



## ASTR Filiala Iași

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### RAPORT DE ACTIVITATE pentru anul 2025

#### I. Activități specifice în cadrul filialei

##### I.A. Participarea cu lucrări din partea membrilor filialei pentru manifestări și publicații ale ASTR

1. **Adăscăliței Adrian A.**, Enhancing the Performance of Technical Universities Using Artificial Intelligence, a 20-a ediție Conferința "Zilele Academiei de Științe Tehnice din România" ZASTR 2025, 18-19 Septembrie, Universitatea Dunărea de Jos, Galați, 2025. <https://astr.ro/wp-content/uploads/2025/09/Program-ASTR-2025-Galati-09.09.2025.pdf>
2. Nicolae SECRIERU, Serghei ANDRONIC, **Adăscăliței Adrian A.**, Viorel Cărbune, Roman Grițco, Implementation of Artificial Intelligence in Engineering Teaching and Learning, a 20-a ediție Conferința "Zilele Academiei de Științe Tehnice din România" ZASTR 2025, 18-19 Septembrie, Universitatea Dunărea de Jos, Galați, 2025. <https://astr.ro/wp-content/uploads/2025/09/Program-ASTR-2025-Galati-09.09.2025.pdf>
3. Ionel Starețu, **Ioan Doroftei**, Matter, Energy and Industrial revolutions – new considerations, Conferința Internațională Zilele Academiei de Științe Tehnice din România – Z ASTR 2025, 18 – 19 septembrie 2025, Galați, Romania.
4. **Ioan Doroftei**, Radu-Octavian Sandu, Eduard-Emil Ghercă, André Preumont, A Concept of Flapping-Wing Mechanism for a Small Flying Robot, Conferința Internațională Zilele Academiei de Științe Tehnice din România – Z ASTR 2025, 18 – 19 septembrie 2025, Galați, Romania
5. **Ioan Doroftei**, Cristina-Magda Cazacu, Ionel Starețu, Design, Kinematics, and Simulation of an Ankle Rehabilitation Device, Conferința Internațională Zilele Academiei de Științe Tehnice din România – Z ASTR 2025, 18 – 19 septembrie 2025, Galați, Romania.
6. Ionel Starețu, **Ioan Doroftei** (2025). Bionics-an essential solution to harmonizing society with nature and a case study. Journal of Engineering Sciences and Innovation (JESI), 10(3), 327-346.
7. **Isopeșcu Dorina-Nicolina**, Ingineria Civilă în Contextul European Actual. Misiune și Viziune, a 20-a ediție Conferința internațională Zilele ASTR "ENERGIA ȘI MATERIA ÎN INDUSTRIA MODERNĂ", 18 și 19 septembrie, Galați, 2025.
8. **Liviu Goraș**, Monica Fira, *A Note on Circuit Elements*, ZASTR Galati 18-19 sept 2025

9. Maria Catana (Oancea), Simona-Nicoleta Mazurchevici, Harshit Dave, Virgil Teodor, Viorel Paunoiu, **Dumitru Nedelcu**, (2025), *Complex interfacial designs for mechanical performance in biodegradable bicomponent 3D printed parts*, ZASTR, 18-19 septembrie 2025, Universitatea “Dunărea de Jos” din Galați.
10. Feraru Mihaela (Ilie), Simona – Nicoleta Mazurchevici, Teodor – Daniel Mîndru, Constantin Carausu, **Dumitru Nedelcu**, (2025), *Copper coatings of polymer matrix composites. A review*, JESI, 10(1), 55-92, <http://doi.org/10.56958/jesi.2025.10.1.55>
11. **Pastravanu O.**, Matcovschi M-H., **Voicu M.**; Generative-Artificial-Intelligence Assistance in Exploring Systemic Properties – Case Study, Conferința “Zilele Academiei de Științe Tehnice din România”, Universitatea Galați, 18-19 septembrie, 2025.

### **I.B. Participarea în Comitete de program, sau Colective editoriale ale manifestărilor, respectiv publicațiilor ASTR**

- **D. Nedelcu** - Comitetul științific al Conferinței ZASTR, 18-19 septembrie, 2025, Universitatea “Dunărea de Jos” din Galați
- **O. Păstrăvanu** - Comitetul științific al Conferinței ZASTR, 18-19 septembrie, 2025, Universitatea “Dunărea de Jos” din Galați
- **M. Voicu** - membru în Comitetul editorial *Journal of Engineering Sciences and Innovation* (JESI) - Electrotechnics, Electronics, Energetics, Automation

### **I.C. Organizarea și co-organizarea de manifestări științifice (sub egida ASTR)**

1. Cea de a 20-a ediție a seriei de conferințe internaționale anuale *Linguistic Resources and Tools for Natural Language Processing*, a avut loc în acest an la Casa Academiei Române – București, în perioada 8-10 octombrie 2025. Organizatori-editori: V. Barbu Mititelu, E. Irimia, M. Mitrofan, D. Trandabă, D. Tufiș, **D. Cristea**, <https://conferences.info.uaic.ro/consilr/2025/>
2. Cea de a 17-a ediție a școlilor internaționale EUROLAN, a avut loc în acest an la Universitatea de Vest din Timișoara, în perioada 14-21 septembrie 2025. Titlul Școlii a fost *Natural Language Processing in the Age of Complex Networks and Agentic AI*, <https://conferences.info.uaic.ro/eurolan/2025/>). Directori: **D. Cristea**, D. Tufiș, N. Ide.
3. KES-AMSTA-2025 - Agent and Multi Agents System - 19th International KES Conference - Invited Session (S01): Education in 21st Century: Artificial Intelligence and future developments, 25-27 iunie, Croația, Split. Organizatori: M. Mazzara, R. Marouf, R. Hussain, L.A. Scutelnicu, **D. Cristea**, S. Megha
4. 26th International Symposium on Measurement and Control in Robotics (ISMCR 2025), Sambreville, Belgium, October 07 - 08, 2025; - **Ioan Doroftei**, Publication Chair and Review Co-Chair; Membru Scientific Committee.
5. The 14th IFToMM International Symposium on Science of Mechanisms and Machines (SYROM 2025), Brasov, Romania, October 23–25, 2025; **Ioan Doroftei** - Symposium Co-Chair; Membru Scientific Committee
6. 13th International Conference - Modern Technologies in Industrial Engineering, ModTech 2025, June 11-14, Tatra Hotel, Zaczopane, Poland - **Ioan Doroftei**, Membru Organizing Committee, Membru Scientific Committee.
7. Organizarea celei de a 17 ediții a Simpozionului Internațional de Semnale, Circuite și Sisteme, ISSCS 2025, Iași 17-18 oct. 2025 (**L. Goras** cu participarea unor membri ASTR)

8. A 28-a ediție a Conferinței Internaționale *System Theory, Control and Computing*, ICSTCC 2025, 9-11 octombrie, 2025, Sinaia (volum de lucrări indexat IEEE Xplore), **Vasile Manta** – co-organizator
9. Conferința Internațională ModTech2025, 11-14 iunie 2025, Zakopane, Polonia, Organizatori: Universitatea Silesiană de Tehnologie din Gliwice, Polonia, Universitatea Tehnică “Gheorghe Asachi” din Iași, Academia de Științe Tehnice din România, Asociația Profesională ModTech, **Nedelcu**
10. International Conference on *Innovative Research* ICIR-EUROINVENT, 8-10 mai, 2025, Iasi, Romania (<http://www.euroinvent.org/partners/>). **Petrică Vizureanu** – Chairman și organizator.

## II. Cercetare (publicații, brevete, proiecte)

### II.A. Cărți și capitole în cărți

1. **A. Adăscăliței**: Introducere în utilizarea inteligenței artificiale în educație STEAM: predare, învățare și atestare, Editura Polirom, Iași, 2025, pagini 296, <https://polirom.ro/metodica/8656--introducere-%C3%AEn-utilizarea-inteligen%C5%A3ei-artificiale-%C3%AEn-educa%C5%A3ie-.html>
2. **Daniel Condurache**, Mihail Cojocari, Ionut Popa, “*Higher-Order Kinematics of Planar Rigid Motion by Euclidean Tensors and Complex Algebra. An Overview*”. In: Doroftei, I., Lovasz, E.C. (eds) *New Advances in Mechanisms, Mechanical Transmissions and Robotics. MTM&Robotics 2024. Mechanisms and Machine Science*, vol 178. Springer, Cham. [https://doi.org/10.1007/978-3-031-87537-3\\_6](https://doi.org/10.1007/978-3-031-87537-3_6)
3. Adriana Baci (Birluțiu), Daniela-Nagy-Onița, Dan Tufiș, **Dan Cristea**: *Proceedings of the 19th International Conference Linguistic Resources and Tools for Natural Language Processing*, University „1 December 1918” of Alba-Iulia, 14-16 November 2024 (published in 2025), Editura Universității „Alexandru Ioan Cuza” din Iași.
4. **Ioan Doroftei**, Erwin-Christian Lovasz (Eds) *New Advances in Mechanisms, Mechanical Transmissions and Robotics - MTM & Robotics 2024, Mechanisms and Machine Science*, Vol. 178, Springer Nature Switzerland, Cham, 2025, ISBN 978-3-031-87536-6.
5. **Ioan Doroftei**, Ovidiu-Vasile Crivoi, Cristina-Magda Cazacu, *Some Particular Theoretical Aspects of Internal-External Gear Pairs with Zero Difference in Numbers of Teeth*, In Doroftei, I., Lovasz E.C. (Eds) *New Advances in Mechanisms, Mechanical Transmissions and Robotics - MTM & Robotics 2024, Mechanisms and Machine Science*, Vol. 178, Springer Nature Switzerland, Cham, 2025, pp. 219 – 227.
6. Cezar Duca, Florentin Buium, **Ioan Doroftei**, *Force Transmission in Mechanisms Actuated by Linear Motors*, In Doroftei, I., Lovasz E.C. (Eds) *New Advances in Mechanisms, Mechanical Transmissions and Robotics - MTM & Robotics 2024, Mechanisms and Machine Science*, Vol. 178, Springer Nature Switzerland, Cham, 2025, pp. 219 – 227.
7. Radu-Octavian Sandu, Danut-Constantin Irimia, **Ioan Doroftei**, *Compact and Cost-Effective EMG Acquisition Systems for Neuroprosthetic Control. Part I: Theory Review on Biophysics, Noise and Signal Processing*, In Neagoe, M., Doroftei, I., Lovasz, E.C. (Eds) *Advances in Mechanisms and Machine Science - Proceedings of the 14th IFToMM International Symposium on Science of Mechanisms and Machines (SYROM 2025)*, *Mechanisms and Machine Science*, Vol. 198, Springer Nature Switzerland, Cham.
8. Radu-Octavian Sandu, Danut-Constantin Irimia, **Ioan Doroftei**, *Compact and Cost-Effective EMG Acquisition Systems for Neuroprosthetic Control. Part II: Prototype Development, Experimental Evaluation and Comparative Analysis*, In Neagoe, M.,

- Doroftei, I., Lovasz, E.C. (Eds) *Advances in Mechanisms and Machine Science - Proceedings of the 14th IFToMM International Symposium on Science of Mechanisms and Machines (SYROM 2025)*, Mechanisms and Machine Science, Vol. 198, Springer Nature Switzerland, Cham.
9. **Ioan Doroftei**, Cristina-Magda Cazacu, Vitalie Coadă, Mechanical Design and Simulation of a New Ankle Rehabilitation Device. Part I: Mechanical Design, In Neagoe, M., Doroftei, I., Lovasz, E.C. (Eds) *Advances in Mechanisms and Machine Science - Proceedings of the 14th IFToMM International Symposium on Science of Mechanisms and Machines (SYROM 2025)*, Mechanisms and Machine Science, Vol. 198, Springer Nature Switzerland, Cham.
  10. Cristina-Magda Cazacu, **Ioan Doroftei**, Vitalie Coadă, Mechanical Design and Simulation of a New Ankle Rehabilitation Device. Part II: Simulation Results, In Neagoe, M., Doroftei, I., Lovasz, E.C. (Eds) *Advances in Mechanisms and Machine Science - Proceedings of the 14th IFToMM International Symposium on Science of Mechanisms and Machines (SYROM 2025)*, Mechanisms and Machine Science, Vol. 198, Springer Nature Switzerland, Cham.
  11. Alexandru-Tudor Popovici, Andrei-Iulian Iancu, Vasile Horga, Catalin-Constantin Dosoftci, **Ioan Doroftei**, In Doroftei, I., Baudoin, Y., Taqvi, Z., Keller Fuchter, S. (Eds) *Measurements and Control in Robotics - Proceedings of the 26th International Symposium on Measurements and Control in Robotics (ISMCR 2025)*, Mechanisms and Machine Science, Vol. 199, Springer Nature Switzerland, Cham.
  12. **Liviu Goras**. (2025), On Circuits Exhibiting Unstable Spatial Modes. *Capitol în Current Research Progress in Physical Science* Vol. 8, 107–127. <https://doi.org/10.9734/bpi/crpps/v8/4620>
  13. Adam L., **Isopescu D.N.**, Contribuții la optimizarea performanțelor termo-mecanice ale betonului ecologic pe bază de cânepă, Editura PIM, Iași 2025, ISBN 978-606-13-9288-9.
  14. Costin M., **Lazar C.** (2025). MTPA Strategy for Induction Machine Predictive Control. Chapter in: Borowik, G., Chmaj, G., Waszkowski, R. (eds) *Models and Methods for Systems Engineering. Studies in Big Data* (SBD vol. 165), Springer, ISSN 2197-6503.
  15. Harshit K. Dave, Sandip T. Patel, **Dumitru Nedelcu**, Mohd. Khairul Anuar Bin Mohd Ariffin, Keyur P. Desai, (2025), *Multi-Material Vat Photopolymerization 3D Printing: A Brief Review of Technology, Design, and Process*, Chapter 4, 27 pages, Book title: Digital Product Design and Manufacturing, eds Gheorghe Oancea, Panagiotis Kyratsis, CRC Press (Taylor & Francis), Boca Raton, Florida, USA, <https://doi.org/10.1201/9781003518198>
  16. **Valentin I. Popa**, *Mi-am făcut ordine în gânduri*, Ed. Symposium, Iași, 2025, ISBN 978-606-8821-37-5
  17. **P. Vizureanu**, S. Yamaguchi, M.S. Baltatu, G. Göller, A.V. Sandu, C. Zamora-Ledezma, I.V. Antoniac, Functionalized Materials Applications in Biomedicine, CRC Press, Taylor & Francis Group, 2025, <https://doi.org/10.1201/9781003642855>
  18. A.V. Sandu, P. **Vizureanu**, M.M.A.B.Abdullah, M. Nabialek, M.R.R.M.A. Zainol, I. Sandu, Selected Papers from the International Conference on Innovative Research ICIR EUROINVENT 2025, Springer Proceedings in Materials (SPM, volume 95), <https://doi.org/10.1007/978-3-031-81198-2>
  19. **P. Vizureanu**, A. Pruteanu, R.C. Fierascu, M.S. Baltatu, P. Pietrusiewicz, A.V. Sandu, M. Nabialek, *Evolution and Prospects of Epoxy Materials: From Traditional to Advanced*, in Epoxy - Materials, Applications and Advanced Technologies (ed. P. Vizureanu, M.S. Baltatu), 2025, Intech Open, DOI: 10.5772/intechopen.1012225

20. M.S. Bălțatu, **P. Vizureanu**, A.V. Sandu, D.C. Achitei, D.D. Burduhos Nergis, M.C. Perju, M. Nabialek, *Biocomposites: Materials, Properties, and Applications*, In Composite Materials - Science and Engineering, Intech Open **2025**, (DOI: 10.5772/intechopen.1010197)
21. M.S. Baltatu, **P. Vizureanu**, A.V. Sandu, M. Nabialek, Appraisal of Several Ti-Based Alloys Used for Medical Applications, in Functionalized Materials Applications in Biomedicine (ed: P. Vizureanu, S. Yamaguchi, M.S. Baltatu, G. Göller, A.V. Sandu, C. Zamora-Ledezma, I.V. Antoniac) CRC Press, Taylor & Francis Group, **2025**, p. 19.
22. Bălțatu M.S., **Vizureanu P.**, Sandu A.V., Pruteanu A., Ciolacu F., Fierascu R., Spataru M.C. And Krawczyk M.B., *Methods and Processing Techniques of Titanium Alloys*, (Titanium Alloys - Research and Future Trends), 2025, Intech, Open, Rieka, Croatia, DOI: 10.5772/intechopen.1012294

## II.B. Articole în reviste

1. **Adăscăliței, A. A.** (2025). Îmbunătățirea performanțelor academice ale universităților tehnice folosind educația inginerască asistată de inteligența artificială. *Buletinul AGIR*, 29(2), 3-14. <https://www.agir.ro/buletine/3387.pdf>
2. **D.F. Chiper**, R.Matei, Design Technique and Efficient Polyphase Implementation for 2D Elliptically Shaped FIR Filters, *Sensors*, 25(19), 2025. IF = 3.5 (Q2)
3. **D.F. Chiper**, A Novel DST-IV Efficient Parallel Implementation with Low Arithmetic Complexity, D.M. Dobrea, *Electronics*, 14 (21), 2025. IF = 2.6 (Q2)
4. Calin Vaida, Iosif Birlescu, Bogdan Gherman, **Daniel Condurache**, Damien Chablat, Doina Pisla, "An analysis of higher-order kinematics formalisms for an innovative surgical parallel robot", *Mechanism and Machine Theory*, Volume 209, 2025, 105986, ISSN 0094-114X, <https://doi.org/10.1016/j.mechmachtheory.2025.105986>.
5. **Daniel Condurache**, "An overview of higher-order kinematics of rigid body and multibody systems with nilpotent algebra", *Mechanism and Machine Theory*, Volume 209, 2025, 105959, ISSN 0094-114X, <https://doi.org/10.1016/j.mechmachtheory.2025.105959>.
6. **Daniel Condurache**, Mihail Cojocari, Ionuț Popa. 2025. "About a Classical Gravitational Interaction in a General Non-Inertial Reference Frame: Applications on Celestial Mechanics and Astrodynamics", *Symmetry* 17, no. 3: 368. <https://doi.org/10.3390/sym17030368>.
7. **Daniel Condurache**, Mihail Cojocari, Ioan-Adrian Ciureanu. 2025. "A Closed Form of Higher-Order Cayley Transforms and Generalized Rodrigues Vectors Parameterization of Rigid Motion", *Mathematics* 13, no. 1: 114. <https://doi.org/10.3390/math13010114>.
8. **Daniel Condurache**, Ionuț Popa, "Computation without Singularity for Logarithms of Homogeneous Matrices and Orthogonal Dual Tensors", *Buletinul Institutului Politehnic din Iași*, Volum 71 (75), Nr. 1-2(2025).
9. Florentin Buium, **Ioan Doroftei**, Stelian Alaci (2025). Assembly Modes and Workspace Analysis of a 3-R RR Planar Manipulator. *Robotics*, Vol. 14, No. 2, p. 16. Q2
10. Toma-Marian Ciocirlan, Stelian Alaci, Florina-Carmen Ciornei, Ionut-Cristian Romanu, **Ioan Doroftei** (2025, January). A Symmetrical RRPRR Robust Coupling for Crossed Axes Transmission. In *Actuators*, Vol. 14, No. 2, p. 64). MDPI. Q2
11. **Ioan Doroftei**, Ovidiu-Vasile Crivoi, Cristina-Magda Cazacu, Stelian Alaci (2025). Some Particularities of Internal-External Gear Pairs with Zero Difference in Numbers of Teeth. *ACTA TECHNICA NAPOCENSIS-Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING*, Vol. 68, No. 1 & 2, pp. 23 - 28. Q4

12. Ionel Staretu, **Ioan Doroftei** (2025). Bionics-an essential solution to harmonizing society with nature and a case study. *Journal of Engineering Sciences and Innovation (JESI)*, 10(3), 327-346.
13. Radu - Octavian Sandu, **Ioan Doroftei**, Biomechanics-Driven Development of Prosthetic Fingers: A Two-Phalanx Approach, *BULETINUL INSTITUTULUI POLITEHNIC DIN IAȘI. Secția Matematica. Mecanică Teoretică. Fizică*, Vol. 71, No. 1-2, pp. 15 – 26, 2025.
14. Alin-Stefan Diaconu, **Ioan Doroftei**, MOBILE ROBOTS FOR LIFTING AND TRANSPORTING OBJECTS OF ANY SHAPE – A REVIEW, *BULETINUL INSTITUTULUI POLITEHNIC DIN IAȘI. Secția Construcții de mașini*, Vol. 71, No. 4, pp. 49 – 64, 2025.
15. Florentin Buium, Cezar D. Duca and **Ioan Doroftei**, Forces transmission quality of complex mechanisms using the structural groups procedure, to be published in *Environmental Engineering and Management Journal*. (Impact Factor = 0.9, Q4).
16. Radu-Octavian Sandu, Danut-Constantin Irimia and **Ioan Doroftei**, A Review on Interfacing Strategies Used for Robotic Upper Limb Prostheses, to be published in *Environmental Engineering and Management Journal*. (Impact Factor = 0.9, Q4).
17. Cristina-Magda Cazacu, Vitalie Coadă, **Ioan Doroftei**, Stelian Alaci, A Comprehensive Review of Lower Limb Exoskeletons, to be published in *Environmental Engineering and Management Journal*. (Impact Factor = 0.9, Q4).
18. **Ioan Doroftei**, Stelian Alaci, Marius–Gheorghe Hagan, Andrei Vieru, Designing an Agricultural Mobile Robot with Hybrid Locomotion, to be published in *Environmental Engineering and Management Journal*. (Impact Factor = 0.9, Q4).
19. Ivanov, O., Băiceanu, F. C., Nemeș, C. M., Grigoraș, G., Țuchendria, B. E., & **Gavrilaș, M.** (2025). A Multistage Algorithm for Phase Load Balancing in Low-Voltage Electricity Distribution Networks Operated in Asymmetrical Conditions. *Symmetry*, 17(10), 1589, IF=2.2. <https://www.mdpi.com/2073-8994/17/10/1589>
20. Petronela Cozma, Mihaela Roșca, Mariana Minuț, **Maria Gavrilescu**, "Phytoremediation: A sustainable and promising bio-based approach to heavy metal pollution management", *Science of the Total Environment*, 2025, **1001**, 180458, <https://doi.org/10.1016/j.scitotenv.2025.180458>
21. Maria Paiu, Lidia Favier, Doina Lutic, Raluca Maria Hlihor, Dumitru Claudiu Sergentu, Veronique Alonzo, **Maria Gavrilescu**, "First insight on the effective removal of pentoxifylline drug under visible-light-driven irradiation with ZnO catalyst obtained via precipitation", *Journal of Environmental Management* 2025, **386** 125420, <https://doi.org/10.1016/j.jenvman.2025.125420>
22. Maria Paiu, Doina Lutic, Lidia Favier, **Maria Gavrilescu**, "Heterogeneous photocatalysis for advanced water treatment: materials, mechanisms, reactor configurations, and emerging applications", *Applied Sciences* 2025, **15** 5681, <https://doi.org/10.3390/app15105681>
23. Cristina Ghinea, Elena-Diana Ungureanu-Comăniță, Raluca Maria Tâbuleac, Paula Sânziana Oprea, Ersilia Daniela Cosbuc, **Maria Gavrilescu**, "Cost-benefit analysis of enzymatic hydrolysis alternatives for food waste management", *Foods*, 2025, **14**, 488, <https://doi.org/10.3390/foods14030488>
24. Dana-Gabriela Simion Ludusanu, Daniela-Ionela Fertu, Grigore Tinică, **Maria Gavrilescu**, "Integrated quality and environmental management in healthcare: impacts, implementation, and future directions toward sustainability", *Sustainability*, 2025, **17**, 5156, <https://doi.org/10.3390/su17115156>
25. Maria Paiu, Lidia Favier, **Maria Gavrilescu**, "Photocatalytic approaches to treating mixtures of emerging organic pollutants in aquatic environments", *Environmental*

- Engineering and Management Journal*, 2025, 24, 745-791, <https://doi.org/10.30638/eemj.2025.058>
26. Monica Fira, **Liviu Goraş**, Lucian Fira, Radu Florin Popa, Hariton-Nicolae Costin, “Arrhythmia Classification with Single-Channel Features Extracted from “A Large-Scale 12-Lead ECG Database for Arrhythmia Study”, *Sensors*, 25, 5621. <https://doi.org/10.3390/s25185621>, 2025
  27. Costin, Hariton-Nicolae, Monica Fira, and **Liviu Goraş**, “Artificial Intelligence in Ophthalmology: Advantages and Limits”, *Applied Sciences*, 15, no. 4: 1913, <https://doi.org/10.3390/app15041913>, 2025
  28. Bizu A.N., **Isopescu D.N.**, Drăghici G., Blănari I., (2025), An Experimental and FE Modeling Investigation of the Pull-Out Behavior of Anchoring Solutions in Concrete: A Comparative Study, *Materials* 2025, 18(19), 4596; <https://doi.org/10.3390/ma18194596>
  29. Grănescu A.M., **Isopescu D.N.**, Carazeanu Popovici I., Pericleanu M., Pericleanu B.D., Angheliescu C.E., Voicu G., Ghiga D.A., (2025), Material and Structural Characterization of Historical Masonry: Analytical Framework for Restoration Planning: A Case Study, *Appl. Sci.* 2025, 15(11), 6176; <https://doi.org/10.3390/app15116176>
  30. Baciu A., **Lazar C.**, Gradient vs. Non-Gradient-Based Model Free Control Algorithms: Analysis and Applications to Nonlinear Systems, *Applied Sciences*, 2025, **15**(5), 2766. [doi.org/10.3390/app15052766](https://doi.org/10.3390/app15052766) (IF=2.5, Q2)
  31. Mihail-Cristian Heghea, Silviu-Dumitru Paval and **Vasile-Ion Manta**, Reaction-Diffusion Applications to Data Dynamic Clustering and Partitioning, *Discrete and Continuous Dynamical Systems - Series S*, Early Access, 2025, p. 1-18, IF 1, Q3, 10.3934/dcdss.2025042
  32. CT Axinte, A Stan, **VI Manta**, Embedded Streaming Hardware Accelerators Interconnect Architectures and Latency Evaluation, *Electronics*, 2025, Issue 8, Vol. 14, p. 18, IF 2.6, Q2 10.3390/electronics14081513
  33. CA Popovici, A Stan, NA Botezatu, **VI Manta**, RiscADA: RISC-V Extension for Optimized Control of External D/A and A/D Converters, *Electronics*, 2025, Issue 15, Vol. 14, p. 21, IF 2.6, Q2, 10.3390/electronics14153152
  34. Dimitrie Cristian Fodor, Otilia Zvorişteanu, Dragoş Florin Chitariu, Adriana Munteanu, Ştefan Daniel Achirei, **Vasile Ion Manta**, Neculai Eugen Seghedin, Compensation of Leg Length Discrepancy Using Computer Vision in a Self-Adaptive Transtibial Prosthesis, *Technologies*, 2025, Issue 8, Vol. 13, p. 24, IF 3.6, Q1, 10.3390/technologies13080319
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## II.C. Articole în volume de conferințe

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  26. Cucos I., Antonescu I., **Isopescu D.N.**, Baraga P., *Hydrogen plasma gasification equipment for renewable energy production*, The 13th International Conference on Environmental Engineering and Management – ICEEM 13, Empower Sustainability, September 17-20, 2025, Iași, România.
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  28. Barbu D., Grămescu A.M., Maftai C., Bîrcă Al.G., Gemănaru A, **Isopescu D.N.**, *Integrated Approaches to Valorization of Archaeological Heritage in Urban Space*, The International Scientific Conference CIBv 2025, the 20th edition, 6-7 Noiembrie 2025, Brașov, România.
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  31. Mihail-Cristian Heghea, Silviu-Dumitru Pavăl, **Vasile-Ion Manta**, Numerical Simulation of Reaction–Diffusion Model for Graph-Based Data Clustering, International Conference on System Theory, Control and Computing (ICSTCC) 2025, Cluj-Napoca, IEEE Xplore
  32. **Octavian Pastravanu, Mihail Voicu**, Mihaela-Hanako Matcovschi, 2025, Self-learning Policy for Structurally Stable Regulation, Proceedings *25th International Conference on Control Systems and Computer Science (CSCS)* , pp. 129-135, Publisher: IEEE, DOI: 10.1109/CSCS66924.2025.00027
  33. Mihaela-Hanako Matcovschi, **Octavian Pastravanu**, 2025, On Strong Stability of Discrete- and Continuous-Time Linear Systems, Proceedings *29th International Conference on System Theory, Control and Computing (ICSTCC)*, pp. 474-479, Publisher: IEEE, DOI: 10.1109/ICSTCC66753.2025.11240349

## II.D. Brevete

### D.N. Isopescu

- Brevet de invenție, RO135303, *Instalație de reciclare a deșeurilor lichide periculoase*, Cucuș I., **Isopescu D.N.**, Antonescu I., Caunii V., Cucuș V.C., Alecu I.C., Agavriloaie M.O., Bogdan I. Gh., (cerere depusă în 2021)
- Brevet de invenție, RO135311, *Instalație de reciclare a deșeurilor menajere și din industria materialelor de construcții*, Cucuș I., **Isopescu D.N.**, Antonescu I., Cucuș V.C., Alecu I.C., Agavriloaie M.O., Drăghicescu M., (cerere depusă în 2021)

### V. Manta

- Sistem protetic pentru detecția și compensarea diferenței de lungime a membrilor inferioare umane (internațional: A61F2/62; A61F2/70), Fodor Dimitrie-Cristian, Seghedin Neculai-Eugen, **Manta Vasile-Ion**, Zvoristeanu Otilia, Chitariu Dragos-Florin, Achirei Stefan-Daniel, [https://ro.espacenet.com/publicationDetails/biblio?II=0&ND=3&adjacent=true&locale=ro\\_RO&FT=D&date=20240730&CC=RO&NR=138295A0&KC=A0](https://ro.espacenet.com/publicationDetails/biblio?II=0&ND=3&adjacent=true&locale=ro_RO&FT=D&date=20240730&CC=RO&NR=138295A0&KC=A0)

### P. Vizureanu

- Geantă V., Voiculescu I., Ștefănoiu R., Binchiciu H., **Vizureanu P.**, Kelemen H., Codescu M.M., Sandu A.V., Bălțatu M.S., Marinescu V., High-entropy alloy in FeMoTaTiZr metallurgical system for surgical medical applications and manufacturing technology, Patent RO134978B/28.02.2025.
- Voiculescu I., Geantă V., Ștefănoiu R., Kelemen H., **Vizureanu P.**, Codescu M.M., Sandu A.V., Binchiciu Emilia Florina, Bălțatu M.S., Pătroi D., High-entropy alloy of the MoNbTaTiZr system microalloyed with yttrium, for medical applications, and consolidation process, Patent RO134977B / 2025

## II.E. Participări în proiecte de cercetare-dezvoltare / Tehnologii și servicii

### D. Condurache

- Director proiect *Mediu colaborativ pentru dezvoltarea arhitecturilor cloud bazate pe OpenStack cu aplicații în CDI*, POC/398/1/1/Dezvoltarea unor rețele de centre CD, coordonate la nivel național și racordate la rețele europene și internaționale de profil și asigurarea accesului cercetătorilor la publicații științifice și baze de date europene și internaționale. Cod SMIS 2014+124998, Valoare: 5.048.822,88 lei

#### D. Cristea

- eDTLR+: noua versiune a Marelui Dicționar al Limbii române în format electronic; în curs de elaborare (în tema de cercetare a Institutului de Informatică Teoretică)
- CoRoLa+: Noi colecții de date asociate Corpusului Reprezentativ al Limbii Române Contemporane (CoRoLa) (în tema de cercetare a IIT)
- DERC: Colecția de intrări a Dicționarului de Expresii Românești în Context (vol. 1: A-C) (în tema de cercetare a IIT)
- DeLORo+: pipeline-ul funcțional al proiectului DeLoRo (în tema de cercetare a IIT)
- DERC-Expand: Tehnologia de expandare a expresiilor din DERC (în tema de cercetare a IIT)
- eDTLR-EAS: Interfața de editare (Edit - E), adnotare (Annotate - A) și interogare (Search - S) a eDTLR+: un front-end de editare, adnotare și interogare a intrărilor de dicționar (în tema de cercetare a IIT)

#### I. Doroftei

- **Ioan Doroftei** – Expert Senior (Director: Conf.univ.dr.ing. Simona Caraiman), Grant DIGITAL-2021-EDIH-01 (Contract: 101083392, cod MySMIS 161826 - BRAINTWIN), DIGITAL INNOVATION ZONE EDIH–MANUFACTURING&SMART HEALTH for better business life and health in the North East Romania Region (TUIasi).

#### V. Manta

- responsabil Universitatea Tehnica din Iasi, *Romanian National Quantum Communication Infrastructure* (RoNaQCI), proiect în cadrul programului Digital Europe Programme (DIGITAL), apelul: DIGITAL-2021-QCI-01 (EU Secure Quantum Communication Infrastructure), tema: DIGITAL-2021-QCI-01-DEPLOY-NATIONAL, finanțat de European Commission-EU, proiect number: 101091562, perioada: 1 ianuarie 2023 - 30 iunie 2025, buget total - 9 999 877.60 Euro, din care pentru TUIasi 143 454.90 Eur
- responsabil Universitatea Tehnica din Iasi, HUB Român de Inteligență Artificială – HRIA, coordonator UNSTPB, program: Creștere Inteligență, Digitalizare și Instrumente Financiare 2021-2027, prioritatea: Prioritatea 1. Susținerea și promovarea unui sistem de CDI atractiv și competitiv în România, buget total 65 milioane EUR, din care 3.1 millionae EUR pentru TUIași, durata 60 luni (ian 2025 - dec 2029).
- responsabil Universitatea Tehnica din Iasi RExQTCS: Romanian Excellence in Quantum Technologies enhancing Cybersecurity (RExQTCS: Centrul Românesc de Excelență în Tehnologii Cuantice cu impact în Securitatea Cibernetică), proiect castigat in 2025, Solicitare buget total 20 mil Euro din care 2.8 mil. revine TUIASI.

#### D. Nedelcu

- Project Based Learning (PBL) Project, Silesian University of Technology (SUT), Gliwice, Poland, (2025-2026), *Analysis of thermal conditions of the robotic 3D manufacturing process based on the WAAM method*Supervisors / directori proiect: prof. Aleksander Lisiecki (SUT), prof. Dumitru Nedelcu (TUIASI), proiect cu finanțare SUT.

#### O. Păstrăvanu

- Petri Net Toolbox for Matlab, *MathWorks - Third Party Products - Upgrade for MATLAB 2024*, [www.mathworks.com/products/connections/product\\_detail/petri-net-toolbox.html](http://www.mathworks.com/products/connections/product_detail/petri-net-toolbox.html)

#### P. Vizureanu

- Responsabil de proiect: *Harnessing complementary curricular preparedness via sustainable management in response to civil and military pollution on the coastline, tributaries and lagoons in black sea's north, west, south zone*, Call: EMFAF-2023-

PIA-FLAGSHIP, Type of action: EMFAF-PJG, Proposal number: 101124670, Black Sea SIERRA, 2023–2026 (<https://simtit.ro/black-sea-sierra/>)

- Director de proiect: A new generation of metallic biomaterials as health solution for a sustainable life (Cool&SmartTit), Project ERA-MIN Joint Transnational Call 2023, Aprilie 2024-Martie 2027, European Comission, Horizon Europe (<https://simtit.ro/coolsmartit/>).

### III. Prezentări invitate / Comunicări / Premii

1. **Daniel Condurache**, Premiul " *Outstanding Contribution Award*" oferit de World Research Awards, part of the Scifax Group, 2025
2. Premiul „Gheorghe Silaș” al Academiei de Științe Tehnice din România, 2025
3. Premiul Academiei Romane „Petre Sergescu” pentru lucrarea „Gheorghe Asachi - un spirit enciclopedic”, Neculai Eugen Seghedin (editor), Gabriel Asandului, **Daniel Condurache**, Ioan Milică, Florin Cîntic, Mihai Dorin, Bogdan Crețu, Tudor Grădinaru, Cristian Ungureanu, 2025
4. **D. Cristea**, L-A. Scutelnicu, Tutorial: DeLORo project, EUROLAN 2025, The 17th Eurolan Edition, NLP in the Age of Complex Networks and Agentic AI, Hybrid Training School, Timișoara, Romania, 15-21 September 2025.
5. P. Rebeja, D. Gifu, L. A. Scutelnicu, C. Bolea, L. Pisol, **D. Cristea** – eDTLR - arhitectura nouă, „Zilele Academice Ieșene” Ediția a XXXIX-a, Simpozionul „Sisteme Inteligente și Aplicații” (SIA), 17 octombrie 2025.
6. **Ioan Doroftei**, ROSYLOGISTIC - Development of a fleet of autonomous omnidirectional mobile robots for logistic applications. 26th International Symposium on Measurement and Control in Robotics (ISMCR 2025), Sambreville, Belgium, October 07 - 08, 2025; Keynote Speaker
7. **Ioan Doroftei**, Dezvoltarea unei flote de roboți mobili omnidirecționali autonomi pentru aplicații logistice. Conferința științifică Smart Diaspora 2025, 04 – 07 noiembrie, 2025, Cluj-Napoca, Romania; Workshop "Robotica fără frontiere – abordări inovative în industrie, medicină și servicii"; Invited Speaker
8. **Ioan Doroftei**, Robotica socială – viitorul interacțiunii om-robot. Edu Tech Fest – Ediția a III-a, 10 – 11 aprilie, 2025, Iasi, Romania; Invited Speaker
9. Challenges of artificial intelligence in climate change management, **Maria Gavrilescu**, The 4th International Conference Creativity and Innovation in Digital Economy, Ploiești, Romania, October 16-17, 2025
10. Maria Paiu, Lidia Favier, Doina Lutic, Raluca-Maria Hlihor, Veronique Alonzo, **Maria Gavrilescu**, *Efficient visible light-driven photocatalytic degradation of a synthetic dye: assessment of process efficiency and phytotoxicity of degradation products*, 13th International Conference on Environmental Engineering and Management, Iași, România, 17–20 September 2025.
11. Petronela Cozma, Raluca-Maria Hlihor, Maria Paiu, **Maria Gavrilescu**, *Phytoremediation of heavy metal-contaminated soils by rapeseed (Brassica napus L.)*, 13th International Conference on Environmental Engineering and Management, Iași, România, 17–20 September 2025.
12. Maria Paiu, Paula-Sânziana Oprea, Lidia Favier, Doina Lutic, Raluca-Maria Hlihor, Veronique Alonzo, **Maria Gavrilescu**, *Impact of pentoxifylline degradation by a ZnO/visible light system on plant growth and physiological responses*, 9th European Bioremediation Conference, Chania, Creta, Grecia, 15–19 June 2025.
13. Raluca-Maria Țâbuleac, Tiberiu Vlad Simion, **Maria Gavrilescu**, *Assessing environmental, social, and governance (ESG) integration in tourism and hospitality: a*

- comparative analysis of global standards and industry practices*, International Conference of the Doctoral School – CSD 2025, Iași, Romania, 14-16 May, 2025
14. Tiberiu Vlad Simion, Raluca-Maria Mighiu (Țâbuleac), **Maria Gavrilesu**, *Tourism and free movement in the European Union: environmental challenges and pathways to sustainable development*, International Conference of the Doctoral School – CSD 2025, Iași, Romania, 14-16 May, 2025
  15. Elena-Diana Ungureanu-Comăniță, Raluca Maria Țâbuleac, Ersilia Daniela, Coșbuc, Paula Sânziana Oprea, Dana Fertu, **Maria Gavrilesu**, *Cost Benefit Evaluation of Converting Banana and Apple Pulp into Nutrient-Rich Food Ingredients*, Applications of Chemistry in Nanosciences and Biomaterials Engineering NanoBioMat 2025 – Summer Edition, 25-27 June 2025, Bucharest, Romania.
  16. Raluca-Maria Țâbuleac, Decebal Mighiu, Elena Diana Ungureanu Comăniță, **Maria Gavrilesu**, *Advancing Carbon Neutral Travel: A Review of Renewable Energy Integration in the Tourism Sector*, Applications of Chemistry in Nanosciences and Biomaterials Engineering, NanoBioMat 2025 – Summer Edition, 25-27 June 2025, Bucharest, Romania.
  17. Raluca-Maria Tabuleac, Tiberiu Vlad Simion, Elena Diana Ungureanu Comăniță, **Maria Gavrilesu**; *Tourism Employment in the European Union: Structural Dynamics and Implications for the Circular Economy*, Applications of Chemistry in Nanosciences and Biomaterials Engineering, NanoBioMat 2025 – Winter Edition, 26-28 November 2025, Bucharest, Romania.
  18. Ersilia Daniela Coșbuc, Elena-Diana Ungureanu-Comăniță, Raluca Maria Țâbuleac, Paula Sânziana Oprea, **Maria Gavrilesu**; *Cost–Benefit based Risk Modeling for Food Waste Management*, Applications of Chemistry in Nanosciences and Biomaterials Engineering, NanoBioMat 2025 – Winter Edition, 26-28 November 2025, Bucharest, Romania.
  19. Elena-Diana Ungureanu-Comăniță, Raluca Maria Țâbuleac, Ersilia Daniela Coșbuc, Paula Sânziana Oprea, **Maria Gavrilesu**, *Multi-Criteria Decision Analysis for Waste-To-Resource Options: Conventional PVC vs PHA*, Applications of Chemistry in Nanosciences and Biomaterials Engineering, NanoBioMat 2025 – Winter Edition, 26-28 November 2025, Bucharest, Romania.
  20. Elena-Diana Ungureanu-Comăniță, Raluca Maria Țâbuleac, Paula Sânziana Oprea, Ersilia Daniela Coșbuc, **Maria Gavrilesu**, *Circular strategies and innovative technologies for food waste management: A review of sustainable solutions for nutrient recovery*, The 20th International Conference of Constructive Design and Technological Optimization in Machine Building Field OPROTEH 2025, 21-23 may 2024, Bacau, Romania.
  21. Raluca Maria Țâbuleac, Elena-Diana Ungureanu-Comăniță, Isabela Maria Simion, **Maria Gavrilesu**, *Biodiversity conservation in protected areas in the context of ecotourism: A review of policy strategies and management approaches*, The 20th International Conference of Constructive Design and Technological Optimization in Machine Building Field OPROTEH 2025, 21-23 may 2024, Bacau, Romania.
  22. Raluca-Maria Țâbuleac, Tiberiu Vlad Simion, Elena-Diana Comăniță-Ungureanu, Petronela Cozma, Camelia Betianu, Isabela Maria Simion, **Maria Gavrilesu**, *Green Transformation in Tourism: Eco-Innovation Adoption and Sustainability Performance Across Europe*, The 13th International Conference on Environmental Engineering and Management (ICEEM13), 17-20 September 2025, Iasi, Romania.
  23. Simion, T.S., Țâbuleac, R.M., **Gavrilesu, M.**, *Integrating tourism, mobility, and environmental sustainability: a conceptual framework for the European Union*, The 13th International Conference on Environmental Engineering and Management (ICEEM13), 17-20 September 2025, Iasi, Romania

24. Paula-Sânziana Oprea, Elena-Diana Comăniță-Ungureanu, Petronela Cozma, **Maria Gavrilesu**, *Sustainable solutions for food waste valorization: Pathways to recover bioactive compounds and nutrients*, The 13th International Conference on Environmental Engineering and Management (ICEEM13), 17-20 September 2025, Iasi, Romania.
25. Sebastian Jan Baranyai, **Maria Gavrilesu**, *Granulation and chemical conversion of sewage sludge ash. A technical approach for the recovery of plant-available phosphorus*, The 13th International Conference on Environmental Engineering and Management (ICEEM13), 17-20 September 2025, Iasi, Romania.
26. **Maria Gavrilesu**, *Artificial intelligence for climate change mitigation: opportunities, applications and challenges*, The 13th International Conference on Environmental Engineering and Management (ICEEM13), 17-20 September 2025, Iasi, Romania.
27. Petronela Cozma, Raluca-Maria Hlihor, Maria Paiu, **Maria Gavrilesu**, *Phytoremediation of Heavy Metal-Contaminated Soils by Rapeseed (*Brassica Napus L.*)*, The 13th International Conference on Environmental Engineering and Management (ICEEM13), 17-20 September 2025, Iasi, Romania.
28. Camelia Bețianu, Adrian Puițel, Teodor Măluțan, **Maria Gavrilesu**, *Dynamic behavior of persistent organic pollutants in soil*, The 13th International Conference on Environmental Engineering and Management (ICEEM13), 17-20 September 2025, Iasi, Romania.
29. Dana-Gabriela Simion Ludușanu, Grigore Tinică, **Maria Gavrilesu**, *Synergizing quality and environmental management in healthcare institutions: pathways toward sustainable and patient-centered care*, The 13th International Conference on Environmental Engineering and Management (ICEEM13), 17-20 September 2025, Iasi, Romania.
30. Emilian David, Monica Fira, **Liviu Goraș**, *On Incorporating Distance Correlation based Feature Selection in Classifier Optimization: A Hyper-Parameter Bayesian Optimization Approach*, comunicare la Simpozionul „Sisteme Inteligente și Aplicații”, 17 octombrie 2025, Iasi
31. Monica Fira, **Liviu Goraș**, Emilian David, *Clasificarea aritmiilor cu caracteristici monocanal extrase dintr-o baza de date cu 12 canale ECG*, comunicare la Simpozionul „Sisteme Inteligente și Aplicații”, 17 octombrie 2025, Iasi
32. **Dumitru Nedelcu**: Profesor invitat - Universitatea Silesiană de Tehnologie din Gliwice, Facultatea de Mecanică, Gliwice, Polonia, 2024-2025. Cursuri: Additive Manufacturing, Mechanics I
33. **Dumitru Nedelcu**: Profesor invitat - Universitatea de Stat “Alecă Russo” din Bălți, Republica Moldova, 2024-2025. Cursuri: Tehnologia materialelor III, Tehnologia și proprietățile materialelor nemetalice
34. **Octavian Pastravanu, Mihail Voicu**, Mihaela-Hanako Matcovschi Principiile controlului structural-stabil în context de auto-învățare, Prezentare – Sesiunea de comunicări științifice a Institutului de Matematică “Octav Mayer” și a Comisiei de Automatică teoretică și Teoria controlului, Zilele academice ieșene, Academia Română, Filiala Iași, 25 octombrie 2025, <https://acadiasi.org/zilele-academice-iesene/>
35. **Octavian Păstrăvanu**, Mihaela-Hanako Matcovschi, **Mihail Voicu**, O conjetură în analiza sistemelor dinamice politopice explorată prin instrumente de inteligență artificială, – Sesiunea de comunicări științifice a Institutului de Matematică “Octav Mayer” și a Comisiei de Automatică teoretică și Teoria controlului, Zilele academice ieșene, Academia Română, Filiala Iași, 25 octombrie 2025, <https://acadiasi.org/zilele-academice-iesene/>
36. **P. Vizureanu**, Design and Evaluation of Biocompatible Ti-Mo-Nb-Sn Alloys for Load-Bearing Implant, MEDAN 2025 – The International Conference on

- Management, Engineering, Digital, and AI Networking, 24 – 25 September 2025, Medan, Indonesia
37. **P. Vizureanu**, Performance Evaluation of Ti-based Alloys as Biomaterials, *Bioceramics* 35, 29/10/2025, Rio de Janeiro, Brazilia
  38. **P. Vizureanu**, Innovations on of  $\beta$ -Titanium Alloys in Biomedical Applications: Recent Developments and Future Directions, 4th International Materials Technologies and Metallurgy Conference-2025, 2-3 October 2025, Istanbul, Turcia

## **IV. Activități editoriale – Membri în colective de redacție, comitete de program, referenți, recenzenți**

### **A. Adăscăliței**

- Editor Asociat: revista *Computer Applications in Engineering Education* <https://onlinelibrary.wiley.com/page/journal/10990542/homepage/editorialboard.html>
- Membru în Technical Committees of the 10th International Conference on Cloud Computing and Big Data Analytics, April 25-27, 2025 // Chengdu, China, <https://www.iccbda.com/tpc.html>
- member of the committee for 24th European Conference on e-Learning (ECEL), 23-24th October 2025, Technical University of Denmark (DTU), Denmark; <https://www.academic-conferences.org/conferences/ecel/>; <https://www.academic-conferences.org/conferences/ecel/ecel-committee/>
- member of the committee for Technical committee of the 8th International Conference on Big Data and Education , taking place in Beijing, China, during October 25-27, 2025, <https://www.icbde.org/tpc.html>
- Mini Track Chair: Dr Adrian A. Adascalitei, "Gh. Asachi" Technical University, Iasi, Romania, Learning, Teaching and Pedagogy of Artificial Intelligence in STEM Education, 2nd International Conference on Education Research (ICER), 6 - 7 November 2025, Lisbon, Portugal, <https://www.academic-conferences.org/conferences/icer/icer-call-for-papers/> <https://www.academic-conferences.org/conferences/icer/icer-biographies/>
- Membru Program Committee, The 25th IEEE International Conference on Advanced Learning Technologies Track 1. Technologies for Open Learning and Education (i-OPENLearn), <https://tc.computer.org/tclt/icalt-2025-track-1-i-openlearn/>
- Recenzent solicitat de reviste: *Computer Applications in Engineering Education*, *IEEE Access*, *Education Sciences (MDPI)*,
- Recenzent pentru IMCIC 2025 and conferences/symposia, <https://www.iiis-spring25.org/imcic/Website/PCReviewers.asp?vc=26>;
- <https://www.iiis-spring25.org/imcic/reviewers/Reviewers.asp?vc=55>; Special Track on Interdisciplinary Research, Education, and Communication: IDREC 2025© in the context of The 16th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2025©, March 25 - 28, 2025
- <https://www.iiis-spring25.org/imcic/reviewers/Reviewers.asp?vc=26> The 16th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2025©, March 25 - 28, 2025

### **N. D. Alexandru**

- Membru în Colectivul editorial al revistei *Advances in Electrical and Computer Engineering*

- Membru în Technical Program Committee of 5th IFSA Winter Conference on Automation, Robotics & Communications for Industry 4.0 / 5.0 (ARCI' 2025), 19-21 February 2025, Granada, Spain
- Special Guest at The 30<sup>th</sup> International Computers Contest for Students Hard & Soft Suceava May 11-18 2025
- Recenzent solicitat la Revue Roumaine des Science Techniques *Série électrotechnique et énergétique*
- Recenzent solicitat la International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies 3ICT 2025, 17-19 November 2025 - University of Bahrain, Bahrain

#### **D.F. Chiper**

- Membru în Colectivul editorial al revistei Electronics
- Membru în Colectivul editorial al revistei Applied Sciences
- Membru în Colectivul editorial al revistei Acoustics, Speech and Signal Processing, ISSN 2522-6827, Canada;
- Membru în Colectivul editorial al revistei Artificial Intelligence Evolution, Universal Wiser Publisher, Singapore
- Membru în Colectivul editorial al revistei Information Systems and Signal Processing Journal, ISSN 2371-9419, Canada;
- Membru în Colectivul editorial al revistei Journal of Electronics and Information Science, ISSN 2371-9524, Canada;
- Membru în Colectivul editorial al revistei Journal of Low Power Electronics and Design, Canada;
- Membru în Colectivul editorial al revistei Journal of Electronics and Information Science, Canada; Clausius Scientific Press, Canada;
- Membru în Colectivul editorial al revistei Journal of Electronic Research and Applications, ISSN: 2208-3502, Australia;
- Membru în Colectivul editorial al revistei Science Journal of Circuits, Systems and Signal Processing, ISSN Print: 2326-9065, New York
- Guest Editor la Electronics la numarul special „Efficient Algorithms and Architectures for DSP Applications
- Guest Editor la Applied Sciences la numarul special ” "Advance in Digital Signal Processing and Its Implementation"
- Recenzent de lucrări publicate în reviste internaționale ISI: IEEE Trans. On Circuits and Systems for Video Technology , IEEE Transaction on Signal Processing, IEEE Signal processing Letters, IEEE Access, IEEE Trans. On Circuits and Systems I, IEEE Trans. On Circuits and Systems II, IEEE Communications Letters, IEEE Transactions on VLSI Systems

#### **D. Condurache**

- Buletinul Institutului Politehnic din Iași, seria Matematică, Mecanică Teoretică, Fizică-redactor șef
- Mechanical Sciences - Topical editor
- The Romanian Journal of Technical Sciences, seria Applied Mechanics- Editor
- Parana Journal of Science and Education (PJSE),ISSN 2447-6153- Membre of The editorial team
- Romanian Journal of Mechanics ISSN 2537 -5229- Associate Editor
- AppliesMath EISSN 2673-9909- Editorial board member
- Președintele Comitetului Român de Istoria Științei a Academiei Române
- Membru în *Technical Committee of Computational Kinematics of IFToMM* ales la *15-th IFToMM World Congress 2019 in Krakow, Poland.*

- Desemnat prin concurs în *Editorial board of Mechanical Sciences* ca topical editor pentru domeniile "*Mechanisms and Robotics*" and "*Dynamics and Control*".
- Chairman: 9th International Conference on Control, Decision and Information Technologies CoDIT 2023, July 03-06, 2023, Università di Roma, Sapienza, Rome, Italy
- Chairman: 11th ECCOMAS Thematic Conference on MULTIBODY DYNAMICS, 12-14 July 2023, Instituto Superior Tecnico-Lisbon, Portugal.
- Chairman: 16th IFToMM World Congress 2023, 5-10 November 2023, Tokyo, Japan.
- Chairman: The Joint International Conference of the XIV International Conference on Mechanisms and Mechanical Transmissions (MTM) and the XXVI International Conference on Robotics (ROBOTICS) Iasi, Romania, November 14 – 16, 2024
- Membru în International Scientific Committee, “The Joint International Conference of the XIV International Conference on Mechanisms and Mechanical Transmissions (MTM) and the XXVI International Conference on Robotics (ROBOTICS)”, Iasi, Romania, November 14 – 16, 2024
- Referent la: *Heliyon*, *Acta Astronautica*, *Mathematical Problems in Engineering*, *Measurement*, *Journal of Mechanical Design*, *IEEE Robotics and Automation Letters*, *Astrophysics and Space Science*, *Advances in Space Research*, *Mathematical Methods in the Applied Sciences*, *Advances in Applied Clifford Algebras*, *Mechanism and Machine Theory*, *The Journal of the Franklin Institute*, *Celestial Mechanics and Dynamical Astronomy*, *The Journal of the Astronautical Sciences*, *Journal of Guidance Control and Dynamics*, *International Journal of Non-linear Mechanics*, *Meccanica*, *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*. 50 de cenzii în 2025

#### D. Cristea

- Membru al comitetului editorial al revistei *Journal of Language Modelling*, (<https://jlm.ipipan.waw.pl/index.php/JLM/about/editorialBoard>)
- Membru al comitetului editorial al revistei *Romanian Journal of Information Science and Technology* (ROMJIST – <https://www.romjist.ro/committees.html>).
- Organizator principal al Şcolii de Toamnă EUROLAN-2025, Universitatea de Vest Timişoara, 14-21 septembrie 2025.

#### I. Doroftei

- Associate Editor, *ROBOTICA* (<https://www.cambridge.org/core/journals/robotica/information/editorial-board>)
- Topic Editor, *ACTUATORS* ([https://www.mdpi.com/journal/actuators/topic\\_editors](https://www.mdpi.com/journal/actuators/topic_editors))
- Guest Editor, *ACTUATORS* ([https://www.mdpi.com/journal/actuators/special\\_issues/advanced\\_robots\\_actuators](https://www.mdpi.com/journal/actuators/special_issues/advanced_robots_actuators))
- Topic Editor, *MATERIALS* ([https://www.mdpi.com/journal/materials/topic\\_editors](https://www.mdpi.com/journal/materials/topic_editors))
- Guest Editor, *MATERIALS* ([https://www.mdpi.com/journal/materials/special\\_issues/advance\\_materials\\_multifunctional\\_applications](https://www.mdpi.com/journal/materials/special_issues/advance_materials_multifunctional_applications))
- Membru in comitetul editorial, *European Journal of Mechanical and Environmental Engineering*, Bruxelles, ISSN 0035-3612, editată de Belgian Society of Mechanical and Environmental Engineering.
- Membru in comitetul editorial, *International Journal of Advance Robotics & Expert Systems* (JARES).
- Embodied Intelligence and Robotics, ACCSCIENCE PUBLISHING, Editorial Board Member
- Membru in comitetul editorial, *Bulletin of the Polytechnic Institute of Iaşi. Machine constructions Section*, eISSN 2537-4869.

- Membru în comitetul științific, ROBOTICA & MANAGEMENT-International Journal, revista BDI, ISSN 1453-2069, editată de Societatea de Robotica din Romania.
- Membru în comitetul științific, Bulletin of the Transilvania University of Brasov, Series I: Engineering Sciences.
- Recenzor la jurnale: Advances in Mechanical Engineering, ISSN: 1687-8132; ROBOTICA, Cambridge University Press, ISSN: 0263-5747 (Print), 1469-8668 (Online); ACTUATORS, MDPI, ISSN: 2076-0825; ROBOTICS, MDPI, ISSN: 2218-6581; BIOMIMETICS, MDPI, ISSN: 2313-7673; Computer Methods in Biomechanics and Biomedical Engineering, Taylor & Francis Online, ISSN: 1476-8259; Australian Journal of Mechanical Engineering, Taylor & Francis Online, ISSN: 1448-4846; IEEE/ASME Transactions on Mechatronics, ISSN: 1083-4435; IEEE Transactions on Neural Systems & Rehabilitation Engineering, ISSN: 1534-4320; Industrial Robot, ISSN: 0143-991X; Intelligent Service Robotics, ISSN: 1861-2776; Journal of Field Robotics, ISSN:1556-4959; Journal of Intelligent & Robotic Systems, ISSN: 0921-0296; Journal of Mechanical Science and Technology, ISSN: 1738-494X; Machines, MDPI, ISSN: 2075-1702; Proceedings of the Institution of Mechanical Engineers, Part C: Journal of mechanical engineering science, ISSN: 0954-4062; Transactions on Neural Systems & Rehabilitation Engineering
- Membru în Comitetul științific la conferințe: The 14th IFToMM International Symposium on Science of Mechanisms and Machines - SYROM 2025, Brasov, Romania, October 23–25, 2025, Conference Co-Chairman, Member of International Scientific Committee; 26th International Symposium on Measurement and Control in Robotics (ISMCR 2025), Sambreville, Belgium, October 07 - 08, 2025, Publication Chair and Review Co-Chair; 3rd International Conference on Advancement in Computation & Computer Technologies (InCACCT 2025), Chandigarh University, India, 17-18 April 2025, Member of Advisory Board; 22nd International Conference on Informatics in Control, Automation and Robotics (ICINCO 2025), Marbella – Spain, October 20 – 22, 2025, Member of Program Committee; 28th International Conference on Climbing and Walking Robots and the Support Technologies for Mobile Machines Shenzhen, China, 05-07 Sept 2025, Member of International Committee; 13th International Conference - Modern Technologies in Industrial Engineering, ModTech 2025, June 11-14, 2025, Zakopane, Poland, Member of Organizing Committee, Member of Scientific Committee; 8th International Conference of the Doctoral School, May 14 - 16, 2025, Iași, România, Member of Executive Committee
- Recenzent la conferințe: The 14th IFToMM International Symposium on Science of Mechanisms and Machines - SYROM 2025, Brasov, Romania, October 23–25, 2025; 26th International Symposium on Measurement and Control in Robotics (ISMCR 2025), Sambreville, Belgium, October 07 - 08, 2025; 3rd International Conference on Advancement in Computation & Computer Technologies (InCACCT 2025), Chandigarh University, India, 17-18 April 2025; 22nd International Conference on Informatics in Control, Automation and Robotics (ICINCO 2025), Marbella – Spain, October 20 – 22, 2025; 28th International Conference on Climbing and Walking Robots and the Support Technologies for Mobile Machines Shenzhen, China, 05-07 Sept 2025.

#### **M. Gavrilas**

- Membru în Colectivul redactional al revistei Journal of Sustainable Energy
- Membru în Colectivul redactional al revistei Analls of the University of Craiova, Electrical Engineering Seris.
- Membru în Colectivul redactional al revistei International Journal of Advances in Applied Sciences

- Membru în Colectivul redactional al revistei International Journal of Robotics and Automation
- Membru în Colectivul redactional al revistei Telecommunication, Computing, Electronics and Control – TELKOMNIKA
- Membru în Colectivul redactional al revistei Journal of Power Generation Technology.
- Membru în Colectivul redactional al revistei *Energies Journal section 'AI: Smart Grids and Microgrids'*.
- Membru în Comitetul de program al conferinței 15-th International Conference on Electromechanical and Energy Systems (SIELMEN), Chisinau, Rep. Moldova, 16-17 Oct. 2025.
- Membru în Comitetul de program al conferinței 12-th International Conference on ENERGY and ENVIRONMENT (CIEM), București, România, 23-24 Oct. 2025.
- Recenzor la revistele: IEEE Transactions on Smart Grid, IEEE Transactions on Power Systems, IEEE Transactions on Sustainable Energy, IEEE Access, IEEE Transactions on Energy Markets, Policy and Regulation, Paper IEEE Transactions on Industrial Informatics, IET-Generation, Transmission and Distribution, IET-Renewable Power Generation, MDPI Energies Journal, MDPI Electronics Journal, MDPI Sustainability Journal

#### **M. Gavrilescu**

- Environmental Engineering and Management Journal, Redactor sef
- PeerJ, Academic Editor
- Water, Academic Editor
- Sustainability, Academic Editor
- Processes, Academic Editor
- Plants, Academic Editor
- Applied Sciences, Academic Editor
- Agriculture, Academic Editor
- Foods, Academic Editor
- Hungarian Journal of Industry and Chemistry, Editor
- Journal of Environmental Engineering and Landscape Management, Membru in Comitetul stiintific
- European Journal of Science and Theology, Membru in comitetul stiintific
- International Journal of Conservation Science, Membru in comitetul stiintific
- Procedia Environmental Science, Engineering and Management, Editor
- Acta Technica Napocensis - Series: Environmental Engineering and Sustainable Development Entrepreneurship, Membru in comitetul stiintific
- Membru în comitetul de organizare și Chair pentru Virtual International Conference Application of Chemistry in Nanosciences and Biomaterials Engineering NanoBioMat, Summer Edition, 25-27 June 2025 (on-line)
- Membru în comitetul de organizare al Virtual International Conference Application of Chemistry in Nanosciences and Biomaterials Engineering NanoBioMat, Winter 2024, 26-28 noiembrie, 2025 (on-line)
- Membru al Comitetului Științific al EUROINVENT European Exhibition of Creativity and Innovation, Iași, mai 2025
- Membru al Comitetului Științific al International Conference on e-Health and Bioengineering EHB 2025 - 13-th Edition 2025, Hybrid Conference, IASI- Romania
- Membru al Local Organizing Committee - 7th Annual Meeting of The Euro-Asian Bridge Society of Cardiovascular & Thoracic Surgeons, Iasi, 17-20 October 2024

- Membru al CNATDCU, Comisia Ingineria Mediului, conform Ordinul nr. 5908/2024 privind componența nominală a Consiliului general și a comisiilor de specialitate ale Comisiei Naționale de Atestare a Titlurilor, Diplomelor și Certificatelor Universitare (CNATDCU) pentru mandatul 2024-2028, al Ministerului Educației
- Peer-reviewer: Chemical Engineering Journal, Chemosphere, CLEAN-Water, Air, Soil, Critical Reviews in Biotechnology, Environment International, Environmental Science and Technology, Environmental Technology, Energy, Journal of Environmental Management, Journal of Hazardous Materials, Clean-Soil Air, Water, Journal of Environmental Engineering and Landscape Management, Journal of Cleaner Production, Geoderma, International Journal of Environment and Pollution, Journal of Hazardous Materials, Bioprocess and Biosystems Engineering, Arid Land Research and Management, Universal Journal of Education and General Studies, Current Biotechnology, Journal of Research in International Business and Management, Separation Science and Technology, Resources, Conservation & Recycling, Desalination and Water Treatment, Water, Air, & Soil Pollution, Bioresource Technology, Critical Reviews in Environmental Science and Technology, Peer J, Water etc

#### **L. Goraș**

- Organizator principal al Simpozionului Internațional de Semnale, Circuite și Sisteme, ISSCS
- Membru în Colectivul editorial al revistei Acta Technica Napocensis (Electronics and Telecommunications)
- Recenzent Matematik *Zentralblatt für Mathematik*
- Membru în Comisia de Știința și Tehnologia Micro-Sistemelor (STMS) a Secției de Știința și Tehnologia Informației a Academiei Române;
- Membru al European Academy of Sciences and Arts

#### **D.N. Isopescu**

- Membru în International Scientific Committee, The 8<sup>th</sup> International Conference of the Doctoral School, “Gheorghe Asachi” Technical University of Iasi, May 14 – 16, 2025, Iași, România, <https://conferinta-csd.tuiasi.ro/organizers/2025-2/>
- Membru în International academic scientific committee, The International Scientific Conference CIBv 2025, the 20th edition, 6-7 Noiembrie 2025, Brașov, România, <https://cibv.unitbv.ro/conference/committees>
- Recenzent solicitat de revistele: Materials, Sustainability, Buildings, Construction Materials, Applied Science, Metals, Nanomaterials (MDPI), Structures (Elsevier).

#### **C. Lazăr**

- Membru în Colectivul editorial al Revistei “The Annals of "Dunarea de Jos" University of Galati”, Fascicle III: Electrotechnics, Electronics, Automatic Control, Informatics
- Membru în Colectivul editorial al Revistei “Buletinul Institutului Politehnic din Iași”, Electrotechnics, Energetics, Electronics Section
- Referent solicitat de organizatorii conferințelor: 33th Mediterranean Conference on Control and Automation, 10-13 June, 2025, Tangier, Morocco; 25th International Conference on Control Systems and Computer Science, 27-30 May, 2025, Bucharest, Romania; 29<sup>th</sup> International Conference on System Theory, Control and Computing (ICSTCC), 9-11 October, 2025, Cluj, Romania; International Symposium on Signals, Circuits & Systems, July 17-18, 2025, Iasi, Romania.

#### **V. Manta**

- Membru în Colectivul editorial al revistei “Advances in Electrical and Computer Engineering” și referent

- Membru în Comitetul de program al conferinței 29th International Conference on System Theory, Control and Computing, ICSTCC 2025 (IEEE Xplore)
- Associate Editor-in-Chief: System Theory, Control and Computing Journal, <https://stccj.ucv.ro/index.php/stccj/index>
- Referent solicitat de organizatorii conferințelor: 29th Internațional Conference on System Theory, Control and Computing (ICSTCC), 10-12, October, 2025, Cluj-Napoca; 2025, Computer Vision and Pattern Recognition Conference (CVPR); 21th International Conference on Intelligent Computer Communication and Processing, October 2025, Cluj-Napoca, Romania
- Referent reviste ISI: Quantum Information Processing

#### **D. Nedelcu**

- Editor Șef, *Journal of protective coatings & linings*, University of Alaska, SUA.
- Editor Șef Dumitru Nedelcu, *International Journal of Hybrid Information Technology*, Global Vision Press, Australia.
- Editor Șef Dumitru Nedelcu, *Advanced Engineering Forum*, Trans Tech Publications Inc., Elveția.
- Editor Șef Dumitru Nedelcu, *International Journal of Modern Manufacturing Technologies*, Iasi, Romania.
- Editor Șef Dumitru Nedelcu, *International Journal of Manufacturing Economics and Management*, Iasi, Romania.
- Editor Dumitru Nedelcu, *Annals of Dunarea de Jos University of Galați*, Fascicle XII, Welding Equipment and Technology.
- Topic editor Dumitru Nedelcu, *Polymers*, jurnal WoS Zona Q1
- Topic editor Dumitru Nedelcu, *Materials*, jurnal WoS Zona Q2
- Editor Dumitru Nedelcu, *Indian Journal of Engineering and Materials Sciences*, jurnal WoS, Q4.
- Membru comitet editorial Dumitru Nedelcu, *Journal of Mechanical Engineering and Automation (JMEA)*- SUA
- Membru comitet editorial Dumitru Nedelcu, *Journal of Military Technology*, Romania
- Referent la revistele: Macromolecular Symposia, Materials, Polymers.

#### **O. Păstrăvanu**

- Membru în Colectivul editorial al revistei “Control Engineering and Applied Informatics” (ISI Clarivate)
- Membru în Colectivul editorial al revistei “Revista Română de Informatică și Automatică” (ISI Clarivate)
- Membru în Comitetul de program al conferinței / International Program Committee / IEEE 25th International Carpathian Control Conference, ICC 2025, Starý Smokovec, Slovakia, (IEEE Xplore, ISI Clarivate), <https://iccc.fberg.tuke.sk/>
- Membru în Comitetul de program al conferinței / Program Committee / IEEE 25th International Conference on Control Systems and Computer Science, CSCS 2025, Bucharest (IEEE Xplore, ISI Clarivate), <https://25.cscs-conference.com/chairs-and-committees/>
- Membru în Comitetul de program al conferinței / Conference Editorial Board / International Conference on System Theory, Control and Computing, ICSTCC 2025, Cluj-Napoca (IEEE Xplore, ISI Clarivate), <https://icstcc2025.utcluj.ro/>
- Membru în Comitetul de program al conferinței / Technical Program Committee/, 19th International Symposium on Applied Computational Intelligence SACI 2025, Budapest and Timisoara, (IEEE Xplore, ISI Clarivate), <https://conf.uni-obuda.hu/saci2025/general.html>

- Member of Track 4 Technical program committee at ETFA'2025, *30th IEEE International Conference on Emerging Technologies and Factory Automation*, Porto (IEEE Xplore, ISI Clarivate), [https://etfa2025.ieee-ies.org/files/tracks/ETFA2025\\_TT04-AutomatedManufacturingSystems\\_CfP.pdf](https://etfa2025.ieee-ies.org/files/tracks/ETFA2025_TT04-AutomatedManufacturingSystems_CfP.pdf)

#### **V.I. Popa**

- Editor invitat: Revista Gels (zona roșie/Q1, IF. 5,3, section &quot;Gel Processing and Engineering, Special Issue: Eco-Friendly Gels for Adsorption (perioada: 15.05.2024-26.09.2025). [https://www.mdpi.com/journal/gels/special\\_issues/7RMKMHMZIO](https://www.mdpi.com/journal/gels/special_issues/7RMKMHMZIO)

#### **N. Țăranu**

- Editor in Chief, Buletinul Institutului Politehnic din Iasi, Secția Construcții și Arhitectura.
- Member of the Editorial Board, Annals of the Academy of Romanian Scientists Series on Engineering Sciences.
- Member of the Advisory Committee of the International Conference Computational Civil Engineering, Iasi, Romania, 7-9 May , 2025
- Member of the Scientific Committee of "ModTech International Conference", June 11-14, 2025, Zakopane Poland
- Member of the International Scientific Committee, "XXV International Conference VSU 2025", Sofia, Bulgaria October 23-25, 2025

#### **P. Vizureanu**

- Editor sef (2015-2025) - European Journal of Materials Science and Engineering

#### **M. Voicu**

- Buletinul Institutului Politehnic din Iași
- Transactions on Automatic Control and Computer Science, editată de Universitatea „Politehnica” din Timișoara
- Quality Assurance Review for Higher Education, editată de ARACIS
- Proceedings of the Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science, editată de Editura Academiei Române;
- Romanian Journal of Information Science and Technology (ROMJIST), editată de Editura Academiei Române;
- Control Engineering and Applied Informatics, editată de SRAIT;
- Romanian Journal of Information Technology and Automatic Control, editata de ICI București;
- 29th International Conference on System Theory, Control and Computing, October 9-11, 2025, Cluj-Napoca, Romania
- 11<sup>th</sup> Conference on Control, Decision and Information Technologies (CoDIT 2024), July 15-18, 2025, Split, Croatia
- 25th International Conference on Control Systems and Computer Science (CSCS25), 27-30 May, Bucharest, Romania
- Revista de recenzii "Zentralblatt für Mathematik" (editor: European Mathematical Society); 17 recenzii post-publicare
- Revista de recenzii "Mathematical Reviews" (editor: American Mathematical Society); 2 recenzii post-publicare
- Revista Control Engineering and Applied Informatics (SRAIT București) (indexată ISI); 2 recenzii ante-publicare
- Revista Studies in Informatics and Control (ICI București); 2 recenzii ante-publicare
- 11<sup>th</sup> Conference on Control, Decision and Information Technologies (CoDIT 2024), 1 recenzie ante-publicare

- 29<sup>th</sup> IEEE International Conference on System Theory, Control and Computing; 2 recenzii ante-publicare

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