Curriculum Vitae

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1 Education

• Habilitation Thesis, Mathematics, University Politehnica of Bucharest, 2013.

• Ph. D., Mathematics, University Babeş-Bolyai, June 1992 (Dynamical Systems; Advisor: Prof. Dr. Gheorghe Atanasiu).

• B. A., Computer Science, University Politehnica of Bucharest, June 1988.

• B. A., Mathematics, University "Al. I. Cuza" in Iaşi, June 1979.

2 Employment

• Head, Department of Mathematics and Informatics, University Politehnica of Bucharest, March 2012 to present.

• Full Professor, Department of Mathematics I, University Politehnica of Bucharest, October 2001 to present.

• Associate Professor, Department of Mathematics I, University Politehnica of Bucharest, October 1997 to September 2001.

• Lecturer, Department of Mathematics I, University Politehnica of Bucharest, October 1993 to September 1997.

• Assistant Professor, Department of Mathematics I, University Politehnica of Bucharest, October 1990 to September 1993.

• Mathematician (research), Institute for Power Studies and Design, Bucharest, October 1979 to September 1990.

3 External examiner

• COMSATS Institute of Information Technology, Islamabad;

• Lahore University of Management Science, Lahore;

• Botswana University, Gaborone;

• Technical University of Cluj-Napoca.

4 Research directions

- Methods for solving nonlinear operator equations (47J25)
- Equations with nonlinear operators (65J15);
- Fixed-point theorems (47H10); Fixed-point and coincidence theorems (54H25)
- 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)
- Equations and systems on manifolds (34C40); Special Riemannian manifolds (53C25)
- Solitons (35Q51); Soliton theory, asymptotic behaviour of solutions (27K40)

4.1 Invited Lectures

1. Advances on Hessian structures and Ricci solitons, Chuo University of Tokyo, May 2011.
2. Integrator for Lagrangian dynamics, University of Thessaloniki, June 2001.
3. On h-paths in General Relativity, University of Athens, August 1997.
4. On the image encoding with random transformations, Shonan Institute of Technology, 10 mai 1996 and Hokkaido Tokai University, 31 mai 1996.
5. On a chaos for a magnetic dynamical system, University of Tsukuba, Institute of Information Sciences, 13 octombrie 1995.
6. On the iteration of rational mappings from the viewpoint of fractal aspects, Shonan Institute of Technology, 7 noiembrie, 1995.
7. Romanian special education, Fukushima University, October 1995.
8. University education in Romania, Chiba Institute of Technology, 1995 şi 1996.

4.2 Visiting Professor

1. Chuo University of Tokyo, May 2011; three weeks.
2. Aristotle University of Thessaloniki, June 2001; two weeks.
3. Hokkaido Tokai University, 27 May 1996-3 June 1996.
4. Tsukuba University, 14 September 1995-20 November 1995.

4.3 Awards

1. JSPS award, 3 months, 28 March 1996-26 June 1996; Dynamical Systems.

5 Teaching Experience

- Differential and Integral Calculus (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).

6 Professional Service

6.1 Member of managerial board

1. Balkan Society of Geometers; Vice president between 2000-2004; 2008-present.

2. Fair Partners Society; President 1998-present.

6.2 Member of editorial board

1. Member of Editorial Board: U Politeh Buch Ser A (SCIE, IF=0.405)

2. Associate Editor: Series "BSG Proceedings", Geometry Balkan Press (BSG Proc. No. 3, No. 4 and No. 5).

3. Editor in Chief: Series "Handbooks. Treatises. Monographs", Fair Partners Publishers (over 120 issues between 1998-present).

7 Scientific Referee

Acta Mathematica Scientia; Applied Mathematics Letters; Applied Mathematics and Computation; Applied Numerical Mathematics; Arabian Journal of Mathematics; Carpathian Journal of Mathematics; Central European Journal of Mathematics; Filomat; Fixed Point Theory and Applications; Journal of Inequalities and Applications; Journal of Mathematical Analysis; Neural Computing and Applications; Nonlinear Analysis Modeling and Control; Numerical Algorithms; Numerical Functional Analysis and Oprimization; Optimization; Optimization Letters; Optimal Control, Applications and Methods; Scientific Bulletin UPB, Series A: Applied Mathematics and Physics; Turkish Journal of Mathematics; Abstract and Applied Analysis; Analele Universităţii "Al. I. Cuza" din Iaşi; Analele Universităţii Bucureşti; Balkan Journal of Geometry and Its Applications; Vietnam Journal of Mathematics; Journal of Advanced Mathematical Studies.

8 Publications

8.1 Articles in Web of Science

1. 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.

2. 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.

3. Saluja, GS, Postolache, M, Ghiura, A: Convergence theorems for mixed type asymptotically nonexpansive mappings in the intermediate sense. J. Nonlinear Sci. Appl. **9**(2016), No. 7, 5119-5135.

4. Kamran, T, Postolache, M, Fahimuddin, Ali, MU: Fixed point theorems on generalized metric space endowed with graph. J. Nonlinear Sci. Appl. **9**(2016), No. 6, 4277-4285.

5. Shatanawi, W, Postolache, M: On n-collinear elements and Riesz theorem. J. Nonlinear Sci. Appl. **9**(2016), No. 5, 3066-3073.

6. Padhan, SK, Nahak, C, Postolache, M: Control problems with Kuhn-Tucker and Fritz John generalized invexity. J. Math. Anal. **7**(2016), No. 3, 51-57.

7. Fathollahi, Sh, Ghiura, A, Postolache, M, Rezapour, Sh: A comparative study on the convergence rate of some iteration methods involving contractive mappings. Fixed Point Theory Appl. **2015**, Art. No. 234 (2015).

8. Thakur, BS, Dewangan, R, Postolache, M: New iteration process for pseudocontractive mappings with convergence analysis. Fixed Point Theory Appl. **2015**, Art. No. 55 (2015).

9. Saluja, GS, Postolache, M: Strong and $\triangle$-convergence theorems for two asymptotically nonexpansive mappings in the intermediate sense in CAT(0) spaces. Fixed Point Theory Appl. **2015**, Art. No. 12 (2015).

10. Thakur, BS, Thakur, D, Postolache, M: Modified Picard-Mann hybrid iteration process for total asymptotically nonexpansive mappings. Fixed Point Theory Appl. **2015**, Art. No. 140 (2015).

11. Saluja, GS, Postolache, M, Kurdi, A: Convergence of three-step iterations for nearly asymptotically nonexpansive mappings in CAT(k) spaces. J. Inequal. Appl. **2015**, Art. No. 156 (2015).

12. Shatanawi, W, Postolache, M: Mazur-Ulam theorem for probabilistic 2-normed spaces. J. Nonlinear Sci. Appl. **8**(2015), No. 6, 1228-1233.

13. Ali, MU, Kamran, T, Postolache, M: Fixed point theorems for multivalued G-contractions in Hausdorff b-gauge spaces. J. Nonlinear Sci. Appl. **8**(2015), No. 5, 847-855.

14. Dewangan, R, Thakur, BS, Postolache, M: Strong convergence of asymptotically pseudocontractive semigroup by viscosity iteration. Appl. Math. Comput. **248**(2014), 160-168.

15. Yao, Y, Agarwal, RP, Postolache, M, Liu, YC: Algorithms with strong convergence for the split common solution of the feasibility problem and fixed point problem. Fixed Point Theory Appl. **2014**, Art. No. 183 (2014).

16. Yao, Y, Postolache, M, Kang, SM: Strong convergence of approximated iterations for asymptotically pseudocontractive mappings. Fixed Point Theory Appl. **2014**, Art. No. 100 (2014).

17. Thakur, BS, Dewangan, R, Postolache, M: General composite implicit iteration process for a finite family of asymptotically pseudocontractive mappings. Fixed Point Theory Appl. **2014**, Art. No. 90 (2014).

18. Dewangan, R, Thakur, BS, Postolache, M: A hybrid iteration for asymptotically strictly pseudocontractive mappings. J. Inequal. Appl. **2014**, Art. No. 374 (2014).

19. 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).

20. Ghorbanian, R, Hedayati, V, Postolache, M, Rezapour, Sh: On a fractional differential inclusion via a new integral boundary condition. J. Inequal. Appl. **2014**, Art. No. 319 (2014).

21. Abbas, M, Khan, SH, Postolache, M: Existence and approximation results for SKC mappings in CAT(0) spaces. J. Inequal. Appl. **2014**, Art. No. 212 (2014).

22. Thakur, BS, Postolache, M: Existence and approximation of solutions for generalized extended nonlinear variational inequalities. J. Inequal. Appl. **2013**, Art. No. 590 (2013).

23. 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.

24. Shatanawi, W, Postolache, M: Common fixed point theorems for dominating and weak annihilator mappings in ordered metric spaces. Fixed Point Theory Appl. **2013**, Art. No. 271 (2013).

25. Miandaragh, MA, Postolache, M, Rezapour, Sh: Approximate fixed points of generalized convex contractions. Fixed Point Theory Appl. **2013**, Art. No. 255 (2013).

26. Yao, Y, Postolache, M, Liou, YC: Coupling Ishikawa algorithms with hybrid techniques for pseudocontractive mappings. Fixed Point Theory Appl. **2013**, Art. No. 211 (2013).

27. Yao, Y, Postolache, M, Liou, YC: Strong convergence of a self-adaptive method for the split feasibility problem. Fixed Point Theory Appl. **2013**, Art. No. 201 (2013).

28. Yao, Y, Postolache, M, Liou, YC: Variant extragradient-type method for monotone variational inequalities. Fixed Point Theory Appl. **2013**, Art. No. 185 (2013).

29. Choudhury, BS, Metiya, N, Postolache, M: A generalized weak contraction principle with applications to coupled coincidence point problems. Fixed Point Theory Appl. **2013**, Art. No. 152 (2013).

30. Shatanawi, W, Postolache, M: Common fixed point results of mappings for nonlinear contractions of cyclic form in ordered metric spaces. Fixed Point Theory Appl. **2013**, Art. No. 60 (2013).

31. Shatanawi, W, Postolache, M: Coincidence and fixed point results for generalized weak contractions in the sense of Berinde on partial metric spaces. Fixed Point Theory Appl. **2013**, Art. No. 54 (2013).

32. Chandok, S, Postolache, M: Fixed point theorem for weakly Chatterjea-type cyclic contractions. Fixed Point Theory Appl. **2013**, Art. No. 28 (2013).

33. Aydi, H, Karapınar, E, Postolache, M: Tripled coincidence point theorems for weak φ-contractions in partially ordered metric spaces. Fixed Point Theory Appl. **2012**, Art. No. 44 (2012).

34. Yao, Y, Postolache, M: Iterative methods for pseudomonotone variational inequalities and fixed point problems. J. Optim. Theory Appl. **155**(2012), No. 1, 273-287.

35. Pitea, A, Postolache, M: Duality theorems for a new class of multitime multiobjective variational problems. J. Glob. Optim. **54**(2012), No. 1, 47-58.

36. Olatinwo, MO, Postolache, M: Stability results for Jungck-type iterative processes in convex metric spaces. Appl. Math. Comput. **218**(2012), No. 12, 6727-6732.

37. 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.

38. 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.

39. Aydi, H, Postolache, M, Shatanawi, W: Coupled fixed point results for (ψ, ϕ)-weakly contractive mappings in ordered G-metric spaces. Comput. Math. Appl. **63**(2012), No. 1, 298-309.

40. Bercu, G, Postolache, M: Classification of steady gradient Ricci solitons on two-manifolds. Int. J. Geom. Methods Mod. Phys. **9**(2012), No. 5, ID: 1250049.

41. Bercu, G, Postolache, M: Classes of gradient Ricci solitons on generalized Poincaré manifolds. Int. J. Geom. Methods Mod. Phys. **9**(2012), No. 4, ID: 1250027.

42. Bercu, G, Postolache, M: Classes of gradient Ricci solitons, Int. J. Geom. Methods Mod. Phys. **8**(2011), No. 4, 783-796.

43. Bercu, G, Corcodel, C, Postolache, M: Iterative geometric structures, Int. J. Geom. Methods Mod. Phys. **7**(2010), No. 7, 1103-1114.

44. Pitea, A, Postolache, M: Advances on affine vector fields. Carpathian J. Math. **25**(2009), No. 2, 197-202.

8.2 Habilitation Thesis

1. M. Postolache: Nonlinear Analysis, Vector Optimization and Geometric Methods in Physics, *Habilitation Thesis*, Bucharest, 2013.

8.3 Ph. D Thesis

1. M. Postolache: Advances in operational calculus with applications in Mechanics and Physics, *Ph. D Thesis*, "Babeş-Bolyai" Univ., Cluj-Napoca, 1992.

8.4 Monographs and textbooks

1. G. Bercu, Y. Matsuyama and M. Postolache: *Hessian Structures and Ricci Solitons*, Fair Partners Publishers, Bucharest, 2011.
2. M. Postolache: *Numerical modeling; Theory and Applications*, Fair Partners Publishers, Bucharest, 2010.
3. A. Pitea and M. Postolache: *Basic Concepts of Probability & Statistics*, Fair Partners Publishers, Bucharest, 2007.
4. C. Udrişte and M. Postolache: *Atlas of Magnetic Geometric Dynamics*, Geometry Balkan Press, Bucharest, 2001.
5. C. Udrişte and M. Postolache: *Magnetic Fields Generated by Piecewise Rectilinear Circuits*, Geometry Balkan Press, Bucharest, 1999.
6. M. Postolache and S. Corbu: *Exercise Manual in Probability Theory*, Fair Partners, Ltd., Bucharest, 1998.
7. C. Udrişte, V. Iftode and M. Postolache: *Numerical Modelling*, Editura Tehnică, Bucharest, 1996.
8. M. Postolache: *Techniques of Solving Applied Problems in Probability Theory*, "Politehnica" Univ. Publishers, 1995.

8.5 Refereed journal publications

1. Noor, MA, Postolache, M, Noor, KI, Awan, MU: Geometrically nonconvex functions and integral inequalities. *Appl. Math. Inf. Sci.* **9**(2015), No. 3, 1273-1282.
2. Postolache, M: Duality for multitime multiobjective ratio variational problems on first order jet bundle, *Abstr. Appl. Anal.* Volume 2012, ID: 589694, 18 pp.
3. Postolache, M: Minimization of vectors of curvilinear functionals on second order jet bundle: dual program theory, *Abstr. Appl. Anal.* Volume 2012, ID: 535416, 12 pp.
4. Shatanawi, W, Postolache, M: Some fixed point results for a G-weak contraction in G-metric spaces, *Abstr. Appl. Anal.* Volume 2012, ID: 815870, 19 pp.
5. Haghi, RH, Postolache, M, Rezapour, Sh: On T-stability of the Picard iteration for generalized φ-contraction mappings, *Abstr. Appl. Anal.* Volume 2012, ID: 658971, 7 pp.
6. Aydi, H, Shatanawi, W, Postolache, M, Mustafa, Z, Tahat,N: Theorems for Boyd-Wong type contractions in ordered metric spaces, *Abstr. Appl. Anal.* Volume 2012, ID: 359054, 14 pp.
7. Bercu, G, Corcodel, C, Postolache, M: Advances on Hessian structures, *Sci. Bull. UPB, Series A: Appl. Math. Phys.* **73**(2011), No. 1, 63-70.

8. Bercu, G, Corcodel, C, Postolache, M: On Udrişte ODE and a problem of Jiang, *Sci. Bull. UPB, Series A: Appl. Math. Phys.* **72**(2010), No. 1, 171-176.

9. Bercu, G, Postolache, M: Class of self-concordant functions on Riemannian manifolds, *Balkan J. Geom. Appl.*, **14**(2009), No. 2, 13-20 (IF 0.765).

10. Bercu, G, Postolache, M: More on self-concordant functions on Riemannian manifolds, *J. Adv. Math. Stud.*, **3**(2010), No. 2, 1-10.

11. Bercu, G, Postolache, M: Hessian structures via invariant calculus, *Bull. Univ. "Transilvania", Braşov*, 15(50), III-2008, 1-4, 25-32.

12. Udrişte, C, Bercu, G, Postolache, M: 2D Hessian Riemannian manifolds, *J. Adv. Math. Stud.*, **1**(2008), No. 1-2, 135-142.

13. Udrişte, C, Postolache, M: Least squares problem and geometric dynamics, *Italian J. Pure Appl. Math.*, **13**(2003), 177-188.

14. Udrişte, C, Postolache, M, Ţevy, I: Integrator for Lagrangian dynamics, *Balkan J. Geom. Appl.*, **6**(2001), No. 2, 109-115.

15. Postolache, M, Nicolaescu, B: The paths of Randers spaces, *Mem. Sci. Sec.*, Tom XXI (2001), 67-74.

16. Postolache, M: Geometrical study of a Kapteyn-type dynamical system, *Mem. Sci. Sec.*, Tom XX (2000), 30-35.

17. Postolache, M, Pârvan, M: New prof of Bellman-Kalaba theorem on quasilinearization, *Balkan J. Geom. Appl.*, **4**(1999), No. 1, 129-133.

18. Corbu, S, Postolache, M: Dynamical systems on vector bundles, *Balkan J. Geom. Appl.*, **3**(1998), No. 2, 47-56.

19. Postolache, M, Mocioalcă, O: On a geometrical study of population ecosystems, *Balkan J. Geom. Appl.*, **2**(1997), No. 1, 101-108 .

20. Corbu, S, Postolache, M: On the image encoding with generating functions of probabilities, *Tensor, N. S.*, **57**(1996), 1-7.

21. Udrişte, C, Udrişte, A, Balan, V, Postolache, M: Equilibrium points of magnetic fields generated around filiform electrical circuits, *Tensor, N.S.*, **57**(1996), 119-134.

22. Udrişte, C, Udrişte, A, Balan, V, Postolache, M: Magnetic dynamical systems, *An. Şt. "Al. I. Cuza" Univ.*, Iaşi, Tom 4, Informatică, 1995, pp. 105-126.

23. Postoache, M, Kawaguchi, T: On a chaos for a magnetic dynamical system, *Tensor, N.S.*, **55**(1994), 154-160.

24. Postolache, M: Numerical simulation of v-paths in Berwald spaces with locally constant connection, *Tensor, N.S.*, **53**(1993), 63-69.

25. Udrişte, C, Postolache, M, Udrişte, M: Energy of magnetic field generated by currents through filiform electrical circuits of right angle type, *Tensor, N.S.*, **54**(1993), 185-196.

26. Postolache, M: Order and chaos for a magnetic dynamical system, *Sci. Bull. UPB Series A: Appl. Math. Phys.,* **55**(1993), No. 3-4, 211-222.

27. Udrişte, C, Balan, V, Postolache, M: V-paths in general relativity - numerical simulation, *Sci. Bull. UPB Series A: Appl. Math. Phys.,* **55**(1993), No. 3-4, 255-265.

28. Udrişte, C, Postolache, M, Udrişte, A: Acad. Sabba Ştefănescu conjecture; lines of magnetic field generated by filiform electrical circuits, *Rev. Roum. Geoph.,* **36**(1992), 17-25.

8.6 Refereed conference and workshop publications

1. (ISI) Computational methods in Lagrange geometry, in *Lagrange and Finsler Geometry*, (P.L. Antonelli and R. Miron (Eds.)), Kluwer, 1996 (FTPH 76), pp. 163-176.

2. (ISI) Phase portraits and critical elements of magnetic fields generated by piecewise rectilinear electrical circuits, in *Lagrange and Finsler Geometry*, (P.L. Antonelli and R. Miron (Eds.)), Kluwer, 1996 (FTPH 76), pp. 177-187 (with C. Udrişte, A. Udrişte and V. Balan).

3. (ISI) Magnetic dynamical systems[1], in *New Developments in Differential Geometry*, (L. Tamássy and J. Szenthe (Eds.)), Kluwer, 1996 (MIA 350), pp. 407-414 (with C. Udrişte, A. Udrişte and V. Balan).

4. Fractals generated by Möbius transformations and some applications, în *New Frontiers in Algebras, Groups and Geometries*, (Gr.T. Tsagas (Ed.)), Hadronic Press, Palm Harbor, 1996, pp. 407-416 (with S. Corbu).

5. Dynamical systems with random evolution, in *New Frontiers in Physics II*, (T. Gill (Ed.)), Hadronic Press, Palm Harbor, 1996, pp. 257-266 (with S. Corbu).

6. On the geometrical structure of a magnetic field, *Proc. Symp. Finsler Geom.*, Nagasaki, Nov. 13-16, 1995, pp. 23-26 (with T. Kawaguchi (Tsukuba Univ., Japan)).

7. On H-paths in general relativity, *Proc. Third Panhellenic Congress of Geometry*, Athens, May 30-31, 1997, pp. 71-77 (with V. Balan).

8. Equilibrium sets of magnetic fields around electric circuits, *Global Anal., Diff. Geom. and Lie Algebras*, (Gr. Tsagas (Ed.)), Geometry Balkan Press, 1998, pp. 125-136 (with C. Udrişte, T. Mazilu and A. Udrişte).

9. Self-similar sets from random affine transformations, *Global Anal., Diff. Geom. and Lie Algebras* (Gr. Tsagas (Ed.)), Geometry Balkan Press, 2000, pp. 100-107.

10. The magnetic field behaviour of two electrical circuits of right angle type varying with the position parameters, *Proc.* 23^{rd} *Conf. Geom. Topol.*, Cluj-Napoca Univ., 1993, pp. 129-135.

11. Graphic kernel for *PC* computers, *Nat. Conf. B.E.M. and F.E.M.*, Sibiu, **4** (1993), 59-65 (with Al. Dragomir).

12. Magnetic field generated by two coplanar electrical circuits of fixed angle type and its field lines, *Proc.* 24^{th} *Nat. Conf. Geom. Topol.*, Timişoara, 1994, pp. 285-301 (with C. Udrişte, A. Udrişte and V. Balan).

13. Finite homogeneous Markov chain induced by a branching process in random environment, *Global Anal., Diff. Geom. and Lie Algebras* (Gr. Tsagas (Ed.)), Geometry Balkan Press, 2000, pp. 21-36 (with S. Corbu).

Prof. Dr. habil. Mihai Postolache
Date: January 18, 2017

[1] Proc. Coll. Diff. Geom., Debrecen, Hungary, July 26-30 (1994)