

Lect. univ. dr. DEAC DAN STELIAN
Department : Mathematics and Informatics
The Faculty of Exact Sciences
"Aurel Vlaicu" University of Arad

LIST OF SCIENTIFIC WORKS

1. *PhD thesis:*

2009 **Western University of Timisoara**, elaboration and support of the doctoral thesis in the Mathematical field "*Geometric methods for the study of some economic systems*" under the scientific leadership of prof. univ. dr. Mircea Craioveanu

2. *Books and chapters of books:*

[1] Vladislav, T., **Deac, D.**, "*Complemente de matematică pentru studenții facultăților cu profil economic*". Vol.I, "Vasile Goldiș" University Press, Arad 2000, ISBN 973-9328-61-X.

[2] S. Nădăban, **D. Deac**, (2024). Fuzzy Functional Analysis—A General View. In: Balas, V.E., Dzemyda, G., Belciug, S., Kacprzyk, J. (eds) Decision Making and Decision Support in the Information Era. Studies in Systems, Decision and Control, vol 534. Springer, Cham. https://doi.org/10.1007/978-3-031-62158-1_17

3. *Articles published in journals from the main stream with international recognition –*

ISI

[1] S. Dzitac, H.Oros, **D. Deac**, S. Nadaban, *Fixed Point Theory in Fuzzy Normed Linear Spaces: A General View*. INTERNATIONAL JOURNAL OF COMPUTERS COMMUNICATIONS & CONTROL Online ISSN 1841-9844, ISSN-L 1841-9836, Volume: 16, Issue: 6, Month: December, Year: 2021 Article Number: 4587, <https://doi.org/10.15837/ijccc.2021.6.4587>.

[2] Nădăban, S., **Deac, D.**, *Nonstandard Fuzzy Sets: A General View*. Intelligent Methods Systems and Applications in Computing, Communications and Control. ICCCC 2022. Advances in Intelligent Systems and Computing, vol 1435, pp 208–218. Springer, Cham. https://doi.org/10.1007/978-3-031-16684-6_17

4. *Articles published in journals from the main stream with international recognition*

indexed in databases

- [1] Schebesch, K., **Deac, D.**, „*Innovation Clusters: Social Learning and Bussines Incubation*”. Zilele Academice, Arad, 2011, nr 21/2011, partea 1 a revistei „Studia Universitatis Vasile Goldiș”, p. 73-82, ISSN 1584-2339.
- [2] **Dan Deac**, Titus Petrila, „*Mathematical and numerical model for blood flow in large vessels with some pathology*”, Lucrare prezentată în plen la Lucrările Conferinței internaționale ”Zilele Academice Arădene”, 14 -17 mai 2014 , Arad, ”Vasile Goldiș” University Press, secțiunea: Present and prospects in life sciences research (biological science). Studia Universitatis “Vasile Goldiș”, Seria Științele Vieții Vol. 24, issue 2, 2014, pp.265-270, ISSN: 1584-2363, e-ISSN: 1842-7863, ISSN-L: 1584-2363.
- [3] **Deac D.**, Schebesch K.B., *Market Forecasts and Client Behavioral Data:Towards Finding Adequate Model Complexity*, Studia Universitatis „Vasile Goldiș” Arad, Economics Series, Volume 28, Issue 3/2018, pp. 50-76, ISSN 1584-2339, ISSN online 22285-3065.
- [4] **Deac, D.**, *Modele economice prin sisteme de ecuații cu diferențe*, Studia Universitatis 6/1997, ISBN 973-9328-07-05, Ed. Universitară „Vasile Goldiș”, Arad, 1997.
- [5] **Deac, D.**, *Considerații asupra dinamicii masei monetare*, Studia Universitatis 9/2000, p. 345-352, ISSN: 1453-103X, Ed. Universitară „Vasile Goldiș” , Arad, 2000.
- [6] **Deac, D.**, Danciu, L., „*Model matematic privind experiența practică și formarea capitalului uman*” Zilele Academice, Arad, 2006, nr 16/2006, vol. I, p.332-338, al revistei „Studia Universitatis Vasile Goldiș”, Arad. ISSN 1584-2339.
- [7] **Deac, D.**, Opreș, D., *The geometry of fractional osculator bundle of higher order on \mathbb{R} , Applications in Mechanics and Economics*, Prezentată la „ The Conference on Differential Geometry: Lagrange and Hamiltonian Spaces”, Sept 3-8, 2007, Iași. Apărută în nr 19/2009 partea a-III-a, p.398-404, al revistei „Studia Universitatis Vasile Goldiș”, Arad. ISSN 1584-2339.
- [8] **Deac, D.**, Danciu, L., „*Analiza unui model de creștere economică. Modelul bisectorial bunuri- educație*”. Zilele Academice, Arad, 2009, nr 19/2009 al revistei „Studia Universitatis Vasile Goldiș”, p. 96-101. ISSN 1584-2339.

- [9] Danciu, L., **Deac, D.**, „*Utilizarea modelelor informatice pentru realizarea studiilor previzionale*”. Zilele Academice, Arad, 2009, nr 19/2009, partea a-III-a, a revistei „Studia Universitatis Vasile Goldiș”, p. 405-411. ISSN 1584-2339.
- [10] Fărcaș, P., **Deac, D.**, “*Managementul portofoliilor de acțiuni cotate la bursa de valori București și analiza legăturilor statistice ale variației cotațiilor.*”. Zilele Academice, Arad, 2010, nr 20/2010 al revistei „Studia Universitatis Vasile Goldiș”, p. 167-177. ISSN 1584-2339.
- [11] Schebesch Klaus B., **Deac Dan S.:** „*The dynamics of unemployment and job creation using a time-delayed model*”. Ovidius University Annals Series: Civil Engineering, 16 (2014), p. 129-142, ISSN 1584-5990
- [12] Remeș E., Schebesch K.B., Remeș C., **Deac D.**, *Specific Aspects of Unregistered Unemployment in the Western Part of Romania*, Studia Universitatis „Vasile Goldiș” Arad, Seria Științe Economice, Vol.4/2016 ISSN 1584-2339, ISSN online 22285-3065.

5. Articles published in the volumes of internationally recognized scientific events

- 1) Deac, D.**, *Despre compacitatea relativizată*, Proceedings of the communications meeting of „Aurel Vlaicu” University. Third edition, volume 14B, ISBN 973-97708-0-0, Arad, 1996
- 2) Deac, D.**, *Some fractional dynamical systems which describe economic processes*, Proceedings of The International Conference „Differential Geometry and Dynamical Systems” (DGDS-2007), pp 61-67, Geometry Balkan Press 2008, ISSN 1454-511X.
- 3) Deac, D.**, Neamțu, M., Opriș, D., *The dynamical economic model with discrete time and consumer sentiment*, Applied Sciences Papers Fac. Of Appl. Sci. Politehnica Bucharest, DGDS Journal Papers, Volume 11, 95-104, 2009. ISSN 1454-511X.
- 4) Schebesch, K.**, Suciuc, M., **Deac, D.**, Ivanovici M., „*Business incubators and collective learning for sustainable innovation: From concepts to first steps in computational modelling*”. , GIRA 2010 Conference, 9-10 September, Lisbon Portugal.
- 5) Schebesch, K.**, **Deac, D.**, “*Knowledge about replenishable resources: the dynamics of unemployment and job creation*”. Third International Conference on Modelling and Development of Intelligent Systems, October 10-12, 2013 Sibiu, România, pp.119-126, ISSN 2067-3965
- 6) Schebesch Klaus B.**, **Deac Dan S.:** „*The dynamics of unemployment and job creation using a time-delayed model*”. Ovidius University Annals Series: Civil Engineering, 16 (2014), p. 129-142, ISSN 1584-5990

7) Nicoleta Sârghi, Mihaela Neamțu, **Dan Stelian Deac** „A dynamic model for unemployment control with distributed delay” *Methods in Finance and Business Administration*, Proceeding of the International Business Administration conference, Tenerife Spain, 1(2014), p.42-48. ISBN 978-960-474-360-5.

6. Papers published in other recognized journals

1) Balazs Albert, Vitalie Vacaras, **Dan Deac**, Titus Petrila, „A global condition for the rupture risk of an Abdominal Aortic Aneurysm (AAA) obtained within a mathematical and numerical model for blood flow in large vessels”, *Jokull Journal*, Vol 64, No 3, pp. 339-352, 2014, ISSN: 0449-0576. <http://jokulljournal.com/issue.php?v=64&i=3>

2) Balazs Albert, Vitalie Vacaras, **Dan Deac**, Titus Petrila, „Non-Newtonian Mathematical Model and Numerical Simulations for the Blood Flow in Capillary Vessels”, *Jokull Journal*, Vol 64, No. 5, pp. 13-22, 2014, ISSN: 0449-0576. <http://jokulljournal.com/issue.php?v=64&i=5>

3) Balazs Albert, Vitalie Vacaras, **Dan Deac**, Titus Petrila, „Large caliber blood vessel pseudoaneurysm following prosthetic surgery. Mathematical model and numerical considerations”, *Jokull Journal*, Vol 64, No. 7, pp. 215-229, 2014, ISSN: 0449-0576. <http://jokulljournal.com/issue.php?v=64&i=7>

4) **Dan Deac**, Titus Petrila, „Mathematical and numerical model for blood flow in large vessels with some pathology”, Paper presented in plenary at the Proceedings of the International Conference "Academic Days Arad", May 14-17, 2014, Arad, "Vasile Goldiș" University Press, the section: Present and prospects in life sciences research (biological science). *Studia Universitatis "Vasile Goldiș", Life Sciences Series* Vol. 24, issue 2, 2014, pp.265-270, ISSN: 1584-2363, e-ISSN: 1842-7863, ISSN-L: 1584-2363.

7. Articles published in the volumes of national scientific events

1) **Deac, D.**, Benghia, O. *Submulțimi relativ compacte*, *Studia Universitatis* 5/1996, p. 281-285, ISBN 973-578-207-3, Ed. Mirton, Timișoara, 1996.

2) **Deac, D.**, *Modele economice prin sisteme de ecuații cu diferențe*, *Studia Universitatis* 6/1997, ISBN 973-9328-07-05, Ed. Universitară „Vasile Goldiș”, Arad, 1997.

3) **Deac, D.**, *Considerații asupra dinamicii masei monetare*, *Studia Universitatis* 9/2000, p. 345-352, ISSN: 1453-103X, Ed. Universitară „Vasile Goldiș”, Arad, 2000.

4) **Deac, D.**, Opreș, D., *The geometry of fractional osculator bundle of higher order on \mathbb{R} , Applications in Mechanics and Economics*, Prezentată la „The Conference on Differential Geometry: Lagrange and Hamiltonian Spaces”, Sept 3-8, 2007, Iași. Appeared in nr 19/2009 part III, p.398-404, „Studia Universitatis Vasile Goldiș”, Arad. ISSN 1584-2339.

8. Research / development-innovation projects based on contract / grant

P1: Member (expert mathematician) in the strategic project team POSDRU/111/4.1/S/91816 *Cercetarea și prognozarea pieței muncii din vestul României. Evidențierea șomajului neînregistrat din județul Arad*, in which the forecasting of the labor market was done by an international research team (2012-2015)

P2: Western Region Training Expert within the Project co-financed by the European Social Fund within POSDRU, “ *Microcreditarea, componenta fundamentală a antreprenoriatului în mediul rural*” ID 135486(09.2015-11.2015).

Date:

Lect. univ. dr. Deac Dan Stelian

20.09.2024

