

CURRICULUM VITAE

Name: Dragos-Radu Popescu

Position: Associate Professor, University of Bucharest

Date of birth: July 9, 1951

Place of birth: Giurgiu, Romania

Marital status: Divorced, one son (born 1985)

E-mail: dragosradupopescu@yahoo.com

Studies:

May 1990	Ph.D. in Mathematics, University of Bucharest
1974-1975	Postgraduate Studies, University of Bucharest, Certificate of Specialization in Computer Science
1970-1974	University of Bucharest, Honours Diploma(MS) in Mathematics, June 1974

Languages: English, French

Professional activities:

2005-	University of Bucharest, Associate Professor
1993-2005	University of Bucharest, Lecturer
1991-1993	University of Bucharest, Researcher
1981-1991	ICSIT Titan (Bucharest), Researcher and Senior Researcher
1975-1981	Computer-Analyst, Computing Center of CIMUMFS ,
1996- 2008	Member of the Council
1998-	Member of AMS and Society of Romanian Mathematicians
1978, 1979, 1992-1995, 1999	Teacher of the Romanian Team for the International Mathematical Olympiad
1999	Member of the Organizing Committee of the 40 th International Mathematical Olympiad, Bucharest, Romania.

Research activities:

Balance in signed graphs [4, 6, 7, 8, 9, 12, 13, 14, 18]
Maximal nonhamiltoneity [2, 3]
Extremal set theory [16]
Enumerative combinatorics [7, 10, 17]
Combinatorial identities and inequalities [10, 11, 15]
Coverings [1, 5]

Teaching (University of Bucharest):

Combinatorics and Graphs Theory – introductory course
Algorithmic Graphs Theory
Enumerative Combinatorics
Special Chapters in Combinatorics and Graphs Theory

Granturi la care am participat.

- Grant CNCSIS (Contract nr. 17/1998, Tema nr. 23, Cod CNCSU) cu titlul „*Cercetari de combinatorica si teoria grafurilor si aplicatii in informatica*” (1998) – Director de Grant Prof. dr. I. Tomescu.
- Grant CNCSIS (Contract nr. 37116/2000, Tema nr. 56, Cod CNCSU) cu titlul „*Cercetari de combinatorica si teoria grafurilor*” (2000) – Director de Grant Prof. dr. I. Tomescu.
- Din anul 2006 sunt membru al Centrului de cercetare in *Modele de Calcul, Algoritmi si Criptografie* (MOCALC)

Participation in International Scientific Meetings (with given talks):

International Conference on Combinatorics dedicated to Paul Erdos on his eightieth birthday (Keszthely , Hungary , 1993) unde am prezentat lucrarea „*Une methode d’enumeration des cycles negatifs d’un graphe signe*”.

9th International Conference on Discrete Mathematics „*Convexity and Graph Theory*” unde am prezentat lucrarea „*An extention of LYM inequality*”.
(Dortmund, Germany , 2004).

10th International Conference on Discrete Mathematics unde am prezentat lucrarea „*Balance in systems of finite sets with applications*”
(Dortmund, Germany , 2007).

Workshop on ALGEBRA and GRAPH THEORY - School of Mathematical Sciences, GC University, unde am tinut conferintele „*Signed graphs. Basic concepts*” si „*Signed graphs. New results and open problems*”.
(Lahore, Pakistan , 2006)

Workshop Tomescu’65, IMAR, (Bucuresti, Romania, 2007) unde am prezentat lucrarea „*Balance in systems of finite sets with applications*”.

Miscellaneous:

- 3th award to the 11th International Mathematical Olympiad,
Keszthely, Hungary, 1970.
- 2th award to the National Mathematical Olympiad,
Bucharest, Romania, 1970.

LIST OF PUBLICATIONS

Referred mathematical papers

1. Dragos-Radu Popescu: *A covering problem*, Studii si Cercetari Matematice, tom 27, 3, 1975, p.329-344, (in Romanian).

2. Dragos-Radu Popescu: *Nonhamiltonian maximal graphs*, Studii si Cercetari Matematice, tom 28, 3, 1976, p321-341(in Romanian).
3. Dragos-Radu Popescu: *Hamiltonian properties of some classes which generalize the Petersen's graph*, Studii si Cercetari Matematice, tom 31, 1, 1979, p. 77-103(in Romanian).
4. Dragos-Radu Popescu: *Properties of signed graphs*, Studii si Cercetari Matematice, tom 31, 4, 1979, p. 433-452(in Romanian).
5. Dragos-Radu Popescu: *On the partitions of a set*, Studii si Cercetari Matematice, tom 34, 3, 1982, p. 281-296(in Romanian).
6. Dragos-Radu Popescu: *Cycles in signed graphs*, Studii si Cercetari Matematice, tom 43, 3-4, 1991, p. 85-219(in Romanian).
7. Dragos-Radu Popescu: *Une methode d'enumeration des cycles negatifs d'un graphe signe*, Selected papers in honour of Paul Erdos on the occasion of his 80th birthday(Kesztesy, 1993), Discrete Mathematics, 150(1996), no.1-3, p. 337-345.
8. Dragos-Radu Popescu, Ioan Tomescu: *Negative cycles in complete signed graphs*, Discrete Applied Mathematics, 68, 1996p. 145-152 .
9. Dragos-Radu Popescu, Ioan Tomescu: *Bonferroni Inequalities and Negative Cycles in Large Complete Signed Graphs*, Europ. J. Combinatorics, 17, 1996, p 479-483.
10. Dragos-Radu Popescu: *Another approach to the inclusion-exclusion principle*, Revue Roumaine de Mathematiques Pures et Appliquees, tome XLIII, No. 3-4, 1998, p.425-435.
11. Dragos-Radu Popescu, Ioan Duma: *New expressions for the probability density function for the gain of APD*, Proceedings of the 7th Conference on Applied and Industrial Mathematics, CAIM'99, Buletin Stiintific-Universitatea din Pitesti, Seria Matematica si Informatica, Nr. 6, 2000, p.83-91.
12. Dragos-Radu Popescu: *Balance in systems of finite sets*, Analele Universitatii Bucuresti, 48(1999), p. 29-40.
13. Dragos-Radu Popescu: *An inequality on the maximum number of negative cycles in complete signed graphs*, Mathematical Reports, vol.3(53), Janury-April 2001, p. 53-60.
14. Dragos-Radu Popescu: *Inequality for the symmetric difference*, The Hyperion Scientific Journal, Series A, Volume 2, Number 1, 2001, p. 15-18.
15. Dragos-Radu Popescu: *A formula for the development of the permanent of a matrix*, Bulletin Mathematique SSMR de Roumanie, Tome 48(96), No. 4, 2005, 433 – 443.
16. Dragos-Radu Popescu: *An extention of LYM inequality*, Revue Roumaine de Mathematiques Pures et Appliquees, TOME LI, 4, 2006, 473 – 483.
17. Dragos-Radu Popescu: *A new proof for the Cayley's theorem*, Gazeta Matematica B, Nr.9, 2005, p. 431-437.
18. Dragos-Radu Popescu: *Balance in systems of finite sets with applications*, Journal of Universal Computer Science, Vol. 13, No. 11, 2007, pp. 1755-1766.

Citari

Lucrarea [4] este citata in

1. S.J.Kirkland,J.J.Mc.Donald,M.J.Tsatsomeros: *Linear and Sign-Patens wich require a positive eigenvalue*, Linear and Multilinear Algebra,41(3):199-

210,1996.

Lucrarea [8] este citata in

1. Monica Tataram: *Connectivity and Reachability in Signed Networks*, *Journal of Universal Computer Science*, vol. 13, no.11 (2007), 1779-1790.

2. Bekkali M., Zahni D.: *Upper semi-lattice Algebras*, Set Theory, Trends in Mathematics, 29-54, 2006 Birkhauser Verlag Basel/ Switzerland

Lucrarea [9] este citata in

1. M. Deza, J. Rosenberg: *n-semimetrics*, Liens 98-106 (Dec. 1998), Lab. d'Informatique de l'Ecole Normale Supérieure, Paris, France.

Lucrarile [4],[6],[7],[8],[9] mai sunt citate in

1. Th. Zaslavsky: *A Mathematical Bibliography of Signed and Gain Graphs and Allied Areas*, *Electronic Journal of Combinatorics*, *Dynamic Surveys in Combinatorics*, # DS9, 1998.

Mentionam ca lucrarile [4],[6] si [7] sunt citate de cate doua ori, in contexte diferite.

Lucrarea 16 este citata in

1. Mubayi D.: *An intersection theorem for four sets*, *Advances in Mathematics* 2007 vol.215 (no.2)

2. Mubayi D.: *Structure and stability of triangle-free set systems*, *Transactions of the American Mathematical Society* 2007 vol.359 (no.26)

Lucrarea [3] din "Books" (*Combinatorics and graphs theory*, SSMR (Society of Romanian Mathematicians), 2005. (in Romanian)) este citata in

1. Teseleanu George: *New proofs for the p,q – analogue of Chu-Vandermonde's identity*, *Integers* 13 (2013), p.3

Books

1. Dragos-Radu Popescu, Oboroceanu George: *Exercices and Problems in Algebra, Combinatorics and Number Theory* *Combinatorics and Number Theory*, Editura Didactica si Pedagogica, Bucuresti, 1979, (in Romanian)
2. C. Nastasescu, C. Nita, M. Dumitrescu, D. Nitescu, Dragos-Radu Popescu, N. Soare: *Matematica, Textbooks for the Xth grade*, Editura Didactica si Pedagogica, Bucuresti, 2000.
3. Dragos-Radu Popescu: *Combinatorics and graphs theory*, SSMR (Society of Romanian Mathematicians), 2005. (in Romanian)
4. Ioan Tomescu, Dragos-Radu Popescu: *Elemente de matematica discreta, teoria grafurilor si analizacombinatorie*, Editura MATRIX, Bucuresti, 2013 (in Romanian).
5. Dragos-Radu Popescu, Ruxandra Marinescu-Ghemeci: *Combinatorica si Teoria grafurilor prin Exercitii si probleme*, Editura MATRIX, Bucuresti, 2014. (in Romanian).

Miscellaneous:

1. Dragos-Radu Popescu, *Strunjirea suprafetelor torice cu cadrul portal in pozitie retrasa*, Simpozionul de Masini Unelte – Institutul Politehnic Bucuresti, aprilie, 1982.
2. Dragos-Radu Popescu, *Generari de structuri test de masini-unelte*, Simpozionul “Realizari si tendinte in dezvoltarea masinilor-unelte”, I.C.S.I.T.-Titan, 1983.
3. Dragos-Radu Popescu, *Program pentru determinarea automata a traiectoriei rezultate la prelucrarea prin autocopiere pneumatica a lingourilor poligonale*, Sesiunea de Comunicari Stiintifice “Progresele Cercetarii Stiintifice in Domeniul Masinilor Unelte”, Bucuresti, 2-3 iunie 1986, Vol. 2, p. 437-444.
4. Dragos-Radu Popescu, *Algoritm pentru determinarea profilului camei pornind de la curba rolei descrise prin puncte*, Sesiunea de Comunicari Stiintifice “Progresele Cercetarii Stiintifice in Domeniul Masinilor-Unelte”, Bucuresti, 2-3 iunie 1986, Vol. 2, p. 445-448.
5. Dragos-Radu Popescu, *Parcursarea interiorului unei benzi plane printr-un numar minim de segmente*, Conferinta Nationala de Masini-Unelte, CNMI - 86, Bucuresti, 1986, Vol. 1, p. 631-633.
6. Dragos-Radu Popescu, Toma Constantina, *Limbajul DRAGON pentru modelarea si desenarea 3D a corpurilor*, lucrare realizata in cadrul unui contract desfasurat in anii 1986-1990 la SIMTEX S.A.