Emilian Mosnegutu, Claudia Tomozei, Oana Irimia, Alina Petrovici, Florin Marian Nedeff, Mihaela Dascalu; valoare contract 2.000 lei; membru;
32. Contract de cercetare cu SC ECO Sistem Proiect S.R.L. Bacău, Studii și cercetări privind epurarea apelor uzate și a nămolurilor de epurare; 2014; valoare contract 20000 lei; membru;

33. Contract nr POSDRU/160/2.1/S/133020. Creșterea capacității de integrare pe piața muncii a studenților și absolvenților prin consiliere și plasamente practice” 2007-2013, consilier termen scurt; membru;
34. Contract nr. 2/2009, Cercetări privind modul de încadrare a imisiilor de noxe și zgomot provenite de la Stația de betoane ERUMECAR, model EMA – 12042 în perioada probelor de punere în funcțiune și stabilirea eventualelor măsuri necesare, efectuarea măsurărilor de zgomot și noxe la limita incintei S.C. Rustrans S.R.L.; membru.

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