



Universitatea „Vasile Alecsandri” din Bacău

ROMÂNIA  
MINISTERUL EDUCAȚIEI NAȚIONALE  
UNIVERSITATEA „VASILE ALECSANDRI” DIN BACĂU



## ****Listă de lucrări****

### ****A. Teza de doctorat****

*Contribuții la aproximarea funcțiilor folosind operatori liniari*, 2008, Universitatea “Babeș-Bolyai” din Cluj-Napoca, Facultatea de Matematica-Informatica

### ****B. Cărți și capitole în cărți****

1. Carmen-Violeta Muraru, *Metode Numerice. Seminarii în Matlab*, Ed. Edusoft, Bacău 2005, ISBN 973-87655-44;
2. Bogdan Pătruț, Carmen-Violeta Muraru, *Aplicații în C si C++*, Ed. Edusoft, Bacău 2006, ISBN 973-8934-05-2;
3. Carmen- Violeta Muraru, *Matlab- Ghid de studiu*, Ed. Edusoft, Bacau 2006,ISBN(10) 973-8934-35-4, ISBN (13) 978-973-8934-35-1
4. Carmen- Violeta Muraru, *Contribuții la aproximarea funcțiilor folosind operatori liniari*, Doctoral Thesis, Ed. Edusoft Bacau 2009, ISBN 978-973-1882-15-4 ;
5. Valer Niminet, Carmen-Violeta Muraru, *Geometrie Computațională cu aplicații în Matlab*”, Ed. PIM, 2010, ISBN 978-605-520-667-0
6. Carmen Violeta Muraru, Alina Mihaela Patriciu *Metode Numerice cu aplicații în Matlab* Ed. PIM, 2010, ISBN 978-6-6-520-935-4
7. Nechita E., Muraru C.V.., Talmaciu M., *Advanced Bio-Inspired Computational Methods*, Ed. Univ. „Petru-Maior”, Editors: Călin Enăchescu, Barna Iantovich, Florin Filip, Part IV „Ant Colony Optimization”, ISBN 978-973-7794-77-2, *Mechanisms in social insect societies and their use in optimization. A case study for trail laying behaviour* (capitol de carte)
8. Muraru Carmen Violeta (co-author), *Modern Paradigms in Computer Science and Applied Mathematics : A Handbook for PhD Students and Researchers*, Akademische Verlagsgemeinschaft München, Patrut, Bogdan [Ed] ; Crisan, Gloria-Cerasela [Ed.], ISBN 978-3-86306-757-1, 2011;
9. Carmen Violeta Muraru, *Metode Numerice*, Ed Alma Mater, ISBN 978-605-527-167-8, 2011
10. Carmen Violeta Muraru, Elena Nechita, *Informatică Economică- Note de curs*, Ed. Alma Mater, ISBN 978-606-527-220-0, 2012
11. Carmen Violeta Popescu (Muraru), Acu Ana Maria, Gloria Cerasela Crișan, Elena Nechita, *Statistics and Applications. A Computational Perspective.*, Ed Lambert Academic Publishing, Eds. C.V. Popescu (Muraru), G.C. Crișan

12. Muraru (Popescu) C.V, Furdu I., Acu A.M., *The influence of computers and Informatics on Mathematics and its teaching (capitol de carte)*, Casa Cărții de Știință, Cluj, 2016, ISBN 978-606-17-0978-6
13. Ioana Boghian, Muraru (Popescu) C.V, Roxana Ardeleanu, *Responsible Online Ethical Teaching in Higher Education During the COVID-19 Pandemic*, capitol de carte, *Ethical Use of Information Technology in Higher Education*, Ed.Springer, pg 195-209, 2021

### **C. Articole/studii în extenso, publicate în reviste din fluxul științific internațional principal**

#### **a) Lista publicate in reviste cotate/indexate ISI**

1. Ogün Doğru, Carmen Violeta Muraru, *Statistical approximations by a Stancu type bivariate generalization of Meyer-Konig and Zeller type operators*, Mathematical and Computer Modelling (ISI), vol. 48, issues 5-6, September 2008, 961-968
2. Nechita E., Muraru C.V, Talmaciu M, *A bayesian approach for the assessment of risk probability. Case study for digital risk probability*, Environmental Engineering and Management Journal, 11(12), 2249-2256, 2012
3. Carmen-Violeta Muraru, Ana Maria Acu, *Approximation Properties of Bivariate Extension of  $q$ -Bernstein–Schurer–Kantorovich operators*, Results in Mathematics, Volume: 67 Issue: 3-4 Pages: 265-279 Published: JUN 2015 ;
4. Dan Bărbosu, Carmen-Violeta Muraru, *Approximating B-continuous functions using GBS operators of Bernstein–Schurer–Stancu type based on  $q$ -integers*, Applied Mathematics and Computation, Volume 259, 15 May 2015, Pages 80–87
5. Manea L.R., Bertea A.P., Nechita E., Popescu (Muraru) C.V., Sandu I. (2016) *Mathematical model of the electrospinning process, Part I*. Revista de chimie, 67 (7), 1284-1289, 2016
6. Manea L.R., Bertea A.P., Nechita E., Popescu (Muraru) C.V., Sandu I., *Mathematical model of the electrospinning process, Part II. Effect of the technological parameters on the electrospun fibers diameter*, Revista de Chimie, 67 (8), 2016, 1607-1612 , 2016
7. Ana-Maria Acu, Carmen Violeta Muraru, Daniel Florin Sofonea, Voichita Adriana Radu, *Some approximation properties of a Durrmeyer variant of  $q$ -Bernstein–Schurer operators*, Mathematical Methods in the Applied Sciences, 39 (18), 5636-5650, 2016
8. Dan Bărbosu, Ana Maria Acu, Carmen Violeta Muraru, *On certain GBS-Durrmeyer operators based on  $q$ -integers*, Turkish Journal of Mathematics, Volume: 41 Issue: 2 , 368-380 , 2017
9. Dan Bărbosu, Carmen Violeta Muraru, Ana-Maria ACU, *Some Bivariate Durrmeyer operators based on  $q$ -integers* , Journal of Mathematical Inequalities, 11(1), 59-75, 2017
10. Acu, Ana-Maria; Muraru Popescu , Carmen Violeta, *Certain approximation properties of Srivastava-Gupta operators*, Journal of Mathematical Inequalities, 12(2), 2018, 583-595
11. Acu, Ana-Maria; Muraru Popescu, Carmen Violeta, Adriana Voichita Radu, *On the monotonicity of  $q$ -Schurer-Stancu type polynomials*, Miskolc Mathematical Notes, 19(1), 2018, 19-28
12. Acu, Ana-Maria ; Dogru, Ogun , Muraru (Popescu) Carmen Violeta; Radu, Voichita Adriana, *APPROXIMATION PROPERTIES OF CERTAIN BERNSTEIN-STANCU TYPE OPERATORS*, JMI, septembrie 2019, Volume: 13, Issue: 3, Pages: 687-702

13. Acu, Ana Maria; Acar, Tuncer; Muraru, Carmen-Violeta, Radu, Voichita Adriana, *Some approximation properties by a class of bivariate operators*, MATHEMATICAL METHODS IN THE APPLIED SCIENCES, Volume: 42, Issue: 16, Pages: 5551-5565, nov. 2019
14. Muraru, Carmen; Dogru, Ogun; Gulsun, Aslihan, *A-Statistical L-p approximation properties of an integral variant of a general positive linear operators*, Annals of Functional Analysis, Volume: 11 Issue: 3 Pages: 761-779 Published: JUL 2020
15. Boghian I, Venera C., Popescu (Muraru) C. V., Mătă L, *Game-based learning. Using board games in adult education*, JOURNAL OF EDUCATIONAL SCIENCES & PSYCHOLOGY Vol: 9 Issue: 1 , Pages: 51-57 Published: 2019
16. Topliceanu, L , Muraru, CV , Furdu, I , Puiu, PG , *Study concerning the damping of pressure wave propagation in adiabatic evolution*, Scientific Study and Research-Chemistry and Chemical Engineering Biotechnology Food Industry Volume 22 (1) Pages 89-105, 2021
17. Gupta,V., Muraru, C.P (Popescu)., Radu, V.A., *Convergence of Certain Hybrid Operators*, Rocky Mountain Journal of Mathematics, 51(4) , IF 0.568, 2021
18. Birou, M.M., Muraru, C.V. Popescu , Radu, V.A., *Convergence of certain Baskakov operators of integral type*, Symmetry 2021, Special Issue "New Directions in Theory of Approximation and Related Problems", 13(9), <https://doi.org/10.3390/sym13091747>, ISSN 2073-8994, 2021, IF 2.7
19. Vijay Gupta, Ali Aral, Carmen-Violeta Muraru Popescu, *Modification of exponential type operators preserving exponential functions connected with  $x^3$*  , Mediterranean Journal of Mathematics, 18 (5), ISSN 1660-5446, IF 1.4

**b. Lucrari publicate in reviste cotate BDI**

1. Carmen Violeta Muraru, *Some remarks on theory of interpolation*, Studii și Cercetări Științifice, ser. Mathematica, 13(2003), 79-88, Bacău;
2. Carmen Violeta Muraru, *On the monotonicity of Schurer type polynomials*, Carpathian Journal of Mathematics, 21(2005), 89-94, Baia Mare;
3. Carmen Violeta Muraru, *Kantorovich-Szász bivariate operators*, Proceedings of International Conference on Mathematics and Informatics, ICMI45, Bacău, Romania, 2006, 169-175, Scientific Studies and Researches, Mathematics serie, 16(2006), Supliment;
4. Carmen Violeta Muraru, *Applications of divided differences in study of linear and positive operators*, Scientific Studies and Researches, Mathematics serie, 16(2006), Bacău , 131-140;
5. Carmen Muraru, *On a class of bivariate Mirakjan-Szász type operators*, Journal of Approximation Theory and Applications (2007)

6. Carmen Muraru, *On the sequence of Kantorovich type operators*, International Journal of Pure and Applied Mathematics, 45(2008), 439-445
7. C. V. Muraru , V. Numinet, *On a bivariate generalized Boolean Sum type operator*, Scientific Studies and Researches, Mathematics serie, 18 (153-160), 2008;
8. V. Numinet, C.V.Muraru, *Canonical nonlinear connection of lagrangian nonholonomic mechanical systems*, Scientific Studies and Researches, Mathematics serie, 18(173-180), 2008;
9. A.M. Acu, A. Rafiq, C.V. Muraru, *The remainder term of some quadrature formulae*, Scientific Studies and Research. Series Mathematics and Informatics, ISSN 2067 –3566, 19 (1) ,5-15, 2009
10. C.V.Muraru, *Note on q-Bernstein- Schurer operators*, Studia UBB, Mathematica, LVI(2), 1-7, 2011
11. C.V. Muraru, *On a Problem of Fitting Data Using Bezier Curves*, Broad Research in Artificial Intelligence and Neuroscience, Volume 1, Issue 2, ISSN 2067-3957 ,127-132, 2010
12. C.V.Muraru, *On a weighted statistical approximation properties of q-Schurer*, SSRMI 20(1), 171-178, 2010;
13. C.V. Muraru, V. Numinet, *On the statistical approximation properties of q-Schurer* SSRMI, 21 (1), 167-174, 2011
14. V. Numinet, C.V. Muraru, *Sub-Riemannian structures associated with a Lagrange generalized metric*, SSRMI, 21(1), 179-184, 2011
15. C.V. Muraru, Acu A. M., *Some approximation properties of a Schurer-Bernstein operators on q-integers*, General Mathematics, 20 (5), 2012, 61-70
16. V.J. Inglezakis, V. Nedeff, M. Panainte, I. Caraman, C. Muraru, M. Dram, L. Focariu, V. C. Venetis, P.Coutsikos, *Producers and distributors survey on green products in Romania*, Buletinul Institutului Politehnic din Iasi, Chimie si Inginerie Chimică, Tomul LVIII (LXII) Fasc. 3, 29-40, 2012
17. Muraru C V, *Note on the q-Stancu -Schurer operators*, Miskolc Mathematical Notes, ,14(1), 191-20, 2013
18. Muraru C.V., Acu Ana, *Some approximation properties of q-Durrmeyer-Schurer operators*, SSRSMI, 23(1), 77-84, 2013
19. Acu Ana, Sofonea F., Muraru C.V, *Gruss and Ostrowski type inequalities and their applications*, SSRSMI , 23(1), 5-14, 2013
20. Acu Ana Maria, Sofonea Florin, Muraru Carmen Violeta, *Aspecte didactice privind utilizarea softului GeoGebra in rezolvarea problemelor de programare liniara*, Procedings al Conferinței Cercetare și Practica în Didactica Modernă, Conferința anuală de didactică, Alba-Iulia, ISSN 2344-4142, ISSN-L 2344-4142., 456-464, 2013.
21. Carmen Violeta Popescu, *Considerations on a new class of linear and positive operators*, Annals of Dunărea de Jos University of Galați, Mathematics, Physics, Theoretical Mechanics, 2067-2071, Fascicle II, Year VI (XXXVII), No 2, 2014
22. Carmen Violeta Popescu (Muraru), Dorel Ureche, Camelia Ureche, Elena Nechita *A statistical model for estimation of ichthyofauna quality based on water parameters in Oituz basin*, Transylv. Rev. Syst. Ecol. Res., 17.1 (2015), 83-94, 2015

**D. Publicații în extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate**

1. Cerasela Crișan, Muraru Carmen, *The study of the parameters of Ant system*, Proceedings of International Symposium of Young Researchers, ASE Moldova, ISBN 978-9975-75-319-1, pg. 36-39, Chișinău, Rep. Moldova, 2005;
2. CarmenVioleta Muraru, *Remarks on knot inserting of a B-spline curve using Matlab*, Proceedings of International Symposium of Young Researchers, ASE Moldova, ISBN 978-9975-75-371-2, 54-57, Chișinău, Rep. Moldova, 2006;
3. Carmen Violeta Muraru, *On a class of bivariate operators*, Proceedings of International Conference on Numerical Analysis and Theory Approximation, NAAT 2006, Cluj-Napoca, Romania, ISBN 973-686-961-X, 305-311(eds. O. Agratini, P. Blaga);
4. Alina Baboș, Ana Maria Acu, Carmen-Violeta Muraru, *Cubature Formulas on a Triangle with One Curved Side*, The 19th International Conference The Knowledge-Based Organization, 13-15 iunie 2013, Sibiu, “Nicolae Bălcescu” Land Forces Academy Publishing House, Conference Proceedings 3,pg 13-18
5. Carmen-Violeta Muraru, Ana Maria Acu, Alina Baboș, *On a modified SCHURER-STANCU operator*, The 19 th International Conference, The Knowledge--Based Organization, 13-15 iunie 2013, Sibiu, “Nicolae Bălcescu” Land Forces Academy Publishing House, Conference Proceedings 3, pg 108-113
6. C.V.Popescu (Muraru), *Web 2 resources for teaching Matlab*, International Conference on Social Media on Academia-Reseach and Teaching-SMART 2014, Timișoara, SEP. 15-21, Pg. 79-82/indexata ISI 2016

Nume și prenume,  
Popescu (Muraru) Carmen-Violeta

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Semnătura,