

Curriculum Vitae – Savin Treanță

Personal Info: E-mail address: savin.treanta@upb.ro

Education: 2021: Habilitation in Mathematics, National University of Science and Technology Politehnica Bucharest, Romania [4 Ph.D. students (from 2022), 4 Ph.D. students (from 2023), 2 Ph.D. students (from 2024), 1 PhD student (from 2025)]

2010-2013: Ph.D. University Politehnica of Bucharest, Faculty of Applied Sciences, Romania

2009-2011: M.Sc. “Simion Stoilow” Institute of Mathematics of the Romanian Academy, Scoala Normala Superioara-Bucharest (SNS-B), Department of Mathematics, Romania

2008-2010: M.Sc. University of Bucharest, Faculty of Mathematics and Informatics, Romania

2005-2008: B.Sc. University of Bucharest, Faculty of Mathematics and Informatics, Romania

Academic Experience: 2026-present: Corresponding Member, Academy of Romanian Scientists

2024-2026: Associate Member, Academy of Romanian Scientists

2023-present: Full Professor, Faculty of Applied Sciences, National University of Science and Technology Politehnica Bucharest

2020-2023: Associate Professor, Faculty of Applied Sciences, University Politehnica of Bucharest

2017-2020: Lecturer, Faculty of Applied Sciences, University Politehnica of Bucharest

2011-2017: Assistant Professor, Faculty of Applied Sciences, University Politehnica of Bucharest

2011-2012: BITDEFENDER fellowship - Junior Research Position (obtained by international competition), “Simion Stoilow” Institute of Mathematics of the Romanian Academy

Research Fields: Differential Equations, Calculus of Variations, Optimization and Control Theory, Variational and Nonlinear Analysis, Geometric PDEs, Convex Analysis

Research Projects, Fellowships, Memberships: 2026-present: Head of “Fundamental Sciences Applied in Engineering” Research Center (SFAI), National University of Science and Technology Politehnica Bucharest, 060042 Bucharest, Romania

2025: IN TEMPORE OPORTUNO award, Faculty of Applied Sciences, National University of Science and Technology Politehnica Bucharest, 060042 Bucharest, Romania (*this award is given to young people with an intense research-development-innovation activity who have distinguished themselves in project competitions at national and international level and through major involvement in numerous prestigious national and international publications*)

2025-2030: Degree of Merit from the National University of Science and Technology Politehnica Bucharest

2022-2023: project leader/director of the research project “Well-posedness, existence and characterization results of solutions for certain variational problems”, Academy of Romanian Scientists, “AOSR-TEAMS” 2022-2023 National Competition (Budget: 10.000 euro)

2022-present: founder member of “Fundamental Sciences Applied in Engineering” Research Center, National University of Science and Technology Politehnica Bucharest, 060042 Bucharest, Romania

2020-2025: Degree of Merit from the University “Politehnica” of Bucharest

2019-2024: member of research team for the project “AG 148 / SGU / NC / II / 10.09.2019 - Opportunities for professional development within the educational process of the Faculty of Applied Chemistry and Materials Science”, project leader Cristina Orbeci

2018-2019: project leader/director of the research grant “Nonlinear Analysis with Applications in Optimization and Control”, National University of Science and Technology Bucharest, National Competition (Budget: 10.000 euro)

2016-2017: member of research team for the project “Applied Mathematics in Urbanism”, project leader Corina Cipu

2011-2014: member of research team for the project “Qualitative study of delay differential equations with applications to modeling and simulation of leukemia therapy”, project leader Andrei Halanay

2011-2012: BITDEFENDER fellowship (Junior Research Position) at “Simion Stoilow” Institute of Mathematics of the Romanian Academy

International/National Conferences: - International Conference on Advances in Pure and Applied Mathematics (ICAPAM-25), 5-6 November, Budapest, Hungary, 2025

- “Academy of Romanian Scientists” Autumn Scientific Conference, September 17-19, Durău, Romania, 2025

- “Academy of Romanian Scientists” Spring Scientific Conference, May 23-24, Bucharest, Romania, 2025

- The 5-Day International Workshop on Optimization in Machine Learning, April 04-08, online, India, 2025 (invited speaker)

- The Scientific Session of Young Researchers, AOSR TEAMS 2022-2023 competition (July 18, 2022; December 8, 2022; July 7, 2023; November 27, 2023)

- The 5-Day International Workshop on Optimization Techniques in Industrial and Engineering Applications, January 06-10, online, India, 2023 (invited speaker)

- The Third International Conference on Mathematical Techniques and Applications (eICMTA- 2022), March 23-25, online, India, 2022 (invited speaker)

- The Third Romanian Itinerant Seminar on Mathematical Analysis and its Applications, September 10-12, Alba Iulia, Romania, 2021

- The 13th International Conference on Multiple Objective Programming and Goal Programming, October 28-31, Marrakech, Morocco, 2019

- The 6th World Congress on Global Optimization, July 8-10, Metz, France, 2019

- The I Conference on Minimax Inequalities and Equilibrium Problems, May 6-7, Granada, Spain, 2019

- The 7th Workshop for Young Researchers in Mathematics (WYRM), May 17 - 20, Bucharest, Romania, 2017
- The 5th Workshop for Young Researchers in Mathematics (WYRM), May 21 - 24, Constanta, Romania, 2015
- Real and Complex Differential Geometry, September 8 - 12, Bucharest, Romania, 2014
- The 8th International Conference of Differential Geometry and Dynamical Systems, (DGDS - 2014), September 1 - 4, Mangalia, Romania, 2014
- The 7th International Conference of Differential Geometry and Dynamical Systems, (DGDS - 2013), October 10 - 13, Bucharest, Romania, 2013
- The 17th International Conference on Systems, Control, Signal Processing and Informatics (SCSI'13), July 16 - 19, Rhodes, Greece, 2013
- The 15th International Conference on Automatic Control, Modelling & Simulation (ACMOS'13), June 1 - 3, Brasov, Romania, 2013
- The 6th International Conference of Differential Geometry and Dynamical Systems, (DGDS - 2012), August 29 - September 2, Mangalia, Romania, 2012
- The International Conference "Poisson Geometry - 2012", July 30 - August 3, Utrecht, The Netherlands (Olanda), 2012
- The 5th International Conference of Differential Geometry and Dynamical Systems, (DGDS - 2011), October 6 - 9, Bucharest, Romania, 2011

Additional Information: *Reviewer for:* Zentralblatt MATH; Mathematical Reviews; *International journals (an incomplete list):* Mathematical Communications; Optimal Control, Applications and Methods; Complexity; International Journal of Control; European Journal of Control; Asia-Pacific Journal of Operational Research; Symmetry-Basel; Axioms; Mathematics; AIMS Mathematics; Acta Mathematica Scientia; Journal of Optimization Theory and Applications; SN Operations Research Forum; *International conferences (an incomplete list):* The 4th International Conference on Computational Modeling, Simulation and Applied Mathematics (CMSAM2019), 27-29 December 2019, Guangzhou, China; Automation, Robotics & Communications for Industry 4.0 (ARCI): 1st IFSA Winter Conference, 17-19 February 2021, Chamonix-Mount-Blanc, France (International Program Committee Member).

Editorial board member for (an incomplete list): ACE Journal of Mathematical Research; International Journal of Mathematics and Systems Science; Transnational Journal of Mathematical Analysis and Applications; SCIREA Journal of Mathematics; Transnational Journal of Pure and Applied Mathematics; SCIREA Journal of Information Science and Systems Science; International Journal of Mathematical Analysis and Applications;

Editor for the following 4 (four) books: „Recent Advances in Nonlinear Analysis and Optimization with Applications”, Cambridge Scholars Publishing, 2020; „Symmetry in Mathematical Analysis and Functional Analysis”, Multidisciplinary Digital Publishing Institute, Switzerland, 2023; „Variational Problems and Applications”, Multidisciplinary Digital Publishing Institute Switzerland, 2023; „Advances in Optimization and Nonlinear Analysis”, Multidisciplinary Digital Publishing Institute Switzerland, 2022.

Guest Editor for the following Special Issues (an incomplete list): “Advances in Partial Differential Equations: Theory and Applications” in the AIMS Mathematics journal (ISSN: 2473-6988); “Variational Problems and Applications - Volumes I, II” in the Mathematics journal (ISSN: 2227-

7390); “Advances in Optimization and Nonlinear Analysis - Volumes I, II” in the Fractal and Fractional journal (ISSN: 2504-3110); “Symmetry in Mathematical Analysis and Functional Analysis - Volumes I, II, III” in the Symmetry journal (ISSN: 2073-8994); “Calculus of Variations and Nonlinear Partial Differential Equations” in the Axioms journal (ISSN: 2075-1680); “New Developments in Analysis of Variational Inequalities and Related Fields” in the Axioms journal (ISSN: 2075-1680).

Author (or co-author) of 3 (three) specialized books in international publishing houses (Springer, Cambridge Scholars Publishing, LAP Lambert Academic Publishing):

3) A. Jayswal, Preeti, S. Treanță, *Multi-dimensional Control Problems: Robust Approach*; Series ISSN: 2364-6837; Series E-ISSN: 2364-6845; Springer Singapore, 2022.

2) S. Treanță, *Variational Analysis with Applications in Optimisation and Control*, ISBN: 978-1-5275-3728-6, Cambridge Scholars Publishing, 2019.

1) O. Olteanu, S. Treanță, *Convexity, Optimization and Approximation, with some Applications*, ISBN: 978-613-9-87683-9, LAP Lambert Academic Publishing, 2018.

Author (or co-author) of 8 (eight) book chapters published in edited books published by Springer, World Scientific, Chapman and Hall/CRC, and Cambridge Scholars Publishing:

8) S. Treanță, *On Variational Derivative and Controlled Variational Inequalities*, In: Mishra S.K., Marechal P., Upadhyay B.B. (eds) *Recent Trends in Optimization: Theory, Algorithms, and Applications*; accepted, Springer Nature, 2023.

7) S. Treanță, *Results on the Existence of Solutions for Some Controlled Optimization Problems*, In: Debnath P., Srivastava H.M., Chakraborty K., Kumam P. (eds) *Advances in Number Theory and Applied Analysis*, DOI: 10.1142/13314; ISBN: 978-981-127-252-2; World Scientific, 2023.

6) S. Treanță, *Controlled nonlinear dynamics for constrained optimization problems involving second-order partial derivatives*, In: Jayswal, A., Antczak, T. (Eds.). (2022). *Continuous Optimization and Variational Inequalities* (1st ed.). Chapman and Hall/CRC. eBook ISBN: 9781003289883.

5) S. Treanță, *On well-posed variational problems involving multidimensional integral functionals*, In: Debnath P., Srivastava H.M., Kumam P., Hazarika B. (eds) *Fixed Point Theory and Fractional Calculus. Forum for Interdisciplinary Mathematics*. pp. 189-212; DOI: 10.1007/978-981-19-0668-8_11; eISBN: 978-981-19-0668-8; ISBN: 978-981-19-0667-1; Springer Singapore, 2022.

4) S. Treanță, *On a new class of interval-valued variational control problems*, In: Debnath P., Konwar N., Radenovic S. (eds) *Metric Fixed Point Theory - Applications in Science, Engineering and Behavioural Sciences*, pp. 211-226; DOI: 10.1007/978-981-16-4896-0_10; eISBN: 978-981-16-4896-0; ISBN: 978-981-16-4895-3; Springer, 2021.

3) S. Treanță, *On a class of interval-valued variational control problems with first-order PDE constraints*. In: Treanță S. (ed) *Recent Advances in Nonlinear Analysis and Optimization with Applications*, pp. 17-32; ISBN (10): 1-5275-5954-8; ISBN (13): 978-1-5275-5954-7; Cambridge Scholars Publishing, 2020.

2) S. Treanță, *On Controlled Variational Inequalities Involving Convex Functionals*. In: Le Thi H., Le H., Pham Dinh T. (eds) *Optimization of Complex Systems: Theory, Models, Algorithms and Applications*. WCGO 2019. *Advances in Intelligent Systems and Computing*, vol. 991, pp. 164-174, 2020. Springer, Cham. DOI: 10.1007/978-3-030-21803-4_17; ISBN: 978-3-030-21802-7; eISBN: 978-3-030-21803-4.

1) S. Treanță, C. Udriște, *Single-Time and Multi-Time Hamilton–Jacobi Theory Based on Higher Order Lagrangians*. In: Adhikari A., Adhikari M., Chaubey Y. (eds) *Mathematical and Statistical Applications in Life Sciences and Engineering*, pp. 71-95, 2017. Springer, Singapore. DOI: 10.1007/978-981-10-5370-2_3; ISBN: 978-981-10-5369-6; eISBN: 978-981-10-5370-2.

Total number of citations, according to Web of Science Core Collection: 1948

Hirsch index, according to Web of Science Core Collection: 24

Total number of citations, according to Google Scholar: 2178

Hirsch index, according to Google Scholar: 25

The Google Scholar profile: <https://scholar.google.ro/citations?user=RjZrdA8AAAAJ&hl=en>

196 visible WoS articles (at the time of writing this document).

Expert examiner on the panel for several PhD theses from abroad (India, Pakistan).

Member of the Register of Experts CNATDCU, 2024-2028.

The score for articles published in the last 5 years, with Relative Influence Score greater than or equal to 0.5, is $S = 57.8256$.

World's Top 2% Scientists ranking by Stanford University.

Rewarding of scientific results - CNCS/UEFISCDI (2014, 2017-present) for publication of articles in prestigious international journals.

December 2023 - Rewarding of scientific results for the special quality of the results obtained within the research project “Well-posedness, existence and characterization results of solutions for certain variational problems”, Academy of Romanian Scientists, “AOSR-TEAMS” 2022-2023 <https://www.aosr.ro/competitia-aosr-teams-2022-2023/>

2023 - Participation in the training program Internal Managerial Control System, 6-8 June 2023.

2023 - Member of The International Society of Global Optimization.

*January 2025-Present: **Managing Editor** for Series on Mathematics and Its Applications, Annals of the Academy of Romanian Scientists.*

2024 Top Scholar by ScholarGPS - [Savin Treanță](#) | [Scholar Profiles and Rankings](#) | [ScholarGPS](#)

***Expert evaluator** within the Call “Demonstration experimental project”, UEFISCDI, 2024.*

***Expert evaluator** within the Call “Transfer project to the economic operator”, UEFISCDI, 2024.*

Expert evaluator within the Call “Equipping pre-university education units and related units with furniture, teaching materials and digital equipment”, PNRR, 2023.

Expert evaluator within the Call “Scheme of Grants for the Digitization of Universities”, financed by the National Plan for Recovery and Resilience (PNRR), Iunie 2022.

16.10.2026