

PERSONAL INFORMATION

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Date of birth 18/12/1957 | Nationality Romanian

WORK EXPERIENCE

- 2013 - present **Professor**
Department of Railway Vehicles, Faculty of Transport, University Politehnica of Bucharest
 - Course coordinator to the Bachelor's Degree Program *Vehicles for rail transport*: Comfort at rolling stock, Vibrations, Experimental research of the railway vehicles, Special Plants and Electronic Equipment on Railway Trained, Technology of railway rolling stock
 - Course coordinator to Masters Degree Programs - *Railway vehicles for high speeds*, *Environmental engineering and quality management in the railway*, *Vehicle-track interaction phenomena: Wheel/rail vibrations*, *Phonic pollution at high speeds*, *Noise due to railway vehicles and mitigation measurements*
- 2016 - present **PhD Supervisor, Transportations Engineering Field**
Doctoral School of Transports, University Politehnica of Bucharest
- 2012 - present **Director of Department of Railway Vehicles**
Faculty of Transport, University Politehnica of Bucharest
- 2012 - present **Senator of University Politehnica of Bucharest**
- 2016 - present **Member of the Aerospace, Automotive and Transport Engineering Commission of the National Council for the Certification of Titles, Diplomas and University Certificates (CNATDCU)**
- 2016 - present **Member of the Board of Directors of the Research Center for Railway Vehicle Engineering**
- 2015 – present **Member of the Management Board of the Romanian Investigation Agency**
- 2014 - 2017 **Consultant, Railcar Co. Corp, Sarasota, USA**
- 2008 - 2013 **Associate Professor**
Department of Railway Vehicles, Faculty of Transport, University Politehnica of Bucharest
- 1997 - 2008 **Lecturer**
Department of Railway Vehicles, Faculty of Transport, University Politehnica of Bucharest
- 1989 - 1997 **Asistant professor**
Department of Railway Vehicles, Faculty of Transport, University Politehnica of Bucharest
- 1987 - 1989 **Researcher**
Institute of Research and Technological Design in Transports, Bucharest
- 1984 - 1987 **Engineering**
Institutul de Cercetări și Proiectări Tehnologice în Transporturi, București
- 1982 - 1984 **Junior Engineering**
Piatra Olt Depot, the National Railway Company

EDUCATION AND TRAINING

- 2017 **Certificate of Habilitation, Doctor Habilitatus, Mechanical Engineering**
- 2015 **Certificate of Habilitation, Doctor Habilitatus, Transportations Engineering**
- 2000 **Degree of Doctor of Engineering Sciences, Field of Transportations, University Politehnica of Bucharest**
- 1982 **Engineer Degree , Mechanical Field, Specialization of Railway Vehicles, University Politehnica of Bucharest**

PROFESSIONAL
ACHIEVEMENTS

Publications	7 books, 8 laboratory experimental applications, 120 papers: 21 papers in Web of Science indexed journals/proceedings and 36 papers in SCOPUS indexed journals/proceedings (17 papers only SCOPUS indexed); 24 papers in other International Data Bases indexed journals/proceedings; 11 papers in non-indexed journals; 47 papers in proceedings of international and national conferences.
Research Project/ Grants/Patents	21 Research Projects/Grants: 2 Research Project awarded by national competition, as a project leader, 7 Research Grant awarded by national competition as a responsible; 2 Research Projects awarded by national competition, as a member of the research team; 4 Research / Consultancy Project with the economic environment - project leader/responsible; 7 Research / Consultancy Project with the economic environment - member of the research team. 2 Patents

OTHERS ACTIVITIES

- Expert Evaluator - Engineering Sciences Commission of The Romanian Agency for Quality Assurance in Higher Education - Commission of Engineering Sciences (2011 - present)
- Expert evaluator - Executive Unit for Financing Higher Education, Research, Development and Innovation (UEFISCDI), Competition « State Program » (2020-2023), organized by the National Agency for Research and Development of the Republic of Moldova, in the areas: Environment and Climate Change
- Expert evaluator - Executive Unit for Financing Higher Education, Research, Development and Innovation (UEFISCDI), Partnerships Program - Collaborative projects of applied research , 2011
- Expert evaluator - Executive Unit for Financing Higher Education, Research, Development and Innovation (UEFISCDI), PNCDI 2015-2010, PN III, Program 1.1. Developing national Research and Development – Subprogram 1.1. Human Resources – Postdoctoral Research Projects (PD), 2016 competition
- Expert evaluator - Executive Unit for Financing Higher Education, Research, Development and Innovation (UEFISCDI), PNCDI 2015-2010, PN III, Program 1.1. Developing national Research and Development – Subprogram 1.1. Human Resources – Research projects to stimulate young independent teams (TE), 2016 competition
- Expert evaluator - Executive Unit for Financing Higher Education, Research, Development and Innovation (UEFISCDI), PNCDI 2015-2010, PN III, Program 1.1. Developing national Research and Development Subprogram 1.2. Institutional Performance – Complex projects completed in consortia CDI, 2017 competition
- Member of the Romanian Society of Applied and Theoretical Mechanics
- Member of the Romanian Association for the Theory of Machines and Mechanisms
- Member of the International Federation for the Promotion of Mechanism and Machine
- Member of the Romanian Society for Acoustics
- Member of the Romanian Tribology Association
- Editorial Board Member of *Journal of Modern Transportation*, Editura Springer
- Advisory Board Member of *International Journal of Railway Research*
- Editorial Board Member of *Romanian Journal of Transport Infrastructure*
- Associate Editor of *The Annals of Dunărea de Jos University of Galați, Applied Mechanics*
- Advisory Board, Member of *Annals of Petroșani University - Mechanical Engineering*
- Editorial Board Member of *Technium: Romanian Journal of Applied Sciences and Technology*

OTHERS ACTIVITIES

- Reviewer for journal indexed in International Data Bases:
 - Journal of Sound and Vibration (FI 3.123/2018)
 - Vehicle System Dynamics (FI 2,613/2018)
 - Nonlinear Dynamics (FI 4.604/2018)
 - Mathematical and Computer Modelling (FI 1.366/2015)
 - International Journal of Mechanical Sciences (FI 4.134/2018)
 - Acta Mechanica (FI 2.166/2018)
 - Archive of Applied Mechanics (FI 1.578/2018)
 - Shock and Vibration (FI 1.628/2018)
 - Mechanics Research Communications (FI 2.229/2018)
 - Mathematical Problems in Engineering (FI 1.179/2018)
 - Mechanics and Industry (FI 0.747/2018)
 - Proceedings of the Romanian Academy: Series A: Mathematics, Physics, Technical Sciences, Information Science (FI 1.402/2018)
 - Journal of Intelligent Transportation Systems (FI 2.568/2018)
 - IET Intelligent Transport Systems (FI 2.05/2018)
 - Advances in Applied Mathematics and Mechanics (FI 0.844/2018)
 - Journal of Zhejiang University-SCIENCE A, Applied Physics & Engineering (FI 1.369/2018)
 - Periodica Polytechnica Civil Engineering (FI 0.976/2018)
 - Journal of Modern Transportation
 - Open Journal of Civil Engineering
 - UPB Scientific Bulletin, Series D: Mechanical Engineering
- Reviewer for MatrixRom Publishing House
- Co-chairman, MiniSymposium - Moving Loads, XI International Conference on Structural Dynamics, EURODYN 2020, June 22-24, 2020, Athens, Greece,
- Conference Chair, International Conference on Intelligent Transportation and Vehicle Engineering (ICITVE 2019), December 6-8, 2019, Chongqing, China
- President, ModTech2018 - International Conference – Modern Technologies in Industrial Engineering, June 13-16, 2018, Constanța, România, Section E: Technology Transfer
- Chairperson, 22th edition of Innovative Manufacturing Engineering&Energy International Conference – ImanE&E 2018, May 31 - June 2, Chisinau, Republic of Moldova, Section F: Mechanical and Manufacturing Equipment Devices and Instrumentation
- Co-chairman, MiniSymposia: MS17 - Moving Loads, X International Conference on Structural Dynamics, EURODYN 2017, 10-13 Sept, Rome
- Co-chairman, Special Sessions RW 2012-S10: Models for Railway Vehicle-Infrastructure Interaction, Railways 2012, The First International Conference on Railway Technology: Research, Development and Maintenance, Las Palmas de Gran Canaria, Spain, 18-20 April 2012
- Co-chairman, 5th Symposium SYMECH 2012, Durability and Reliability of Mechanical Systems, Sections Mechanics, Strength of Materials, Tribology, Mechanisms and Machine Parts, Târgu-Jiu, 18-19 May, 2012
- Reviewer, 15th WSEAS International Conference on Automatic Control, Modelling & Simulation (ACMOS-13), Brasov, Romania, June 1-3, 2013
- Co-chairman, MiniSymposium - Moving Loads, XI International Conference on Structural Dynamics, EURODYN 2020, June 22-24, 2020, Athens, Greece,
- Conference Chair, International Conference on Intelligent Transportation and Vehicle Engineering (ICITVE 2019), December 6-8, 2019, Chongqing, China
- President, ModTech2018 - International Conference – Modern Technologies in Industrial Engineering, June 13-16, 2018, Constanța, România, Section E: Technology Transfer
- Chairperson, 22th edition of Innovative Manufacturing Engineering&Energy International Conference – ImanE&E 2018, May 31 - June 2, Chisinau, Republic of Moldova, Section F: Mechanical and Manufacturing Equipment Devices and Instrumentation
- Co-chairman, MiniSymposia: MS17 - Moving Loads, X International Conference on Structural Dynamics, EURODYN 2017, 10-13 Sept, Rome
- Co-chairman, Special Sessions RW 2012-S10: Models for Railway Vehicle-Infrastructure Interaction, Railways 2012, The First International Conference on Railway Technology: Research, Development and Maintenance, Las Palmas de Gran Canaria, Spain, 18-20 April 2012
- Co-chairman, 5th Symposium SYMECH 2012, Durability and Reliability of Mechanical Systems, Sections Mechanics, Strength of Materials, Tribology, Mechanisms and Machine Parts, Târgu-Jiu, 18-19 May, 2012

- Member of Scientific Committee:
 - 11th edition of International Conference on Advanced Manufacturing Technologies (ICAMaT 2020), University Politehnica of Bucharest, October 29 – 30, 2020
 - 5th International Conference on Railway Technology: Research, Development and Maintenance (Railways 2020), 7-10 September 2020, Mallorca, Spain
 - 2nd International Conference on Electronical, Mechanical and Materials Engineering (ICE2ME2020), December 20-21, 2020, Xiamen, China
 - 3rd International Conference on Applied Mathematics, Modeling and Simulation (AMMS2020), July 12-13, 2020, Shanghai, China
 - 4th International Conference on Electrical Automation and Mechanical Engineering (EAME2020), May 15-17, 2020, Beijing, China
 - 3rd International Conference on Energy and Power Engineering (EPE2020), July 12-13, 2020, Shanghai, China
 - TECHNIUM International Conference 2019, December 15, 2019, Constanța, România
 - XI International Conference on Structural Dynamics, EUROODYN 2020, Athens, Greece, June 22-24, 2020, Organizer Minisymposium *Moving Loads*
 - 10th edition of International Conference on Advanced Manufacturing Technologies (ICAMaT 2018), University Politehnica of Bucharest, October 10 – 11, 2019
 - Railways 2018, The Fourth International Conference on Railway Technology: Research, Development and Maintenance, Sitges, Barcelona, Spain, 3-7 September 2018.
 - 9th edition of International Conference on Advanced Manufacturing Technologies (ICAMaT 2018), University Politehnica of Bucharest, 1 – 2 November, 2018
 - 3rd International Conference on Information Technology and Intelligent Transportation Systems (ITITS 2018), Xi'an, China, September 15-16, 2018.
 - 22th edition of Innovative Manufacturing Engineering&Energy International Conference – ImanE&E 2018, Chisinau, Republic of Moldova, May 31 - June 2, 2018.
 - 14th International Conference on Vibration Engineering and Technology of Machinery (VETOMAC XIV), Lisbon, Portugal, September 10 - 13, 2018.
 - The First International Conference on Innovations in Infrastructure (ICIIF), 18-19, May 2018
 - X International Conference on Structural Dynamics, EUROODYN 2017, Roma, Italia, September 10-13, 2017, Organizer Minisymposium *Moving Loads*
 - 2017 International Conference on Computing and Applications in Medical Informatics, Engineering, Avionics, and Security (ICCA-MEAS), Hangzhou, China, August 19-20, 2017
 - The 5th International Conference on Recent Advances in Railway Engineering (ICRARE 2017), Iran, May 14-16, 2017.
 - 2nd International Conference on Information Technology and Intelligent Transportation Systems (ITITS 2017), Xi'an, China, May 20, 2017.
 - Railways 2016, The Third International Conference on Railway Technology: Research, Development and Maintenance, Cagliari, Sardinia, Italy, 5-8 April 2016.
 - IC-ARE'15, International Congress on Advanced Railway Engineering, Istanbul, March 2015
 - International Conference on Information Technology and Intelligent Transportation Systems (ITITS 2015), Xi'an, China, December 12-13, 2015.
 - The 4th International Conference on Recent Advances in Railway Engineering (ICRARE 2015), Iran, May 15-17, 2015.
 - Railways 2014, The Second International Conference on Railway Technology: Research, Development and Maintenance, Ajaccio, Corsica, France 8-11 April 2014
 - 3rd International Conference on Recent Advances in Railway Engineering (ICRARE 2013), April 30, May 1, 2013
 - International Joint Conference on Fuzzy Computing & Intelligent Transportation, Wenzhou, China, December 10-11, 2012

RECOGNITION OF PRESTIGE

Awards and Distinctions

- Nomination in the Research White Paper in Romania – The Ad Astra Register of scientists in Romania in the areas of: mechanical engineering, mechanics, acoustics, multidisciplinary, applied mathematics, informatics, interdisciplinary applications, programming engineering.
- Certificate of Excellence for contribution to the development of Romanian science literary heritage, Matrix Rom Publishing House, Bucharest, 2013
- Reviewer recognition certificate for the Journal of Sound and Vibration, Elsevier
- Reviewer recognition certificate for the Journal of Mechanical Sciences, Elsevier
- Reviewer recognition certificate for the Mechanics Research Communications, Elsevier
- Bronze medal for the book *Methods and procedures for experimental research and testing of railway vehicles* (Romanian language), The 5th European Exhibition of Creativity and Innovation (EUROINVENT 2013) - Technical-Scientific, Artistic and Literary Book Salon
- Paper Traian Mazilu, *Green's functions for analysis of dynamic response of wheel/rail to vertical excitation*, Journal of Sound and Vibration, 306, 2007 was ranked no 12 in Top 25 Hottest Articles Journal of Sound and Vibration, July-Sept. 2007, Science Direct.

Awards and Distinctions

- 7 articles rewarded within the ‚Human Resources‘ Program, Sub-program ‚Awarding the research findings – Articles‘ (PN-III-DCD-RU-PRECISI-2017, PN-II-RU-PRECISI-2013, PN-II-RU-PRECISI-2012, PN-II-RU-PRECISI-2011, PN-II-RU-PRECISI-2009):
 - Traian Mazilu, *Interaction between moving tandem wheels and an infinite rail with periodic supports – Green’s matrices of the track method in stationary reference frame*, Journal of Sound and Vibration, Vol. 401, 2017, pp. 233-254.
 - Traian Mazilu, *Instability of a train of oscillators moving along a beam on a viscoelastic foundation*, Journal of Sound and Vibration, Vol. 332, No. 19, 2013, pp. 4597–4619.
 - Traian Mazilu, Mădălina Dumitriu, Cristina Tudorache, *Instability of an oscillator moving along a Timoshenko beam on viscoelastic foundation*, Nonlinear Dynamics, Vol. 67, No.2, 2012, pp. 1273-1293.
 - Traian Mazilu, Mădălina Dumitriu, Cristina Tudorache, *On the dynamic effect between a stability limit*, Journal of Sound and Vibration, Vol. 330, No.15, 2011, pp. 3729-3743.
 - Traian Mazilu, *On the dynamic effects of wheel running on discretely supported rail*, Proceedings of the Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science, Vol. 10, No.3, 2009, pp. 269-276.
 - Traian Mazilu, *Analysis of infinite structure response due to moving wheel in the presence of irregularities via Green’s functions method*, Proceedings of the Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science, Vol. 10, 2, 2009, pp. 139-150.
 - Traian Mazilu, *Green’s functions for analysis of dynamic response of wheel/rail to vertical excitation*, Journal of Sound and Vibration, Vol. 306, 2007, pp. 31-58.
- ‚Human Resources‘ Program, Sub-program ‚Rewarding of obtaining the ability certificate‘ (PN-II-RU-ABIL-2015-2)
- 1 article rewarded within the Innovative Manufacturing Engineering Conference IManE&E 2017, May 24-27, Iași, România:
 - Traian Mazilu, Marius Ghețj, *On the vertical interaction between a three-axle bogie and track*
- 2 articles rewarded within the Innovative Manufacturing Engineering Conference IManE&E 2018, May 31 - June 2, Chisinau, Republic of Moldova:
 - Traian Mazilu, Cristian Ioan Cruceanu, *Dynamics of a beam on elastic foundation – impact of the bilinear characteristic of the foundation upon the propagation of the bending wave*
 - Traian Mazilu, Dorina Fologea, *Influence of the rail dampers on the frequency-domain response of the rail*

Citations

- Web of Science - 151; SCOPUS -240; Google Academic - 417

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- Web of Science: 9; SCOPUS: 9; Google Academic: 13; i10-index: 16

April 14, 2020