

# Curriculum Vitae

Prof. Dr. habil. Mihai POSTOLACHE,  
Department of Mathematics & Informatics\*  
National University of Science & Technology "Politehnica" Bucharest  
313 Splaiul Independenței, 060042 Bucharest (RO)  
Email: [mihai.postolache@upb.ro](mailto:mihai.postolache@upb.ro)

## 1 Highest Education

- Habilitation (Mathematics), University Politehnica of Bucharest, 2013.
- Ph.D. (Mathematics), University Babeș-Bolyai of Cluj-Napoca, 1992.
- B.A. (Computer Science), University Politehnica of Bucharest, June 1988.
- B.A. (Mathematics), University "Al. I. Cuza" in Iași, June 1979.

## 2 Scientometric Data

- H-index in Web of Science = 35;
- Citations in Web of Science: 3770 [self-citations 8.06%];
- Average citations per item in Web of Science: 24.97.

## 3 Profile Addresses

- ResearcherID: P-7611-2015
- ORCID Number: <http://orcid.org/0000-0003-0738-787X>
- WoS: <https://www.webofscience.com/wos/author/record/130615>
- Scopus Author ID: 14006820500

## 4 Honors and Awards

- Highly Cited Researcher (2021), Thomson Reuters (Clarivate Analytics);
- Highly Cited Researcher (2020), Thomson Reuters (Clarivate Analytics);
- Highly Cited Researcher (2017), Thomson Reuters (Clarivate Analytics);
- Highly Cited Researcher (2016), Thomson Reuters (Clarivate Analytics);
- Japan Society for the Promotion of Science (1996); Dynamical Systems.

---

\*Permanent address.

## 5 Managerial and Administrative Employment

- Head of Department of Mathematics & Informatics, University Politehnica of Bucharest, March 2012 to present.
- Member of the Senate of the University Politehnica of Bucharest, March 2012 to present.
- Member of the Faculty of Applied Sciences Council at University Politehnica of Bucharest, March 2008 to present.

## 6 Professional Experience and Jobs

- Senior Researcher, Romanian Academy, Gh. Mihoc-C. Iacob Institute of Mathematical Statistics and Applied Mathematics, February 2018 to present.
- Full Professor, Department of Mathematics I, University Politehnica of Bucharest, 2001 to present.
- Visiting Chair Professor, Center for General Education, China Medical University, Taichung 40402, Taiwan, November 2016 to November 2021.
- Associate Professor, Department of Mathematics I, University Politehnica of Bucharest (1997 - 2001).
- Lecturer, Department of Mathematics I, University Politehnica of Bucharest (1993 - 1997).
- Assistant Professor, Department of Mathematics I, University Politehnica of Bucharest (1990 - 1993).
- Mathematician (research), Institute for Power Studies and Design, Bucharest (1979 - 1990).

## 7 Teaching Experience

- Numerical Analysis (one semester lecture),
- Differential Equations (one semester lecture),
- Foundation of Nonlinear Optimization (one semester lecture),
- Mathematical Analysis (one year lecture),
- Numerical Methods and Mathematical Statistics (one semester lecture),
- Probabilities and Statistics (one semester lecture),
- Numerical Modeling and Geometric Integrators (one year lecture).

## 8 Research Directions

- Nonexpansive mappings, and their generalizations (47H09)
- Accretive operators, dissipative operators, etc. (47H06)
- Equations involving nonlinear operators (47J05)
- Methods for solving nonlinear operator equations (47J25)
- Equations with nonlinear operators (65J15)
- Fixed-point theorems (47H10); Fixed-point and coincidence theorems (54H25)
- Monotone operators (with respect to duality) (47H05); Set-valued operators (47H04)
- Convexities, generalizations (26B25); Pareto optimality, etc., applications to economics (58E17)
- Optimization and variational techniques (65K10); Multi-objective and goal programming (90C29)
- Minimax problems (49J35); Nonlinear programming (90C30); Computational methods (93B40)

## 9 PhD Theses Completed

- (2022): Some Classes of Nonlinear Operators for Fixed Point Problems with Applications.
- (2020): Best Proximity Points for Some Classes of Nonlinear Operators.
- (2020): Fixed Point Results in Modular Spaces.
- (2019): Fixed Point, Best Proximity Point and Numerical Reckoning.
- (2018): Iteration Theory, Continuous Optimization and non-Newtonian Calculus.
- (2018): Results in Fixed Point Theory and Iteration Processes with Applications.
- (2015): Fixed Points for Classes of Nonlinear Operators.

## 10 External Examiner

- Aligarh Muslim University, Aligarh;
- Government College University, Faisalabad (GCUF);
- COMSATS Institute of Information Technology, Islamabad;
- Lahore University of Management Science, Lahore;
- International Islamic University, Islamabad;
- RIPHAH International University;
- Indian Institute of Engineering Science and Technology, Shibpur;
- National University of Computers & Emerging Sciences, Islamabad;
- Botswana University, Gaborone;
- University Transilvania of Braşov;
- Technical University of Civil Engineering of Bucharest;
- "Gheorghe Mihoc-Caius Iacob" Institute of Romanian Academy;
- Politehnica University Timisoara;
- Technical University of Cluj-Napoca.

## 11 Assessment of Projects

- (2018) Innovation fund (Republic of Serbia): MINI GRANTS Program (six projects).
- (2017) Innovation fund (Republic of Serbia): MINI GRANTS Program (eight projects) & MATCHING GRANTS Program (eight projects).

## 12 Publications

### 12.1 Recent Published Articles (Selective)

1. Kumar, A, Thakur, BS, Postolache, M: Dynamic stepsize iteration process for solving split common fixed point problems with applications. *Math. Comput. Simulat.* **218**(2024), 498-511.
2. Yao, Y, Postolache, M, Yao, JC: An approximation algorithm for solving a split problem of fixed point and variational inclusion. *Optimization EA SEP2023*, DOI: 10.1080/02331934.2023.2256769.

3. Kumari, S, Gdawiec, K, Nandal, A, Postolache, M, Chugh, R: A novel approach to generate Mandelbrot sets, Julia sets and biomorphs via viscosity approximation method. *Chaos, Solitons & Fractals* **163**(2022), Art. No. 112540.
4. Balooee, J, Postolache, M, Yao, Y: System of generalized nonlinear variational-like inequalities and nearly asymptotically nonexpansive mappings: graph convergence and fixed point problems. *Ann. Funct. Anal.* **13**(2022), No. 4, Art. No. 68.
5. Yao, Y, Li, H, Postolache, M: Iterative algorithms for split equilibrium problems of monotone operators and fixed point problems of pseudo-contractions. *Optimization* **71**(2022), No. 9, 2451-2469.
6. Uşurelu, GI, Bejenaru, A, Postolache, M: Newton-like methods and polynomiographic visualization of modified Thakur processes. *Int. J. Comput. Math.* **98**(2021), No. 5, 1049-1068.
7. Bejenaru, A, Postolache, M: An unifying approach for some nonexpansiveness conditions on modular vector spaces. *Nonlinear Anal. Modelling Control* **25**(2020), No. 5, 827-845.
8. Bejenaru, A, Postolache, M: Generalized Suzuki-type mappings in modular vector spaces. *Optimization* **69**(2020), No. 9, 2177-2198.
9. Dadashi, V, Postolache, M: Forward-backward splitting algorithm for fixed point problems and zeros of the sum of monotone operators. *Arab. J. Math.* **9**(2020), No. 1, 89-99.
10. Yao, Y, Postolache, M, Zhu, Z: Gradient methods with selection technique for the multiple-sets split feasibility problem. *Optimization* **69**(2020), No. 2, 269-281.
11. Uşurelu, GI, Bejenaru, A, Postolache, M: Operators with property (E) as concerns numerical analysis and visualization. *Numer. Funct. Anal. Optim.* **41**(2020), No. 11, 1398-1411.
12. Yao, Y, Liou, YC, Postolache, M: Self-adaptive algorithms for the split problem of the demicontractive operators. *Optimization* **67**(2018), No. 9, 1309-1319.
13. Nazam, M, Arshad, M, Postolache, M: Coincidence and common fixed point theorems for four maps satisfying  $(\alpha_s, \mathbf{F})$ -contractions. *Nonlinear Anal. Modelling Control* **23**(2018), No. 5, 664-690.
14. Dadashi, V, Postolache, M: Hybrid proximal point algorithm and applications to equilibrium problems and convex programming. *J. Optim. Theory Appl.* **174**(2017), No. 2, 518-529.
15. Ali, MU, Kamran, T, Postolache, M: Solution of Volterra integral inclusion in  $b$ -metric spaces via new fixed point theorem. *Nonlinear Anal. Modelling Control* **22**(2017), No. 1, 17-30.
16. Yao, Y, Leng, L, Postolache, M, Zheng, X: Mann-type iteration method for solving the split common fixed point problem. *J. Nonlinear Convex Anal.* **18**(2017), No. 5, 875-882.
17. Yao, Y, Postolache, M, Liou, YC, Yao, Z: Construction algorithms for a class of monotone variational inequalities. *Optim. Lett.* **10**(2016), No. 7, 1519-1528.
18. Thakur, BS, Thakur, D, Postolache, M: A new iterative scheme for numerical reckoning fixed points of Suzuki's generalized nonexpansive mappings. *Appl. Math. Comput.* **275**(2016), 147-155.
19. Dewangan, R, Thakur, BS, Postolache, M: Strong convergence of asymptotically pseudocontractive semigroup by viscosity iteration. *Appl. Math. Comput.* **248**(2014), 160-168.

20. Thakur, BS, Thakur, D, Postolache, M: New iteration scheme for numerical reckoning fixed points of nonexpansive mappings. *J. Inequal. Appl.* **2014**, Art. No. 328 (2014).
21. Thakur, BS, Dewangan, R, Postolache, M: Strong convergence of new iteration process for a strongly continuous semigroup of asymptotically pseudocontractive mappings. *Numer. Funct. Anal. Optim.* **34**(2013), No. 12, 1418-1431.
22. Aydi, H, Postolache, M, Shatanawi, W: Coupled fixed point results for  $(\psi, \phi)$ -weakly contractive mappings in ordered  $G$ -metric spaces. *Comput. Math. Appl.* **63**(2012), No. 1, 298-309.
23. Yao, Y, Postolache, M: Iterative methods for pseudomonotone variational inequalities and fixed point problems. *J. Optim. Theory Appl.* **155**(2012), No. 1, 273-287.
24. Pitea, A, Postolache, M: Duality theorems for a new class of multitime multiobjective variational problems. *J. Glob. Optim.* **54**(2012), No. 1, 47-58.
25. Pitea, A, Postolache, M: Minimization of vectors of curvilinear functionals on the second order jet bundle. Necessary conditions. *Optim. Lett.* **6**(2012), No. 3, 459-470.
26. Pitea, A, Postolache, M: Minimization of vectors of curvilinear functionals on the second order jet bundle. Sufficient efficiency conditions. *Optim. Lett.* **6**(2012), No. 8, 1657-1669.
27. Olatinwo, MO, Postolache, M: Stability results for Jungck-type iterative processes in convex metric spaces. *Appl. Math. Comput.* **218**(2012), No. 12, 6727-6732.

## 12.2 Published Books (Selective)

1. Postolache, M: *Mathematical Analysis (Theory and Applications) (FIFTH EDITION)*, Fair Partners, Bucharest, 2014 (Romanian).
2. Bercu, G, Matsuyama Y, Postolache, M: *Hessian Metrics and Ricci Solitons*, Fair Partners, Bucharest, 2011.
3. Tevy, I, Postolache, M: *Riemannian Integral. Theory and Applications*, Fair Partners, Bucharest, 2005 (Romanian).
4. Udriște, C, Postolache, M: *Atlas of Magnetic Geometric Dynamics*, Geometry Balkan Press, Bucharest, 2001.
5. Udriște, C, Postolache, M: *Magnetic Fields Generated by Piecewise Rectilinear Circuits*, Geometry Balkan Press, Bucharest, 1999.

## 12.3 Guest Editor to ISI Journals

1. *Advance in Nonlinear Analysis and Optimization*. Symmetry-Basel.
2. *Nonlinear Optimization, Variational Inequalities and Equilibrium problems*. Mathematics.
3. *Fixed Point, Optimization, and Applications*. Mathematics (with Yao, J-C, and Yao, YH).
4. *Recent Advances in Fixed Point Theory for Set Valued Operators with Related Applications*. *Commun. Math. Appl.* (with Ali, MU, Altun, I, and Kamran, T).

## 13 Lectures and Visits

### 13.1 Kenote/Invited Speaker

1. Iteration processes for Suzuki operators, China Medical University of Taichung, May 2019.
2. On multi-step iteration processes, China Medical University of Taichung, May 2018.
3. A pleading for numerical reckoning fixed points of some classes of nonlinear operators, Government College University of Lahore, November 2017.
4. On recent iteration processes for numerical reckoning fixed points of nonlinear operators, China Medical University of Taichung, May 2017.

### 13.2 Invited Lectures

1. Iteration process for hybrid operators (Convergence analysis). North Minzu University, China, June 19, 2023.
2. Iteration processes for nonlinear operators with application to image encoding. North Minzu University, China, June 2019.
3. Advances on Hessian structures and Ricci solitons, Chuo University of Tokyo, May 2011.
4. Integrator for Lagrangian dynamics, University of Thessaloniki, June 2001.
5. On  $h$ -paths in General Relativity, University of Athens, August 1997.
6. On the image encoding with random transformations, Shonan Institute of Technology, May 10, 1996 and Hokkaido Tokai University, May 31, 1996.
7. On a chaos for a magnetic dynamical system, University of Tsukuba, Institute of Information Sciences, October 13, 1995.
8. On the iteration of rational mappings from the viewpoint of fractal aspects, Shonan Institute of Technology, November 7, 1995.
9. Romanian special education, Fukushima University, October 1995.
10. University education in Romania, Chiba Institute of Technology, 1995 and 1996.

### 13.3 Visiting Professor

1. North Minzu University of Yinchuan, 11 June 2023 - 12 July 2023.
2. China Medical University of Taichung, November 2016 - November 2021.
3. North Minzu University of Yinchuan, June 2019; one week.
4. Chuo University of Tokyo, May 2011; three weeks.
5. Aristotle University of Thessaloniki, June 2001; two weeks.

6. Hokkaido Tokai University, 27 May 1996-3 June 1996.

7. Tsukuba University, 14 September 1995-20 November 1995.

## 14 Professional Service

### 14.1 Member of Managerial Boards

1. Fair Partners Society for the Promotion of Science; President: since 1998.
2. Balkan Society of Geometers; Vice president: 2000-2004; 2008-2023.

### 14.2 Editorial Work

1. Series Editor: U Politeh Buch Ser A (SCIE).
2. Member of Editorial Board: Symmetry - Basel (SCIE).
3. Member of Editorial Board: Mathematics-MDPI (SCIE).
4. Member of Editorial Committee: J Math Anal (ESCI).
5. Associate Editor: Series "BSG Proceedings", Geometry Balkan Press (No. 3, No. 4 and No. 5).
6. Editor in Chief: Series "Handbooks. Treatises. Monographs", Fair Partners Publishers.

## 15 Citations in Selective Journals

Acta Appl Math; Appl Anal; Appl Math Comput; Appl Math Lett; Bull Braz Math Soc (NS); Bull Math Sci; Calcolo; Chaos Solitons Fractals; Comput Math Appl; Eur J Oper Res; IEEE Access; Int J Comput Math; J Fixed Point Theory Appl; J Glob Optim; J Ind Manag Optim; J Optim Theory Appl; Math Methods Appl Sci; Nonlinear Anal Modelling Control; Numer Algorithms; Numer Funct Anal Optim; Numer Methods Partial Differ Eq; Optimal Control Appl Methods; Optimization; RACSAM; Symmetry-Basel and much more.

## 16 Cited by Famous Scientists

Abbas, M; Agarwal, RP; Altun, I; Antczak, T; Aydi, H; Berinde, V; Boikanyo, OA; Cegielski, A; Ceng, LC; Chidume, Ch; De la Sen, M; Deng, VH; Gordji, ME; Gupta, SK; Hussain, N; Imdad, M; Jayswal A; Jleli, M; Kadelburg, Z; Karapinar, E; Kummam, P; Latif, A; Liu, L; Nashine, HK; Noor, MA; O'Reagan, D; Radenovic, S; Reich, S; Roldan, A; Sahu, DR; Samet, B; Shehu, Y; Shahzad, N; Shatanawi, W; Suantai, S; Taddele, GH; Verma, R; Wang, Y; Wardowski, D; Watanabe, T; Zaslavski, AJ; Zegeye, H.

## 17 Scientific Referee

Acta Mathematica Scientia; Analysis and Mathematical Physics; Applied Mathematics Letters; Applied Mathematics and Computation; Applied Numerical Mathematics; Arabian Journal of Mathematics; Axioms; Carpathian Journal of Mathematics; Central European Journal of Mathematics; Demonstratio Mathematica; Expert Systems with Applications; Filomat; Fixed Point Theory; Fixed Point Theory and Applications; Journal of Function Spaces; Journal of Inequalities and Applications; Journal of Inequalities and Special Functions; Journal of King Saud University; Journal of Mathematical Analysis; Journal of Nonlinear Functional Analysis; Mathematica Bohemica; Mathematics; Neural Computing and Applications; Nonlinear Analysis Modeling and Control; Numerical Algorithms; Numerical Functional Analysis and Optimization; Optimization; Optimization Letters; Optimal Control, Applications and Methods; Quaestiones Mathematicae; Scientific Bulletin UPB, Series A: Applied Mathematics and Physics; Symmetry-Basel; The Journal of Analysis; Transactions of A. Razmadze Mathematical Institute; Turkish Journal of Mathematics; Vietnam Journal of Mathematics; Abstract and Applied Analysis; Analele Universității "Al. I. Cuza" din Iași; Analele Universității București; Annales Mathematicae Silesianae; Balkan Journal of Geometry and Its Applications; Journal of Advanced Mathematical Studies; Journal of Nonlinear Sciences and Applications.

Prof. Dr. habil. Mihai Postolache

Date: November 25, 2024