

## ***LIST OF PUBLICATIONS***

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### ***A – Lista celor 10 LUCRĂRI relevante***

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1. **Ciotlaus M.**, Kollo G., Fenesan C., Danciu A.D., Dragomir M.L., Marusceac V. (2023). Rail Wear Evolution on Small-Radius Curves under Mixed Traffic Conditions, In-Field Investigations. *Applied Sciences*, 14(1), 209; <https://doi.org/10.3390/app14010209>.
2. Danciu A.D., Guțiu Ș.I., Moga C., Dragomir M.L., **Ciotlăuș M.**, Marusceac V. (2023) A Review of the Network Arch Bridge. *Applied Sciences*,13(19):10966. <https://doi.org/10.3390/app131910966>.
3. Marusceac V., Danciu A.D., **Ciotlaus M.**, Dragomir, M.L. (2023). Influence of Speed Brakers on Traffic Generated Noise Levels. *Journal of Applied Engineering Sciences*, 13(2) 253-258. <https://doi.org/10.2478/jaes-2023-0032>.
4. **Ciotlaus M.**, Kollo G., Marusceac V., Orban Z. (2019). Rail-wheel interaction and its influence on rail and wheels wear, *Procedia Manufacturing*, Volume 32, 895-900 <https://doi.org/10.1016/j.promfg.2019.02.300>
5. **Ciotlaus M.**, Kollo G. (2018). Ballast bed cleaning and recycling – influence on stability of continuously welded rail track, *Procedia Manufacturing*, Volume 22, 294-300, <https://doi.org/10.1016/j.promfg.2018.03.045>
6. **Ciotlaus M.**, Kollo G., Moldovan D., Muntean L. (2017). Slope stability of railway embankments, *Procedia Engineering* 181, 52-59, <https://doi.org/10.1016/j.proeng.2017.02.362>
7. **Ciotlaus M.**, Moldovan D., Clitan A., Muntean L. (2017), Choosing an Environmentally-Friendly Public Transportation System Using Multiple-Criteria Analysis. Case Study: Bistrita Nasaud, Romania, *Procedia Engineering* Volume 181, 396-403, <https://doi.org/10.1016/j.proeng.2017.02.407>
8. Moldovan D., Nagy A., Muntean L., **Ciotlaus M.** (2017), Study on the Stability of a Road Fill Embankment, *Procedia Engineering*, Volume 181, 60-67, <https://doi.org/10.1016/j.proeng.2017.02.363>
9. **Ciotlaus M.**, Marusceac V. (2017) Railway switches wear impact on dynamic actions, *Bulletin of the Transilvania University of Brașov • Vol. 10 (59) Special Issue No. 1 Series I: Engineering Sciences*, [http://webbut2.unitbv.ro/bulletin/series%20i/BUT\\_CIBv/Ciotlaus%20M\\_rev-22-01-2018.pdf](http://webbut2.unitbv.ro/bulletin/series%20i/BUT_CIBv/Ciotlaus%20M_rev-22-01-2018.pdf)
10. **Ciotlaus M.**, Kollo G. (2012). Increasing railway stability support elements (special sleepers), *Acta Tehnica Napocensis, Civil Engineering & Architecture, Cluj Napoca 2012, Vol. 54, ISSN 1221-5848*. [https://oldconstructii.utcluj.ro/ActaCivilEng/download/atn/ATN2012\(1\)\\_17.pdf](https://oldconstructii.utcluj.ro/ActaCivilEng/download/atn/ATN2012(1)_17.pdf)

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### *B - Ph.D Thesis*

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*New types of superstructures for welded railway track with high resistance at stability*

Coordinator : Prof. Phd. Eng. Gavril Kollo

Technical University of Cluj Napoca, Civil Engineering,

Final presentation: 25 september 2012, title confirmed by Ministry Order MECT 6508/19.12.2012.

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### *C- Patents/industrial property titles*

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Not applicable

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### *D - Books and chapters in books*

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1. Kollo G., Feneşan C., **Ciotlăuș M.**, *Ways of communication and works of art*, Cluj Napoca, 2011, Ed. Mediamira, ISBN 978-973-713-283-3, 248 pages.
2. **Ciotlăuș M.**, Kollo G., Feneşan C., *Railway stations*, Cluj Napoca, 2022, Ed. UTPRES, ISBN 978-973-713-283-3, 183 pages.
3. **Ciotlăuș M.**, *Stability of welded rail. Calculus elements*, Cluj Napoca, 2023, Ed. UTPRESS, on line ISBN 978-606-737-667-8, 218 pages.

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### *E – ISI Web of Science Indexed Papers*

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#### *E.1. JOURNALS FROM THE MAIN INTERNATIONAL SCIENTIFIC FLOW*

1. **Ciotlaus M.**, Kollo G., Fenesan C., Danciu A.D., Dragomir M.L., Marusceac V. (2023). Rail Wear Evolution on Small-Radius Curves under Mixed Traffic Conditions, In-Field Investigations. *Applied Sciences*, 14(1), 209; <https://doi.org/10.3390/app14010209>.
2. Danciu A.D., Guțiu Ș.I., Moga C., Dragomir M.L., **Ciotlăuș M.**, Marusceac V. (2023) A Review of the Network Arch Bridge. *Applied Sciences*, 13(19):10966. <https://doi.org/10.3390/app131910966>.
3. Marusceac V., Danciu A.D., **Ciotlaus M.**, Dragomir, M.L. (2023). Influence of Speed Brakers on Traffic Generated Noise Levels. *Journal of Applied Engineering Sciences*, 13(2) 253-258. <https://doi.org/10.2478/jaes-2023-0032>.

## *E.2. International Conferences Indexing ISI Web of Science*

1. **Ciotlaus M.**, Kollo G., Fenesan C., Danciu A.D., Dragomir M.L., Marusceac V. (2023). Rail Wear Evolution on Small-Radius Curves under Mixed Traffic Conditions, In-Field Investigations. *Applied Sciences*, 14(1), 209; <https://doi.org/10.3390/app14010209>.
2. Danciu A.D., Guțiu Ș.I., Moga C., Dragomir M.L., **Ciotlăuș M.**, Marusceac V. (2023) A Review of the Network Arch Bridge. *Applied Sciences*,13(19):10966. <https://doi.org/10.3390/app131910966>.
3. Marusceac V., Danciu A.D., **Ciotlaus M.**, Dragomir, M.L. (2023). Influence of Speed Brakers on Traffic Generated Noise Levels. *Journal of Applied Engineering Sciences*, 13(2) 253-258. <https://doi.org/10.2478/jaes-2023-0032>.
4. Marusceac V., Danciu A.D., **Ciotlaus M.** (2022) Impact of Non-structural Road Elements on Noise Pollution, a Case Study in Cluj-Napoca, Romania, International Conference Interdisciplinarity in Engineering, 47-56 [https://doi.org/10.1007/978-3-031-22375-4\\_4](https://doi.org/10.1007/978-3-031-22375-4_4)
5. **Ciotlăuș M.**, Marusceac V., Danciu A.D. (2022) Impact of Soil Type Transition on Circular Tunnels Behavior, 16th International Conference Interdisciplinarity in Engineering, INTER-ENG 2022, Târgu Mureș, Romania, International Conference Interdisciplinarity in Engineering, 57-67 [https://doi.org/10.1007/978-3-031-22375-4\\_5](https://doi.org/10.1007/978-3-031-22375-4_5)
6. Orban Z., Kollo G., **Ciotlaus M.** (2018) NEWLINE CSD composite steel-concrete folded slab bridge superstructure design program, *Procedia Manufacturing* Volume 32, 129-135, <https://doi.org/10.1016/j.promfg.2019.02.193>
7. **Ciotlaus M.**, Kollo G., Marusceac V., Orban Z. (2019). Rail-wheel interaction and its influence on rail and wheels wear, *Procedia Manufacturing*, Volume 32, 895-900 <https://doi.org/10.1016/j.promfg.2019.02.300>
8. Marusceac V., **Ciotlaus M.** (2018). Noise pollution around high traffic zones in Cluj-Napoca, *Acta Technica Napocensis-series: Applied Mathematics, Mechanics, and Engineering*, Vol. 61 (1), 105-108, <https://atna-mam.utcluj.ro/index.php/Acta/article/viewFile/966/906>
9. **Ciotlaus M.**, Kollo G. (2018). Ballast bed cleaning and recycling – influence on stability of continuously welded rail track, *Procedia Manufacturing*, Volume 22, 294-300, <https://doi.org/10.1016/j.promfg.2018.03.045>
10. **Ciotlaus M.**, Kollo G., Moldovan D., Muntean L. (2017). Slope stability of railway embankments, *Procedia Engineering* 181, 52-59, <https://doi.org/10.1016/j.proeng.2017.02.362>
11. **Ciotlaus M.**, Moldovan D., Clitan A., Muntean L. (2017), Choosing an Environmentally-Friendly Public Transportation System Using Multiple-Criteria Analysis. Case Study: Bistrita Nasaud, Romania, *Procedia Engineering* Volume 181, 396-403, <https://doi.org/10.1016/j.proeng.2017.02.407>
12. Moldovan D., Nagy A., Muntean L., **Ciotlaus M.** (2017), Study on the Stability of a Road Fill Embankment, *Procedia Engineering*, Volume 181, 60-67, <https://doi.org/10.1016/j.proeng.2017.02.363>
13. Nagy A., Moldovan D., **Ciotlaus M.**, Muntean L. (2017), Evaluation of Experimental and Numerical Simulation of Triaxial Geogrid Reinforcement on the Strength of Road Structures, *Procedia Engineering*, Volume 181, 472-479, <https://doi.org/10.1016/j.proeng.2017.02.418>

1. Danciu A.D., Moga C., Gutiu S.I., **Ciotlaus M.**, Marusceac V., Dragomir M.L. (2023), "Dynamic response analysis of footbridges on hot-rolled steel girders for spans varying between 10 to 40m and width between 2 and 6 m, (2023), The 17th International Conference Interdisciplinarity in Engineering. INTER-ENG 2023, Târgu Mureş, Romania
2. **Ciotlaus M.**, Marusceac V., Danciu A.D., Dragomir M.L. (2023) Rail fastening maintenance impact on track stability for continuously welded rail tracks, The 17th International Conference Interdisciplinarity in Engineering, INTER-ENG 2023, Târgu Mureş, Romania
3. Marusceac V., **Ciotlaus M.**, Danciu A.D., Dragomir M.L. (2023) Noise Pollution in Different Types of Intersections: A Case Study in Cluj-Napoca, The 17th International Conference Interdisciplinarity in Engineering, INTER-ENG 2023, Târgu Mureş, Romania
4. Marusceac V., Danciu A.D., **Ciotlaus M.** (2022) Impact of Non-structural Road Elements on Noise Pollution, a Case Study in Cluj-Napoca, Romania, The 16th International Conference Interdisciplinarity in Engineering, INTER-ENG 2022, Târgu Mureş, Romania, 47-56 [https://doi.org/10.1007/978-3-031-22375-4\\_4](https://doi.org/10.1007/978-3-031-22375-4_4)
5. **Ciotlăuș M.**, Marusceac V., Danciu A.D. (2022) Impact of Soil Type Transition on Circular Tunnels Behavior, The 16th International Conference Interdisciplinarity in Engineering, INTER-ENG 2022, Târgu Mureş, Romania, International Conference Interdisciplinarity in Engineering, 57-67 [https://doi.org/10.1007/978-3-031-22375-4\\_5](https://doi.org/10.1007/978-3-031-22375-4_5)
6. **Ciotlaus M.**, Naş S. (2020) Noise mitigation in urban areas due to transport systems, Simpozion Internațional Resurse Minerale și Mediu, Baia Mare, ISBN 978-973-1729-74-9
7. **Ciotlaus M.**, Trif I. (2019) Highly absorbent track side walls for railway noise control, Bulletin of the Transilvania University of Braşov • Vol. 11 (60) Special Issue No. 1 – 2018, Series I: Engineering Sciences, 251-256, [file:///C:/Users/Madalina%20Ciotlaus/Downloads/ciotlaus%20\(2\).pdf](file:///C:/Users/Madalina%20Ciotlaus/Downloads/ciotlaus%20(2).pdf)
8. **Ciotlaus M.**, Sitea S.C. (2019) Tram noise propagation. Case study: Cluj Napoca, Romania vs Berlin, Germany Materials Science and Engineering – CIBv2019 Conference Proceedings, 2019, Braşov
9. **Ciotlaus M.**, Marusceac V. (2017) Railway switches wear impact on dynamic actions, Bulletin of the Transilvania University of Braşov • Vol. 10 (59) Special Issue No. 1 Series I: Engineering Sciences, [http://webbut2.unitbv.ro/bulletin/series%20i/BUT\\_CIBv/Ciotlaus%20M\\_rev-22-01-2018.pdf](http://webbut2.unitbv.ro/bulletin/series%20i/BUT_CIBv/Ciotlaus%20M_rev-22-01-2018.pdf)
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11. Vlad R.C., Firescu V., Ciotlaus M., Coldea C., Vlad S (2009), Fundamentarea politicilor de internalizare a costurilor externe prin evaluarea potențialului concurențial al modurilor de transport, Review of Management & Economic Engineering, Volume 8 (4).
12. Kollo G., **Munteanu M.** (2004) Railway track – fast and nonpolluting transportation system, Intersections, ISSN 1582-3024, [http://www.intersections.ro/archive/2004/No2/No2\\_eng.pdf](http://www.intersections.ro/archive/2004/No2/No2_eng.pdf)
13. Kollo G., **Munteanu M.** (2004) Design program for the stability of the jointless railway track, Intersections, ISSN 1582-3024. [http://www.intersections.ro/archive/2004/No2/No2\\_eng.pdf](http://www.intersections.ro/archive/2004/No2/No2_eng.pdf)

1. **Ciotlaus M.**, Marusceac V., Fenesan C. (2019) Îndepărtarea apei capilare din căptușeala tunelurilor prin metoda undelor electromagnetice, Simpozion Siguranța circulației, Cluj Napoca
2. **Ciotlaus M.**, Kollo G. (2018) Continuously welded rail de-stressing influence on track stability and buckling, C65 International Conference, "Tradition and Innovation - 65 Years of Constructions in Transilvania", Cluj Napoca
3. Huban C., Popescu O., **Ciotlaus M.** (2017) Oportunitatea implementării metroului și trenului urban în zona metropolitană Cluj, Simpozion Siguranța circulației, Cluj Napoca
4. **Ciotlaus M.**, Butilcă Ovidiu. (2016) Pasaj pietonal subteran - studiu de caz: strada A. Vlaicu, municipiul Cluj Napoca, Simpozion Siguranța circulației, Cluj Napoca
5. **Ciotlaus M.**, Kollo G. (2015) Mijloacele de transport în comun și emisiile de co2 în spațiul urban. Studiu de caz: municipiul Cluj Napoca, Simpozion Drumul și mediul înconjurător, Timișoara
6. **Ciotlaus M.**, Clitan Andrei. (2015) Recomandări privind siguranța intersecțiilor pistelor de biciclete cu calea tramvaiului, Simpozion Siguranța circulației, Cluj Napoca
7. **Ciotlaus M.**, Kollo G. (2014) Rail fractures on welded tracks. "Highway and Bridge Engineering 2014", International Symposium, Iași
8. **Ciotlaus M.**. (2015) Impactul zgomotului produs de mijloace de transport în comun pe șine asupra calității spațiului urban. Studiu de caz – tramvaiul în municipiul Cluj-Napoca. Conferința științifică internațională Cercetare și Administrare Rutieră, "CAR 2015", București
9. **Ciotlaus M.**, Kollo G. (2014) Defecte în cale care periclitează siguranța circulației. Studiu de caz, Simpozion internațional Club Feroviar, București
10. **Ciotlaus M.** (2013) Calculul suprastructurilor rigide pentru tramvaie, Simpozion Siguranța circulației, Cluj Napoca
11. **Ciotlaus M.**, Kollo G., Herman A. (2013) Frame sleepers with high lateral resistance, Hungarian Technical Scientific Society of Transilvania, Șumuleu Ciuc, 17 th International Conference on Civil Engineering and Architecture, Ed. Incitato, ISSN 1843-2123
12. Kollo G., **Ciotlaus M.**, Herman A. (2013) Geometry of space curves used for the railway track, Railway Pro Science and Technology, Sibiu Infrastructure Development priority railway projects, pag 33-39
13. **Ciotlaus M.**, Kollo G. (2013) Transition curves for high speed railways - Length determination, C60 International Conference, Cluj Napoca Tradition and Innovation - 60 Years of Civil Higher Education in Transilvania, pag 217-219, UTPRESS, ISBN 978-973-662-903-7
14. **Ciotlaus M.**, Kollo G., Herman A. (2012) Ballast bed lateral resistance for a frame sleeper, 16 th International Conference on Civil Engineering and Architecture, Șumuleu Ciuc, România, ISSN 1843-2123
15. **Ciotlaus M.**, Kollo G., Herman A. (2012) Frame sleeper tests for lateral ballast bed resistance, Simpozion internațional Club Feroviar, București
16. **Ciotlaus M.**, Kollo G., Herman A. (2011) Influența traverselor (rezemării șinei) asupra stabilității căii fără joante Al X lea Simpozion național de căi ferate, cu participare internațională, București, ISBN 978-973-100-191-3
17. **Ciotlaus M.** (2011) Siguranța trecerilor la nivel cu calea ferată Simpozion: Siguranta circulatiei in actualitate, ISSN 2069-749X, ISSN-L 2069-749X
18. **Ciotlaus M.** (2011) Evoluția sistemelor de prindere pentru tramvaie Materiale și tehnologii noi în construcții și întreținerea drumurilor și podurilor, ISSN 2068-2727
19. Kollo G., **Ciotlaus M.**, Fenesan C. (2010) Vibrații și zgomote provocate de tramvaie și căi de rulare insuficient întreținute. Studiu de caz Municipiul Cluj Napoca Al XI lea Simpozion național de căi ferate, cu participare internațională, București, ISBN 978-973-100-158-6
20. Kollo G., Fenesan C., **Ciotlaus M.** (2010) Utilizarea structurilor mixte oțel beton la poduri de șosea, Materiale și tehnologii noi în construcții și întreținerea drumurilor și podurilor, ISSN 2068-2727
21. **Ciotlaus M.**, Nas S., Fenesan C. (2009) Zgomotul în zonele urbane Noutăți în siguranța circulației, ISBN 987-973-662-481-0
22. Kollo G., Fenesan C., **Ciotlaus M.** (2009) Realizarea căii pentru linii de cale ferată utilizând prinderea continuă cu edilon Noutăți în siguranța circulației, ISBN 987-973-662-481-0

23. Kollo G., **Ciotlaus M.** Herman S. (2009) Design Programme for the stability of the Jointless Railway Track 13 th International Conference on Civil Engineering and Architecture, ISSN 1843-2123.
24. **Ciotlaus M.** (2009) Evaluarea transportului feroviar utilizând analiza SWOT, Materiale și tehnologii noi în construcții și întreținerea drumurilor și podurilor, ISBN 987-973-662-504-6
25. Kollo G., **Munteanu M.** (2005) Prefabricated composite concrete steel slabs, Keep Concretete attractive, Fib Symposium Proceedings Budapesta, vol 2, pag 1089 - 1095, ISBN 963 420 837 10 <https://www.fib-international.org/publications/fib-proceedings.html>
26. Kollo G., **Munteanu M.** (2005) Considerații asupra influenței degradării suprastructurii liniilor de tramvai asupra siguranței circulației. Simpozion: Siguranța circulației în actualitate, Cluj Napoca, ISBN : 973-662-196-0
27. Kollo G., **Munteanu M.** (2004) Analiza comparativă a torsiunii curbelor de cale ferată Simpozion național de căi ferate, Timișoara
28. Kollo G., Moga P., Horvath P., **Munteanu M.** (2003) New solutions for bridges as composite steel-concrete structures, International Conference Constructions 2003, ISBN 973-9350-87-9
29. Nas S., **Munteanu M.** (2003) Managementul calității spațiului urban, Simpozion național de drumuri urbane, Herculane, ISBN 973-8654-94-3
30. Chira C., Naș S., **Munteanu M.** (2004) Impactul traficului asupra calității spațiului urban ; studiu de caz: consecințe ale utilizării tramvaiului în municipiul Cluj-Napoca, Simpozion anual al catedrei de drumuri și căi ferate , Probleme Speciale ale Infrastructurii Transportului Urban, 2004, București; ISBN 973-8165-94-6
31. Chira C., Nas S., **Munteanu M.** (2004) Optimizarea circulației în Piața Cipariu din municipiul Cluj-Napoca Simpozion anual al catedrei de drumuri și căi ferate Probleme Speciale ale Infrastructurii Transportului Urban, București, ISBN 973-8165-94-6
32. Kollo G., Moga P., **Munteanu M.** (2003) Program de calcul pentru dale cu secțiune compozită, International Conference of Civil Engineering and Architecture, ISBN 973-8026-95-8.
33. Kollo G., **Munteanu M.** (2003) Design programme for the stability of the jointless railway track, International Conference Constructions 2003, Iași, ISBN 973-8259-99-2.
34. Kollo G., Moga P., **Munteanu M.** (2004) The safety of 60 and 65 Rail Superstructures, International Conference of Civil Engineering and Architecture, 2004, ISBN 973-86852-1-4.
35. Kollo G., **Munteanu M.** (2003) Design programme for composite steel – concrete slabs, The 10-th International Conference on Metal Structures, ISBN 973-638-060-2.
36. Kollo G., Moga P., **Munteanu M.** (2003) New solutions for bridges as composite steel concrete Structures International Conference Constructions 2003, ISBN 973-9350-87-9, 973-9350-91-7
37. Kollo G., Horvath P., Suci M., **Munteanu M.** (2002) Solicitarea sinelor la incarcari variabile Simpozion national de cai ferate - Linii de cale ferată pentru viteze mari, prezent și viitor, Bucuresti, ISBN 973-585-926-2
38. Kollo G., Horvath P.; **Munteanu M.** (2002) Cale ferata: viteza si protectia mediului. Simpozion national de cai ferate - Linii de cale ferată pentru viteze mari, prezent și viitor, Bucuresti, ISBN 973-585-926-2.
39. **Munteanu M.** (2002) Studiul stabilitatii caili fara joante – program de calcul al coeficientului de siguranță; Sesiunea de Comunicari Stiintifice Studentesti Cluj-Napoca, ISBN 973-8335-27-2

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*H. Expertises carried out as a Technical Expert*

Not applicable

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## *I. Projects as project manager or team member*

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### *I.1. Projects in Railways, Roads and Bridges area*

1. *Street design, vertical systematization: Cetatea Fetei residential area, Florești, Cluj – RRB engineer*
2. *Road tunnel dimensioning and feasibility study: Târgu Mureș - RRB engineer*
3. *Rehabilitation of DN18 section, Borșa Maramureș - RRB engineer*
4. *Consolidation of road body DJ 106F, Sibiu county, bank consolidation works, Beneficiary Alba County Council - RRB engineer*
5. *Ocele Mari road modernization, Vâlcea county - RRB engineer*  
*Rehabilitation of forest roads 242 D and 247 D, Poșaga commune, Alba county - RRB engineer*

### *I.2. Research projects*

1. *Research on improving the bearing capacity of T17 prestressed concrete railway sleepers, using zeolite. UTCN – Zeolites Productions SA, No. register UTCN 35600/27.10.2023, No. register DMCDI TN184/27.10.2023 - project director.*
2. *Research on the realization of bridges on arches in Network Arch type solution, No. register UTCN 39029/24.11.2022, No. register DMCDI TN348/25.11.2022, CDI type project, project member.*
3. *Feasibility study for the investment Green public transport line using means of transport with electric motor - UTCN - PRIMĂRIA BISTRIȚA, No. 4/30.01.2014, No. register UTCN: 2432/31.01.2014 - project member.*
4. *CompRail - Improving the energy efficiency of freight trains, increasing the capacity of the railway network and strengthening its role in intermodal transport with the help of GPS systems. IDEI type project, 2009-2012 - project member.*
5. *Traffic study in the municipality of Cluj Napoca, 2006, Contract no. 54/2005, Beneficiary: Cluj Napoca City Hall - project member.*

**L Phd eng Mădălina Adriana CIOTLĂUȘ (MUNTEANU)**

