

Curriculum Vitae



Yaroslav Vykylyuk

Full Professor, Dr.Sc. (computer science)
Prize-winner of the President of Ukraine award for young scientists in 2017

28.04.1977

Vice-rector on science and international relations
PHEI "Bukovinian university"

Contact

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Education

- 2013 **Professor**
PHEI "Bukovinian university"
 - 2011 **Doctor of Science (Computer Science – mathematical modeling and calculation methods)**
National University "L'viv Polytechnic"
Dissertation: *Development of mathematical simulation methods and tools for tourist industry objects*
 - 2007 **Associate Professor**
Chernivtsi Trade and Economics Institute
 - 2004 - 2005 **Bachelor of Economics**
Chernivtsi Trade and Economics Institute
 - 1999 - 2002 **PhD, Candidate of Science (Physics & Mathematics)**
Chernivtsi National University
Dissertation: *Band structure, chemical bond and optical properties of $Ga_xIn_{1-x}P$, $InAs_xSb_{1-x}$, $InSb_{1-x}Bi_x$ semiconductor solid solutions*
 - 1998 - 1999 **Master, theoretical physics**
Chernivtsi National University
 - 1994 - 1998 **Bachelor, theoretical physics**
Chernivtsi National University
 - 1992 - 1994 Chernivtsi State Physics and Mathematics lyceum
 - 1984 - 1992 Secondary schools
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Job

2020	- present	Professor Yuriy Fedkovych Chernivtsi National University
2018	- present	Distinguished Professor Institute of Laser and Optoelectronics Intelligent Manufacturing of Wenzhou University, China
2017	- present	Professor Lviv Polytechnic National University
2016	- present	Visiting professor European Politechnic Institute, Kunovice, Czech Republic
2010	- present	Professor PHEI "Bukovinian university"
2010	- present	Vice rector on science and international relations PHEI "Bukovinian university"
2019	- 2020	Professor Kujawy And Pomorze University in Bydgoszcz, Poland
2019	- 2020	Professor Uzhhorod National University
2019	- 2020	Professor University of the State Fiscal Service of Ukraine
2019	- 2020	Professor School of Social Sciences & Languages (SSL) VIT University, Vellore, Tamil Nadu, India
2019		Visiting professor (under Erasmus+ mobility of staff program) School of Economics and Management in Public Administration in Bratislava, Slovakia
2019		Visiting professor (under Erasmus+ mobility of staff program) Vasile Goldiș Western University of Arad, Romania
2018		Visiting professor (under Erasmus+ mobility of staff program) Ștefan cel Mare University of Suceava, Romania
2017		Visiting professor (under Erasmus+ mobility of staff program) Vasile Goldiș Western University of Arad, Romania
2016	- 2017	Professor Ternopil Ivan Puluj National Technical University
2016		Visiting professor (under Erasmus+ mobility of staff program) Vasile Goldiș Western University of Arad, Romania
2016		Visiting professor (under Erasmus+ mobility of staff program) School of Economics and Management in Public Administration in Bratislava, Slovakia
2013	- 2014	Perform duties of Rector PHEI "Bukovinian university"
2012	- 2014	Dean of Computer System and Technology department PHEI "Bukovinian university"

2013	Visiting professor Ural Federal University, Russia
2013	Visiting professor Sankt Petersburg branch of the Finance University under the Government of the Russian Federation
2013	Visiting professor Maykop State Technological University, Russia
2007 - 2010	Post Doctoral researcher National University "L'viv Polytechnic"
2002 - 2007	Associate Professor Chernivtsi Trade and Economics Institute
1999	Head of the Programming Department LTD Elektronmash, Chernivtsi
1996 - 1999	Programmer Engineer LTD Elektronmash, Chernivtsi
1994 - 1996	PC Operator LTD Elektronmash, Chernivtsi

Internships

2016	Salzburg University, Austria
2013	Sankt Petersburg branch of the Finance University under the Government of the Russian Federation

Research Interests

Data Science, Applied System Analysis, Mathematical Modeling and Decision Making of Complex Dynamic Systems (socio-economic, geographical, tourist and crisis systems) using by Artificial Intelligence Technology, DataMining, Big Data, Parallel Calculations, Statistics, Econometrics, Econophysics and other Advanced Mathematical Methods with implementation into information, WEB and geographic information systems

Experience

- Published more than **210** scientific papers
- Published **10** monographs and books
- Organized **six** International conferences ITEL (Information Technologies, Economics and Law) (300-400 participants)
- Concluded **15** agreements on cooperation between foreign universities
- Organized the **seven** exchange of students under Erasmus+ program from Slovakia, Romania, Serbia and Russia Universities.
- Managed of websites creation: scientific journal, international conference, university and its departments
- Managed of creation IT systems: international conference, international student competitions.

Member of Scientific Councils

- Academic Council on protection DrSc and PhD thesis D 047.104.09, National University of Water and Nature Management, Rivne
- European Politechnic Institute, Kunovice, Czech Republic
- Academic Council on protection DrSc and PhD thesis D 35.052.05 National University "L'viv Polytechnic"

Scientific membership

- Collection of Scientific Articles. Economic Science. ISSN 2219-5378 (Chief Editor)

- Crisis Management (Slovakia)
 - MEST Journal, ISSN 2334-7058
 - Journal of the Geographical Institute "Jovan Cvijik" SASA. (Serbia) ISSN 0350-7599
 - Public Administration and Regional Development (Slovakia), ISSN 1337-2955
 - Cywilizacja Techniczna (Poland)
 - Member of the board of Ukrainian Scientific and Educational IT Society
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Protected PhD students

- 01.03.2019 Husak O.M., **PhD**
Dissertation: *Information technology for early detection of forest fires using unmanned aerial vehicles*
05.13.06 - Information technologies
- 01.03.2013 Hats B.M., **PhD**
Dissertation: *Information system of forecasting infrastructure development in tourism infrastructure*
05.13.06 - Information technologies
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Teaching

- Systems and methods of decision making
 - Neural networks
 - Fuzzy Logic
 - Data Mining
 - Databases and knowledge base
 - Fractals
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Skills

Programming languages

ASP.NET MVC, C#/++, Matlab & Simulink, Python (TensorFlow, SciKit-Learn, Pandas, Django, etc), Visual Basic

Software

Adobe Photoshop, Deductor, Final Cut Pro, Mac OS, Microsoft Office, Microsoft Project, Microsoft Visual Studio, Microsoft Windows, Pinnacle Studio

The mathematical apparatus

Big Data, Cellular automata, Data Mining, Data Science, Econometrics, Ekonophysics, Fractal analysis, Fuzzy logic, Genetic algorithms, Molecular dynamics, Neural networks, Optimization methods, Parellel calculations, Simulation, Statistics

Languages

Ukraine, English, Russian

Hobby

Art gymnastic, Kayaking, Extreme

21.10.2020



Yaroslav Vykylyuk

Publications

Monographs

- # Title of scientific work
1. **Yaroslav Vykylyuk, Valeriia Savchuk** *Mobile information technologies for safe tourist trip* // LAP LAMBERT Academic publishing, ISBN: 978-613-9-83909-4, 2018, 65P.
 2. **Vykylyuk Y., Savchuk V., Pasichnyk V. V., Kunanets N. E.** *Information Technologies of Personalized Tourist Accompaniment* // LAP LAMBERT Academic publishing, ISBN: 978-613-9-98327-8, 2018, 85P.
 3. **Artemenko O., Vykylyuk Y, Gats B. [etc.] ; chief red V. Pasichnyk** *Simulation information technologies of tourism and informal-communication systems development based on physical analogies* // Monograph. Lwiw : «New World – 2000», 2015, 334P.
 4. **Manylich M.I., Stolyarov V.F., Vykylyuk Y.I.** *Components of the regional economic development* // Monograph. Chernivtsi: Books - XXI, 2014, 156P.
 5. **Vykylyuk Y.** *Mathematical modeling in the tourism industry* // Monograph. Chernivtsi: Books - XXI, 2010, 340P.
 6. **Schkola I.M., Vdovichen A., Orechovska T., Korolchuk O., Kyfyak V., Gomba L., Grytyfuk E., Polyanko V., Vasylenko L., Gut L., Golovachuk T., Burdyak O., Butyrska I., Burdyak O., Kravchuk R., Babinska O., Kozmenko I., Moskaljov V., Chychun V., Koval N., Vykylyuk Y., Savycka L., Popovych O., Popovych N., Mychailovska O., Kozmenko A.** *Development strategy in the nonproduction sphere of the region* // Monograph. Chernivtsi Trade and Economics Institute KNTEU, 2008, 288P.
 7. **Schkola I.M., Orechovska T., Korolchuk O., Kyfyak V., Butyrska I., Burdyak O., Gut L., Roshylo V., Polyanko V., Kozmenko V., Gomba L., Vasylenko L., Vykylyuk Y., Lyakhov S., Sevryukavo M.** *The development of tourism business in the region* // Monograph. Chernivtsi Trade and Economics Institute KNTEU, 2007, 292P.
 8. **Yavkin V., Rudenko V., Korol O., Krachilo M., Gostyuk M., Grynyovo O., Bojko I., Nikorych L., Bryk S., Savranchuk L., Penkin I., Kyfyak N., Bugko G., Burka V., Burka I., Ivanunyk V., Nikorych L., Rudenko V., Bryzhak P., Vykylyuk Y., Tokmakova O., Yacenko M., Tsenda M., Tsenda M.** *Problems of Geography and Tourism Management* // Monograph. Chernivtsi National University., 2006, 260P.

Tutorials

- # Title of scientific work
1. **Vykylyuk Y., Kaninsky R., Pasichnyk V.** *Modeling of Complex System* // Manual. Lviv: Publishing house "New World - 2000", 2017, 404P.
 2. **Sokolovskiy Y., Shabatura Y., Vykylyuk Y., Kroshnyi I., Dendyuk M.** *Modeling systems in GPSS WORLD* // Manual. Lviv: "New World - 2000", 2014, 288P.

Papers

- # Title of scientific work
1. **Bogdan Gats, Yaroslav Vykylyuk, Artur Horbovyi** *Methods for calculation the spatial distribution of the territory membership to the urbanized based on the hybrid neural network* // Journal of the Geographical Institute "Jovan Cvijic" SASA, 2020, **V70**, #2, p.115-128
 2. **Moinak Maiti, Yaroslav Vykylyuk, Darko Vuković** *Cryptocurrencies chaotic co-movement forecasting with neural networks* // Internet Technology Letters, 2020, **V3**, #3, p.1-6

3. **Savchuk V., Vykyuk Y., Pasichnyk V., Holoshchuk R., Kunanets N.** *The Architecture of Mobile Information System for Providing Safety Recommendations During the Trip* // Advances in Computer Science for Engineering and Education II. ICCSEEA 2019. Advances in Intelligent Systems and Computing. Springer, Cham, 2020, **V938**, p.493-502
4. **Darko Vukovic, Yaroslav Vykylyuk, Natalia Matsiuk, Moinak Maiti,** *Neural network forecasting in prediction Sharpe ratio: Evidence from EU debt market* // Physica A: Statistical Mechanics and its Applications, 2019, in print
5. **Yaroslav Vykylyuk, Milan M. Radovanović, Boško Milovanović, Milan Milenković, Marko Petrović, Dejan Doljak, Slavica Malinović Miličević, Natalia Vuković, Aleksandra Vujko, Nataliia Matsiuk, Saumitra Mukherjee** *Space Weather and Hurricanes Irma, Jose and Katia* // Astrophysics and Space Science, 2019, **V364**, #154, p.1-15
6. **Milan M. Radovanović, Yaroslav Vykylyuk, Milan T. Stevančević, Milan Đ. Milenković, Dejana M. Jakovljević, Marko D. Petrović Slavica B. Malinović Miličević, Natalia Vuković, Aleksandra Đ. Vujko, Anatolij Yamashkin, Petro Sydor, Darko B. Vuković, Miroslav Škoda** *Forest fires in Portugal — Case study, 18 June 2017* // Thermal Science, 2019, **V23**, #1, p.73-86
7. **Slavica Malinović Miličević, Yaroslav Vykylyuk, Milan M. Radovanovic, Marko D. Petrovic** *Long-term erythemal ultraviolet radiation in Novi Sad (Serbia) reconstructed by neural network modelling* // International Journal of Climatology, 2018, **V38**, #8, p.3264-3272
8. **Yaroslav Vykylyuk, Petro Sydor, Valeriya Savchuk** *Mobile tourist information system with safety recommender component* // MEST Journal, 2018, **V6**, #2, p.158-166
9. **Skoda M., Vykylyuk Y.** *Detecting creative accounting practices and their impact on the quality of accounting information* // Collection Of Scientific Articles. Economic Sciences, 2018, **V14**, p.59-72
10. **Vykylyuk, Y., Radovanović, M.M., Stanojević, G.B., Milovanović, Boš., Leko, T., Milenković, M., Petrović, M., Yamashkin, A.A., Pešić, Ana. Milanović., Jakovljević, D., Miličević, Slavica. Malinović** *Hurricane genesis modelling based on the relationship between solar activity and hurricanes II* // Journal of Atmospheric and Solar-Terrestrial Physics, 2018, **V180**, p.159-164
11. **Yaroslav Vykylyuk, Milan M. Radovanović, Milan Milenković, Darko B. Vuković, Nataliya Matsiuk** *Forecasting of forest fires in the USA based on ANFIS models* // Public administration and regional development. School of Economics and Management of Public Administration, 2017, **VVXIII**, #2, p.106-118
12. **Vladimir A. Srećković, Desanka M. Šulić, Veljko Vujčić, Darko Jevremović, Yaroslav Vykylyuk** *The Effects Of Solar Activity: Electrons In The Terrestrial Lower Ionosphere* // Journal of the Geographical Institute "Jovan Cvijić" SASA, 2017, **V67**, #3, p.221-233
13. **Yaroslav Vykylyuk, Milan Radovanović, Boško Milovanović, Taras Leko, Milan Milenković, Zoran Milošević, Ana Milanović Pešić, Dejana Jakovljević** *Hurricane genesis modelling based on the relationship between solar activity and hurricanes* // Natural Hazards, 2017, p.1043-1062
14. **Yaroslav I. Vykylyuk, Valeriy K. Yevdokymenko, Ihor V. Yaskal** *The proportions and rates of economic activities as a factor of gross value added maximization in transition economy* // Scientific Annals of Economics and Business, 2016, **V63(1)**, p.55-72
15. **Milan R. Radovanovic, Yaroslav Vykylyuk, Milan Milenkovic, Darko B. Vukovic, Nataliya Matsiuk** *Application of ANFIS models for prediction of forest fires in the USA on the basis of solar activity* // Thermal Science, 2015, **V19**, #5, p.1649-1661

16. **Milan M. Radovanovic, Yaroslav Vykylyuk, Slavica B. Malinovic-Milicevic, Dejana M. Jakovljevic, Milovan R. Pecelj** *Modelling of forest fires time evolution in the USA on the basis of long term variations and dynamics of the temperature of the solar wind protons. Online first* // Thermal Science, 2015, **V19**, #Supplement2, p.437-444
17. **Milan M. Radovanovic, Yaroslav Vykylyuk, Taras Leko** *Finding the functional relationship between the forest fires occurrence and the characteristics of solar activity based on Data Mining* // Mathematical Machines and Systems, 2015, #2, p.71-96
18. **Milan M. Radovanovic, Yaroslav Vykylyuk, Milan Milenkovic, Ana Jovanovic, Darko Vukovic, Milan Stevancevic, Nataliya Matsiuk, Taras Leko** *Conceptual modelling of forest fires flashes by DataDining ontology-based (part 2)* // System Research and Information Technologies, 2015, #3, p.62-71
19. **Milan M. Radovanovic, Yaroslav Vykylyuk, Milan Milenkovic, Ana Jovanovic, Darko Vukovic, Milan Stevancevic, Nataliya Matsiuk, Taras Leko** *Conceptual modelling of forest fires flashes by DataDining ontology-based (part 1)* // System Research and Information Technologies, 2014, #4, p.111-120
20. **Vykylyuk Y., Yevdokymenko V., Yaskal I.** *Modeling of recreation and tourist attractions development using soft computing methods* // International Journal of Business Quantitative Economics and Applied Management Research, 2014, **V1**, #7, p.11-25
21. **Vykylyuk Y., Yevdokymenko V.** *Formation of strategy reproduction of economic activities in the context of dynamic growth of value added and overcome inter-regional differentiation based on SoftComputing* // Scientific Bulletin of Bukovinian State Finance and Economics University. Economics: Collected Works., 2014, **V26**, p.8-35
22. **Yaroslav Vykylyuk, Valeriy Yevdokymenko** *New methods of Soft Computing in regional development strategy formation* // MEST Journal, 2014, **V2**, #2, p.274-284
23. **Gats B, Bryzhak P., Vykylyuk Y** *Information system of forecasting infrastructure development in tourism* // Journal of the Geographical Institute "Jovan Cvijic" SASA, 2013, **V63**, #3, p.279-286
24. **Milan Radovanovic, Yaroslav Vykylyuk, Ana Jovanovic, Darko Vukovic, Milan Milenkovic, Milan Stevancevic, Matsiuk, N** *Examination of the correlations between forest fires and solar activity using hurst index* // Journal of the Geographical Institute "Jovan Cvijic" SASA, 2013, **V63**, #3, p.23-31
25. **Vykylyuk Y., Rotar A., Yevdokymenko V.** *Formation of strategy reproduction patterns of economic activity in the regions based SoftComputing in the context of accelerating the growth of the gross regional product* // Collection Of Scientific Articles. Economic Sciences, 2013, #9, p.99-116
26. **Vykylyuk Yaroslav** *Simulation of spatial form of urban systems by diffusion methods (part 2)* // Journal of the Geographical Institute "Jovan Cvijic" SASA, 2013, **V63**, #2, p.67-77
27. **Vykylyuk Yaroslav** *Simulation of spatial form of urban systems by diffusion methods (part 1)* // Journal of the Geographical Institute "Jovan Cvijic" SASA, 2013, **V63**, #1, p.89-100
28. **Yaroslav Vykylyuk, Darko Vukovic, Ana Jovanovic** *Forex prediction with neural network: USD/EUR currency pair* // Actual Problems of Economics, 2013, #10, p.261-273
29. **Yevdokymenko V., Vykylyuk Y., Andriyenko V.** *On the question of modeling of recreational and tourist attractions* // Scientific Journal [Bukovyna State Finance and Economics University]. Economic science., 2013, **V2**, p.241-256

30. **Val' O., Chaika L., Ostapov S., Yanushavsky S., Vykylyuk Y., Shakleina I.** *Research and development of a key stream generator based on cellular automata combinations* // Journal of Chernivtsi National University, 2012, **V3**, #2, p.6-11
31. **Shahovska N., Vykylyuk Y.** *Application of storage space and data in decision-making systems* // Journal of National University "Lviv Polytechnic". Series: Information Systems and Networks, 2012, #744, p.28-40
32. **Shahovska N., Vykylyuk Y.** *Method of forming response to a request to the data space* // Journal of Chernivtsi National University, 2012, **V3**, #1, p.68-74
33. **Shahovska N., Vykylyuk Y.** *Storage and space data - information foundation of decision-making* // Electrical and Computer Systems, 2012, #08(84), p.93-99
34. **Vykylyuk Y., Artemenko O.** *Designing and building an expert system of analysis recreational attractiveness* // Scientific Bulletin of National Forestry University Ukraine, 2012, #22.5, p.331-337
35. **Vykylyuk Y., Gats B.** *Ontology creation of information systems for forecasting the development of infrastructure in tourism* // East European Journal of advanced technologies, 2012, #1/2(55), p.19-23
36. **Vykylyuk Y.** *Current status of mathematical modeling in the tourism industry (Review)* // Journal of Chernivtsi National University, 2011, **V2**, #4, p.22-29
37. **Vykylyuk Y., Gats B.** *Using the cellular model for forecasting urban form tourist settlement* // Selection and processing of information, 2011, #35(111), p.122-127
38. **Vykylyuk Y., Gats B.** *Review of the current state of information support functioning of the tourism industry* // Journal of National University "Lviv Polytechnic". Series: Information Systems and Networks, 2011, #715, p.59-68
39. **Vykylyuk Y., Gats B.** *Cellular-Automaton Simulation of fractal structures of urban systems* // Journal of Vinnitsa Polytechnic Institute, 2011, #3, p.117-121
40. **Vykylyuk Y., Lyakhov S.** *The method of determining flow of tourists using the "modified gravity model" based on fuzzy logic* // System Research and Information Technologies, 2010, #3, p.46-59
41. **Vykylyuk Y.** *Stochastic fractal Brownian reliefs and fuzzy logic as the basis of mathematical modeling of the spatial organization of tourist settlements* // Mathematical Machines and Systems, 2010, #4, p.135-144
42. **Vykylyuk Y., Ivanuschak N.** *Optimization of consumer choice of tourist services on the basis of spin Ising model* // Scientific Bulletin of Chernivtsi University: Scientific Papers of: Computer Systems and Components, 2010, #663, p.258-262
43. **Yaroslav I. Vykylyuk** *Mathematical Modeling of Complex Social Economic Objects Based on Analogies with Physical Fractals* // Journal of Automation and Information Sciences, 2010, #42, p.53-67
44. **Vykylyuk Y.** *Mathematical Modeling of Complex Social Economic Objects Based on Analogies with Physical Fractals* // Problems of Control and Informatics, 2010, #5, p.52-65
45. **Vykylyuk Y.** *Mathematical modeling of the spatial organization of settlements by stochastic fractal Brownian surfaces and fuzzy logic* // Artificial Intelligence, 2010, #2, p.114-123
46. **Vykylyuk Y., Gats B.** *Methods of calculating and constructing spatial fields probability of urbanization* // Journal of National Technical University KPI, 2010, #31, p.42-48
47. **Vykylyuk Y., Artemenko O.** *Comparative analysis of methods of Fuzzy Logic and analytic hierarchy in problems of determining the attractiveness* // Journal of National Technical University KhPI, 2010, #21, p.18-29

48. **Vyklyuk Y.** *Methods of fractal geometry and fuzzy logic as a basis for mathematical modeling of the spatial organization of tourist settlements* // Bionics intelligence, 2010, #1(72), p.109-117
49. **Vyklyuk Y.** *The impact of on competitiveness growth dynamics attractors in modeling socioeconomic systems* // Physical modeling and information technology, 2010, #11, p.39-48
50. **Vyklyuk Y., Artemenko O., Bryzhak P.** *Using the methods of fuzzy logic to determine the recreational attractiveness of administrative units* // East European Journal of advanced technologies, 2010, #2/4(44), p.4-10
51. **Vyklyuk Y., Ivanuschak N.** *Application of of semantic networks based on spin Ising model to obtain the decision support systems* // Scientific Bulletin of Chernivtsi University: Scientific Papers of: Computer Systems and Components, 2009, #479, p.98-102
52. **Vyklyuk Y., Gats B.** *Using the cellular automata for modeling and deformation of dendritic growth* // Scientific Bulletin of Chernivtsi University: Scientific Papers of: Computer Systems and Components, 2009, #479, p.151-156
53. **Sopin M., Vyklyuk Y.** *Management of social and economic systems using noise* // System Research and Information Technologies, 2009, #4, p.77-85
54. **Shahovska N., Vyklyuk Y., Ugryn D., Kis' Y.** *The strategic concept of corporate data management technologies in tourism as managing the unstructured enterprise information* // Journal of National University "Lviv Polytechnic". Series: Information Systems and Networks, 2009, #653, p.207-214
55. **Pasichnyk V., Vyklyuk Y., Ivanuschak N.** *The econophysics methodology of as a basis for information systems development and automation of social and economic structures* // Journal of National University "Lviv Polytechnic". Series: Information Systems and Networks, 2009, #653, p.61-70
56. **Vyklyuk Y.** *Fractal properties and growth dynamics of attractors by "random rain" for the modeling of socio-economic systems* // Mathematical Machines and Systems, 2009, #4, p.169-178
57. **Vyklyuk Y., Gats B.** *Simulation financial abuse in tourism* // Scientific Bulletin of National Forestry University Ukraine, 2009, #19.9, p.248-255
58. **Vyklyuk Y., Goryn O.** *Simulation, analysis and optimization of the ski resort using the methods of simulation modeling of discrete events* // Journal of National University "Lviv Polytechnic". Series: Automation, Measurement, Control, 2009, #639, p.234-242
59. **Vyklyuk Y., Gats B.** *Simulation modeling of a tourist complex on the example of cash flows* // Collection Of Scientific Articles of Sevastopol National University of Nuclear Energy and Industry, 2009, #3(31), p.174-185
60. **Vyklyuk Y., Artemenko O.** *Method of determining the aggregate index of tourist attractiveness based on fuzzy logic* // Complex Systems and Processes, 2009, #1, p.61-72
61. **Vyklyuk Y., Artemenko O.** *Calculation of recreational attractiveness of areas using fuzzy logic* // Computing, 2009, **V8**, #2, p.109-118
62. **Vyklyuk Y.** *Extrapolation methods as part IS for predicting phenomena of stagnation.* // Mathematical modeling, 2009, #1(20), p.27-32
63. **Vyklyuk Y., Artemenko O.** *Methods of constructing density potential field of recreational attractiveness* // Artificial Intelligence, 2009, #2, p.151-160
64. **Vyklyuk Y., Saveliev V.** *Approaches to create models of data tourism businesses Ukraine* // Journal of Vinnitsa Polytechnic Institute, 2009, #3, p.55-61

65. **Vyklyuk Y.** *Modeling of fluctuations growth and socio-economic segmentation of objects in the fractal growth in fuzzy potential field* // Information Technology and Computer Engineering, 2009, #1, p.23-32
66. **Vyklyuk Y., Artemenko O.** *Evaluating of the effectiveness of tourism advertising campaign based on fuzzy algorithm constructing recreational potential.* // System technology, 2009, #2(61), p.91-102
67. **Vyklyuk Y.** *Fractal properties and growth dynamics of attractors by "random rain"* // Collection Of Scientific Articles. Economic Sciences, 2009, #5, p.223-241
68. **Vyklyuk Y. Gats B.** *Approximation imitation of cash motion in the tourist complex* // Journal of Lviv State Institute of advanced technologies and management. "Actual problems of the market economy." Materials of III International scientific-practical conference "Social and economic development of the national economy in the context of European integration." - Lutsk: VIEM TSIZRVD, 2009, 2009, p.298-306
69. **Vyklyuk Y., Gats B.** *Possibilities of formalization of corruption in the tourism industry* // Proceedings of Donetsk National Technical University. Series: problem modeling and design automation of dynamic systems, 2008, #7(150), p.224-233
70. **Vyklyuk Y., Artemenko O.** *Using the fuzzy logic to determine the recreational potential of the territory* // Journal of National University "Lviv Polytechnic". Series: Information Systems and Networks, 2008, #631, p.45-54
71. **Vyklyuk Y., Ivanuschak N.** *Econophysics as part of information systems for automate the socio-economic structures (Review)* // Scientific Bulletin of Chernivtsi University: Scientific Papers: Physics. Electronics.: Thematic Issue "Computer Systems and Components", 2008, #423, p.130-137
72. **Vyklyuk Y.** *Application of fuzzy logic to determine the recreational potential of the territory* // Journal of National University "Lviv Polytechnic". Series: Information Systems and Networks, 2008, #621, p.69-77
73. **Vyklyuk Y.** *Application of the modified method of "random rain" for predicting the fractal structure of settlements* // Selection and processing of information, 2008, #29(105), p.114-120
74. **Vyklyuk Y., Voroshan A., Rubanets E.** *The benchmarking institutional matrix of regional economy* // Scientific Bulletin of National Forestry University Ukraine, 2008, #18.7, p.264-269
75. **Vyklyuk Y.** *Cartographic modeling of recreational potential Euroregion "Upper Prut" on the basis of fuzzy logic* // Selection and processing of information, 2008, #28(104), p.135-142
76. **Vyklyuk Y.** *Application of "modified gravity model" to optimize recreation systems* // Journal of National University "Lviv Polytechnic". Series: Information Systems and Networks, 2008, #610, p.63-69
77. **Vyklyuk Y.** *Methodology for predicting socio-economic processes of fractal crystal growth in fuzzy potential field* // Journal of Ternopil State Technical University, 2008, #2, p.153-162
78. **Vyklyuk Y.** *Fractal models of crystal growth in a fuzzy potential field for predicting socio-economic processes* // Collection Of Scientific Articles of Sevastopol National University of Nuclear Energy and Industry, 2008, #2(26), p.237-248
79. **Vyklyuk Y.** *Prediction of geometrical structure of settlements by the modified diffusion-limited aggregation in fuzzy potential field.* // Information Technology and Computer Engineering, 2008, #1, p.61-68

80. **Vyklyuk Y.** *A method for segmentation of social and economic facilities in the fractal growth in fuzzy potential field* // Scientific Bulletin of National Forestry University Ukraine, 2008, #18.4, p.271-284
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