List of publications Ghiocel Mot, Professor Ph. D.

A. PhD Thesis

"Some implications of the general theory of convexity in geometry" (in romanian), "Babeş Bolyai" University of Cluj-Napoca, 1999, Scientific Coordinator: Elena Popoviciu, Professor Ph. D.

B. Patents of invention

C. Books

a) Appeared in recognized CNCS publishing houses

- 1. **G. Moţ**, A. Petruşel, *Superior mathematics for engineers and economists*, Mirton Publishing House, 1999, 276 pag., ISBN: 973-578-897-7 (in romanian).
- 2. **G. Moţ**, A. Petruşel, *Special mathematics for engineers and economists*, Mirton Publishing House, 1999, 277 pag., ISBN: 973-578-953-1 (in romanian).
- 3. **G. Mot,** L. Popa, *Linear algebra. Collections of problems*, Mirton Publishing House, 1999, 80 pag., ISBN: 973-578-899-3 (in romanian).
- 4. **G. Moţ,** L. Popa, *Differential equations. Collections of problems*, Mirton Publishing House, 1999, 66 pag. ISBN: 973-578-900-2 (in romanian).
- 5. **G. Moţ,** L. Gaga, L. Popa, L. Sida, T. Bulzan, *Exercises and problems of superior mathematics for technical and economic profiles,* Aradeana Life Publishing House, 2003, 630 pag., ISBN: 973-86288-2-2 (in romanian).
- 6. **G. Mot,** *Types of Convexity in Modern Mathematics. Applications of Allure Theory,* Mirton Publishing House, 1999, 193 pag., ISBN: 973-578-898-5 (in romanian).
- 7. **G. Moţ,** Convexity and Allure in Elena Popoviciu's sense, Miracle Printers Publishing House, Vancouver, Washigton, USA., 2000, 106 pag., ISBN: 973-578-447-6.
- 8. A. Petruşel, **G. Moţ,** *Multivalued analysis, convexity and mathematical economics,* House of the Book of Science Cluj-Napoca, 2003, 166 pag., ISBN: 973-578-900-3.
- 9. **G. Moţ**, A. Petruşel, G. Petruşel, *Topics in Nonlinear Analysis and Applications to Mathematical Economics*, House of the Book of Science Cluj-Napoca, 2006, 153 pag., ISBN: 973-686-952-0.
- 10. S. Szentesi, G. Cristescu, **G. Moţ**, M. Franţescu, M. Vizental, S. Crişan, D. Dănoiu, *Modeling the economic-ecological balance for investment projects*, "Aurel Vlaicu" University Publishing House, Arad, 2010, ISBN: 978-973-752-388-4 (in romanian).
- 11. **G. Moţ,** *Mathematics for engineers and economists*, "Aurel Vlaicu" University Publishing House, Arad, 2011, 100 pag., ISBN: 978-973-752-351-7 (in romanian).
- 12. **G. Moţ,** L. Popa, Superior algebra for technical and economic profiles. Theory and applications-2nd Edition, "Aurel Vlaicu" University Publishing House, Arad, 2013, 132 pag., ISBN: 978-973-752-506-3 (in romanian).
- 13. **G. Moţ,** L. Popa, *Linear algebra. Analytical and differential geometry,* "Aurel Vlaicu" University Publishing House, Arad, 2015, 160 pag., ISBN: 978-973-752-715-8 (in romanian).
- 14. **G. Moţ**, C. L. Mihiţ, *Algebra. Seminar and course support*, "Aurel Vlaicu" Univ. Publishing House Arad, 2019, 162 pag., ISBN: 978-973-752-809-4.

b) Coordination of some collective volumes published in recognized CNCS publishing houses

c) Support of courses, seminars, laboratory works, projects in electronic versions

- 1. **G. Moţ,** C. L. Mihiţ, Seminar and course support at Linear algebra, analytical and differential geometry, 2017 (in romanian).
- 2. **G. Mot**, C. L. Mihit, Seminar and course support at Mathematics I, 2017 (in romanian).
- 3. **G. Moţ**, C. L. Mihiţ, Seminar and course support at Applied mathematics in economy, 2018 (in romanian).
- 4. **G. Mot,** C. L. Mihit, Seminar and course support at Mathematical analysis, 2018 (in romanian).
- 5. **G. Moţ**, C. L. Mihiţ, Seminar and course support at Algebraic foundations of computer science, 2018 (in romanian).
- 6. **G. Moţ**, C. L. Mihiţ, Seminar and course support at Linear algebra, analytical and differential geometry, 2018 (in romanian).
- 7. **G. Moţ**, C. L. Mihiţ, Seminar and course support at Differential equations and partial differential equations, 2019 (in romanian).

D. Articles in extenso, published in journals from the main international scientific flow

I. Scientific articles published in ISI rated journals

- 1. **G. Moţ**, A. Petruşel, *Fixed point theory for a new type of contractive multivalued operators*, Nonlinear Analysis, Theory, Methods and Applications 70 (2009), no. 9, 3371-3377.
- 2. T. Lazăr, **G. Moţ**, G. Petruşel, S. Szentesi, *The Theory of Reich's Fixed Point Theorem for Multivalued Operators*, Fixed Point Theory and Applications, Volume 2010 (2010), Article ID 178421.

II. ISI Proceedings

1. A. Petrușel, **G. Moţ**, *Convexity and decomposability in multivalued analysis*, Proc. of the Generalized Convexity / Monotonicity Conference, Samos, Greece, 1999, Lecture Notes in Economics and Mathematical Sciences, Springer-Verlag, 2001, 333-341.

III. Scientific articles published in BDI rated journals

- 1. P. Enghis, **G. Moţ**, *Remarks on spaces with semi-symmetric connections*, The XVIII-th National Conference on Geometry and Topology Oradea-Felix, October 4-7, 1987, Lit. Univ. "Babeş-Bolyai" Cluj-Napoca, 69-72.
- 2. **G. Moţ**, *General convexity structures and multivalued mappings*, Conference on Analyis, Functional Equations, Approximation and Convexity, Held in Honour of Professor Elena Popoviciu on the Occasion of Her 75th Birtday, Cluj-Napoca, Carpatica Publishing House, 1999, 193-196.
- 3. **G. Moţ,** On the allure of conics and quadrics, Proc. of the 8-th Symp. of Math. and its Applic. "Politehnica" Univ. of Timişoara, 1999, 242-248.

- 4. **G. Moţ**, *On star-shaped sets in convex metric spaces*, Proc. of "T. Popoviciu" Itinerant Sem., "Babes Bolyai" Univ. of Clui-Napoca, Srima Publishing House, 2000, 141-146.
- 5. **G. Moţ**, *The allure of the connection spaces*, Proc. of "T. Popoviciu" Itinerant Sem., "Babeş Bolyai" Univ. of Cluj-Napoca, Srima Publishing House, 2001, 143-148.
- 6. **G. Moţ**, *Fractal type operators*, Sem. De la Meilleure Approx., Convexite et Optimization, Srima Publishing House, 2002, 111-124.
- 7. **G. Moţ,** *Partion and allure,* Proc. of "T. Popoviciu" Itinerant Sem., Univ. "Babeş Bolyai" Cluj-Napoca, Ed. Srima, 2002, 193-196.
- 8. **G. Moţ**, A. Petruşel, *Fixed points and game theory*, Intern. J. Pure Applied Math. 14 (2004), 521-530.
- 9. **G. Moţ,** A. Petruşel, *Selection theorems for multivalued operators*, Annals of the Tiberiu Popoviciu Seminar on Functional Equations, Approximation and Convexity, 3 (2005), 151-156.
- 10. **G. Moţ**, A. Petruşel, *Fractals operators for mixed iterated function system*, Annals of the Tiberiu Popoviciu Seminar of Functional Equations, Approximation and Convexity, 4 (2006), 91-100.
- 11. **G. Moţ,** A. Petruşel, *Local Fixed Point Theorems for Graphic Contractions in Generalized Metric Spaces*, Theory and Applications of Mathematics & Computer Science, 8(1), 2018, 1-5.
- 12. **G. Moţ**, A. Petruşel, *On Iseki' strict fixed point theorem*, Linear and Nonlinear Anal. 4 (2018), no. 1. 105–115.
- 13. **G. Mot,** C. L. Mihit, *On Orthogonal Polynomials*, Theory and Applications of Mathematics & Computer Science, 8(2), (2018), 135-142.

E. Publications in extenso, appeared in the volumes of international specialized conferences

- 1. **G. Moţ**, *Applications of the Convexity spaces*, Proceedings of the Scientific Communications Meeting of "Aurel Vlaicu" University, Third Edition Arad 16th-17th of May 1996 Vol. 14A., 51-56.
- 2. **G. Moţ**, *Generalized convexity in metric spaces*, Lit. Univ. "Aurel Vlaicu" Arad 30-31 Octomber 1997, Vol. I, 83-92.
- 3. **G. Moţ**, *On the allure of conics and quadrics*, Proc. of the 8-th Symp. of Math. and its Applic. "Politehnica" Univ. of Timisoara, 1999, 242-248.
- 4. **G. Moţ**, L. Popa, *On quaternions*, Proceedings of the International Symposium "Research and Education in Innovation Era", 5th Edition, Section Matematics and Computer Science, "Aurel Vlaicu" University of Arad Publishing House (2014), 70-77.
- 5. **G. Moţ**, A. Petruşel, *On some multi-valued coincidence problems*, Proceedings of the International Symposium "Research and Education in Innovation Era", 6th Edition, Section Mathematics & Computer Science, "Aurel Vlaicu" University of Arad Publishing House (2016), 1-6.
- 6. **G. Moţ**, A. Petruşel, G. Petruşel, *Fixed Point Problems with Multi-Valued Operators and Applications*, Proceedings of the International Symposium "Research and Education in Innovation Era", 7th Edition, Section Mathematics & Computer Science, "Aurel Vlaicu" University of Arad Publishing House (2018), 12-17.

F. Other papers and scientific contributions

1. **G. Moţ**, The representation of substances and chemical reactions between them with methods of linear algebra, Works of the Scientific Session, May 1992, Vol.I. Mathematics-Computer Science, 58-65 (in romanian).

- 2. **G. Moţ**, *The spin and semisimetric spaces*, "Aurel Vlaicu" University of Arad, Faculty of Engineering, Works of the Scientific Session, May 1992, Vol.I. Mathematics-Computer Science, 51-57 (in romanian).
- 3. P. Enghis, **G. Moţ,** *T-birecurrent quarter-symmetrical connections*, The session of scientific communications of "Aurel Vlaicu" University of Arad, May 1994, Lit. Univ. "Aurel Vlaicu" Arad, 131-134 (in romanian).
- 4. **G. Moţ,** A. Petruşel, *A characterization of the* ε *-chainable generalized metric spaces*, Works of the Scientific Session, Arad, 1994, 135-138.
- 5. **G. Moţ**, *Observations on semi-symmetrical E-connections*, The session of scientific communications of "Aurel Vlaicu" University of Arad, May 1994, Lit. Univ. "Aurel Vlaicu" Arad, 139-144 (in romanian).
- 6. **G. Moţ,** *Convex curves,* Proceedings of the Scientific Communications Meeting of "Aurel Vlaicu" University of Arad, Third Edition, 16th-17th of May 1996, Vol. 14B. Lit. Univ. "Aurel Vlaicu" Arad, 57-60.
- 7. **G. Moţ,** Generalized convexity in metric spaces, Octomber 30-31, 1997 Vol. I, Lit. Univ. "Aurel Vlaicu" Arad, 83-92.
- 8. **G. Moţ,** Gh. Ila, On graphical representations of curves and surfaces using the Matcad program, Annals of "Aurel Vlaicu" University of Arad, Series Mathematics, Fasc. Mathematics-Computer Science, 2000, 125-132 (in romanian).
- 9. **G. Moţ,** Gh. Ila, *On solving linear systems using the Matcad program,* Annals of "Aurel Vlaicu" University of Arad, Series Mathematics, Fasc. Mathematics-Computer Science, 2000, 133-138 (in romanian).
- 10. **G. Moţ**, L. Popa, *Wiews upon liniar spaces of cuaternions*, Proceedings of the Scientific Communications Meeting of "Aurel Vlaicu" University, 28th-30th of May 2002, "Aurel Vlaicu" University of Arad Publishing House, 229-236.
- 11. **G. Moţ**, L. Popa, *Applications of linear algebra in modeling of chemical substances and reactions*, Proceedings of the Scientific Communications Meeting of "Aurel Vlaicu" University, 28th-30th of May 2002, "Aurel Vlaicu" University of Arad Publishing House, 237-240 (in romanian).
- 12. L. Gaga, **G. Moţ**, *Critical thinking and its role in mathematics*, International Symposium of ISJ Arad, CCD Arad "Color, Sound and Education" Arad, Vol I, 62-68, 2013, ISBN 978-606-8345-30-7 (in romanian).

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