

CURRICULUM VITAE



Omar Purtukhia

Associate Professor
Head of Departments of Mathematics

E-mail: omar.purtukhia@tsu.ge,
o.purtukhia@gmail.com
Phone (office): +995 32 2304786
Phone (mobile): +995 577 244511

Education:

- 1975 – 1980** Ivane Javakhishvili Tbilisi State University (TSU), Faculty of Mathematics and Mechanics
June, 1980 University Diploma in Mathematics, Ivane Javakhishvili Tbilisi State University
1980 – 1984 Post Graduate student of Tbilisi State University and Moscow State University
December, 1984 Ph.D. in Probability Theory and Mathematical Statistics, Moscow State University

Professional activities:

- 2017 --** TSU, Faculty of Exact and Natural Sciences, Chief specialist at the Office of Academic Process Management
2012 -- TSU, Faculty of Exact and Natural Sciences, Head of Department of Mathematics
2009 -- 2017 TSU, Faculty of Exact and Natural Sciences, Senior specialist at the Office of Academic Process Management and Scientific Researches
2006 -- TSU, Faculty of Exact and Natural Sciences, Associate professor
2006 -- 2007 TSU, Chief of Educational-Scientific Mathematical Institute
2000 -- Senior staff scientist of A. Razmadze Mathematical Institute
1990 -- 2006 TSU, Senior staff scientist Laboratory of stochastic analysis and statistical decisions
1985 -- 2000 Staff scientist of A. Razmadze Mathematical Institute

Teaching Courses:

For bachelors: Probability Theory; Probability Theory and Mathematical Statistics for Economists; Bases of the theory of stochastic processes; Bases of the Martingale Theory; Statistics for sociologists and psychologists.

For undergraduates: Probability, Statistics, Stochastic Processes; Stochastic Analysis; The Malliavin Calculus; Theory of Stochastic Differential Equations; Mathematical Statistics for Economists.

For graduate students: Statistical Methods of Researches; Applied Statistics; Stochastic Analysis.

Research Interests

The Cauchy problem for second order stochastic parabolic equation. The filtering problem of multidimensional diffusion processes. Stochastic Differential equations. The stochastic anticipative and nonanticipative analysis. Malliavin Calculus. Martingale Representation Theorems. Stochastic Financial Mathematics. Hedging problem of European Options.

Scientific leadership and evaluation

- 1990 -- 2016** The head of 10 undergraduates who received a master's degree in mathematics at the TSU
2005 -- 2009 Supervisor of the post-graduate student, who became PhD in mathematics at the TSU
2010 – 2017 Scientific evaluation of the 5 dissertation work
2017 -- Head of the Master's program in Applied Mathematics

Scientific Projects

- 2013 – 2016** Shota Rustaveli National Science Foundation, Georgia, no. FR/308/5-104/12, Manager and

- Key perssonnel
- 2013 -- 2015** Shota Rustaveli National Science Foundation, Georgia, no. FR/69/5-104/12, Key Personnel
- 2009 -- 2011** Georgian National Scientific Foundation, Grant no. 09-383-3-106, Manager and Key personnel
- 2009 – 2011** Georgian National Scientific Foundation, Grant no. 09-471- 3-104, Key perssonnel
- 2006 -- 2009** Georgian National Scientific Foundation, Grant no. 337/07, 06-223-3-104, Coordinator and Key perssonnel
- 2005 -- 2006** Research Grant of Georgian Ministry of Education and Science, no. 37, Key perssonnel
- 2004 -- 2005** Research Grant of Georgian National Academy of Sciences, no. 1.10.04, Key perssonnel
- 2003 -- 2004** Research Grant of Georgian National Academy of Sciences, no. 1.10.03, Key perssonnel
- 2002 -- 2003** Research Grant of Georgian National Academy of Sciences, no. 1.10.02, Key perssonnel
- 2001 -- 2002** Research Grant of Georgian National Academy of Sciences, no. 1.10.01, Key perssonnel
- 2000 -- 2001** Research Grant of Georgian National Academy of Sciences, no. 1.10.00, Key perssonnel
- 1997 -- 1999** Project of INTAS, Grant no. 97-30204, Key perssonnel
- 1996 -- 1997** Project of Eurasia Foundation, Grant no. C 96-0030, Key perssonnel



Membership of the organization / association

- 2017 --** Deputy Editor-in-chief of the scientific-popular journal “Mathematics”
- 2016 --** Member of the Mathematical Dissertation Board of Georgian Technical University
- 2016 --** Member of Editorial Board of Reports of Enlarged Session of the Seminar of I. Vekua Institute of Applied Mathematics
- 2016 -- 2017** TSU, Member of the Academic Council
- 2015 --** Vice-president of the Georgian Statistical Association
- 2012 --** Board member of the Georgian Mathematical Union
- 2011 --** Board member of the Georgian Statistical Association
- 2010 – 2017** Accreditation Expert of the National Center for Educational Quality Enhancement of Georgia
- 1991 --** Member of the Georgian Statistical Association (GSA)
- 1990 --** Member of the Georgian Mathematical Union (GMU)
- 1986 --** Member of the Bernoulli's International Society



Certificate and Awards

- 01.10.1978--30.10.1980** I.Chavchavadze State Institute of Foreign Languages Two year courses (English language). Certificate # 223, 20.11.1980;
- 29.02.2008--03.03.2008** Trainers Training (ctc Empowering People for Change). Certificate supported by Coradid Netherlands;
- 2009 -- 2010** Trainer of Georgian Association of Teachers;
- 2012** Award of honor of the president



Participation in International Conferences (Last 10 years)

- 2017** 31st International Enlarged Sessions of the Seminar of Ilia Vekua Institute of Applied Mathematics. Tbilisi, Georgia, April 19-21, 2017
- 2016** 7th International Joint Conference of the Georgian Mathematical Union & Georgian Mechanical Union. Batumi, Georgia, September 4-9, 2016
- 2015** International Conference on Probability Theory and Statistics. Tbilisi, Georgia, September 7-12, 2015
- 2015** The First SDSU – Georgia STEM WORKSHOP on Nanotechnology and Environmental Sciences. Tbilisi, Georgia, September 4-5, 2015
- 2015** 6th International Conference of Georgian Mathematical Union. Batumi, Georgia, July 12-16, 2015
- 2015** International Conference “Probability, Reliability and Stochastic Optimization” (PRESTO-2015). Kyiv, Ukraine, April 7-11, 2015
- 2014** 5th International Conference of Georgian Mathematical Union. Batumi, Georgia, September 8-12, 2014

- 2014** Caucasian Mathematics Conference CMC I. Tbilisi, Georgia, September 5-6, 2014
- 2013** 21st International Conference "Problems of Management of Safety of Difficult Systems". Moscow, Russia, December 17-19, 2013
- 2013** 4th International Conference of Georgian Mathematical Union. Batumi, Georgia, September 9-15, 2013
- 2013** International Conference: "Modern Problems in Applied Mathematics", TSU-95 & VAM-45. Tbilisi, Georgia, September 4-7, 2013
- 2012** 20th International Conference "Problems of Management of Safety of Difficult Systems". Moscow, Russia, December 19-21, 2012
- 2012** 3rd International Conference of Georgian Mathematical Union. Batumi, Georgia, September 2-9, 2012
- 2012** 4th International Conference "Problems of Cybernetics and Informatics". PCI'2012. Baku, Azerbaijan, September 12-14, 2012
- 2011** 19th International Conference "Problems of Management of Safety of Difficult Systems". Moscow, Russia, December 21-23, 2011
- 2011** 2nd International Conference of Georgian Mathematical Union. Batumi, Georgia, September 15-19, 2011
- 2011** International Conference: "Continuum Mechanics and Related Problems of Analysis" dedicated to the Anniversary Georgian National Academy of Sci. and the 120 Birthday of N. Muskhelishvili. Tbilisi, Georgia, September 9-14, 2011
- 2011** 58th World Statistics Congress of the International Statistical Institute. Dublin, Ireland, August 21-26, 2011
- 2011** International Conference: Problems of Modern Mathematics (MMP'2011). Karshi, Uzbekistan, April 22-23, 2011
- 2011** 20th International conference of "Problem of management of safety of difficult systems". Moscow, Russia, December 21-23, 2011
- 2010** 18th International Conference "Problems of Management of Safety of Difficult Systems". Moscow, Russia, December 19-21, 2010
- 2010** International Conference Modern Stochastics: Theory and Applications II. Kyiv, Ukraine, September 7-11, 2010
- 2010** The Third International Conference "Problems of Cybernetics and Informatics". PCI'2010. Baku, Azerbaijan, September 6-9, 2010
- 2009** International Conference "Stochastic Analysis and Random Dynamical Systems". Lviv, Ukraine, June 14-20, 2009
- 2009** 8th International FAM'2009 Conference. Krasnoyarsk, Russian, April 24-26, 2009
- 2008** International Conference on Modern Problems in Applied Mathematics. Tbilisi, Georgia, October 7-9, 2008
- 2008** The Second International Conference "Problems of Cybernetics and Infotmatics". PCI'2008. Baku, Azerbaijan, September 10-12, 2008
- 2007** International Conference dedicated to the 100th anniversary of academician I. Vekua's birth, Tbilisi, 2007

Other Activities

- 2017 --** Scientific Secretary of the City Scientific Seminar on Probability and Statistics
- 2016 --** Member of Scientific Committee of International Conference of Extended Sessions of I. Vekua Institute of Applied Mathematics and Head of Section of Probability Theory and Mathematical Statistics
- 2015** Deputy Chairman of the Organizing Committee of International Conference on Probability Theory and Statistics. Tbilisi, Georgia, September 7-12, 2015
- 2012 --** Member of Scientific Committee of Annual International Conference of the Georgian Mathematical Union
- 2008 - 2015** Member of Organizing Committee of Extended Sessions of I. Vekua Institute of Applied Mathematics and Head of Section of Probability Theory and Mathematical Statistics

2008 --	Member of the Scientific Committee of International Conference on Modern Problems of Applied Mathematics and chair of the Section of Probability theory and Mathematical Statistics
2007 --	Member of the publishing board of the faculty
2007	Member of International Scientific Conference Organizing Committee dedicated to the 100th anniversary of academician I. Vekua's birth, Tbilisi, 2007
2003	Member of Organizing Committee of International Scientific Conference dedicated to the 100th anniversary of academician A. Kolmogorov, Tbilisi, 2003

Selected Publications

1. O. Glonti, **O. Purtukhia**. On One Integral Representation of Functionals of Brownian Motion. *SIAM J. Theory of Probability & Its Applications*, **61**, **1**, pp. 133-139 (2017).
2. H. Livinska, **O. Purtukhia**. Stochastic Integral Representation of One Stochastically Non-smooth Wiener Functional. *Bulletin of TICMI*, **20**, **2**, pp. 11-23 (2016).
3. **O. Purtukhia**. On the smoothness of conditional mean of some stochastically nonsmooth functionals. *Proceedings of I. Vekua Institute of Applied Mathematics*, **66**, pp. 52-57 (2016).
4. **O. Purtukhia**. Stochastic Integral Representation of One Nonsmooth Brownian Functional. *Bulletin of the Georgian National Academy of Sciences*, **10**, **3**, pp. 17-26 (2016).
5. O. Glonti, **O. Purtukhia**. Об одном интегральном представлении броуновского функционала. *Теория вероятностей и ее применения*, **61**, **1**, pp. 158-164 (2016).
6. B. Dochviri, **O. Purtukhia**. Martingale integral representation and its application in financial mathematics. *The first SDSU – Georgia STEM workshop on Nanotechnology and Environmental Sciences. Tbilisi, September 4-5, TSU*, pp.23-24 (2015).
7. O. Glonti, V. Jaoshvili, **O. Purtukhia**. Hedging of European Option of Exotic Type. *Proceedings of A. Razmadze Mathematical Institute*, **168**, pp. 25-40 (2015).
8. **O. Purtukhia**. Martingale Representation of Wiener functional. *Reports of Enlarged Session of the Seminar of I. Vekua Institute of Applied Mathematics*, **29**, pp. 115-118 (2015).
9. B. Dochviri, O. Glonti, **O. Purtukhia**, G. Sokhadze. Radon-Nikodym derivative of solution of nonlinear equations with random right side and applications. *Transactions of National Academy of Sciences of Azerbaijan*, **XXXIV**, **4**, pp. 45-52 (2014).
10. O. Glonti, **O. Purtukhia**. Hedging of European Option of Integral Type. *Bulletin of the Georgian National Academy of Sciences*, **8**, **3**, pp.4-13 (2014).
11. O. Glonti, **O. Purtukhia**. Clark's Representation of Wiener functional and Hedging of the Barrier Option. *Bulletin of the Georgian National Academy of Sciences*, **8**, **1**, pp. 32-39 (2014).
12. O. Glonti, **O. Purtukhia**. Hedging of One European Option of Integral Type in Black-Scholes Model. *International Journal of Engineering and Innovative Technology (IJEIT)*, **4**, **5**, November, pp. 51-61 (2014).
13. P. Babilua, B. Dochviri, **O. Purtukhia**. Об оптимальной остановке стандартного марковского процесса. *Труды XXI международной конференции «Проблемы управления безопасностью сложных систем»*, Москва, pp. 373-378 (2013).
14. P. Babilua, B. Dochviri, **O. Purtukhia**. Об оптимальной остановке и вариационных неравенствах. *Труды XXI международной конференции «Проблемы управления безопасностью сложных систем»*, Москва, pp. 367-372 (2013).
15. P. Babilua, B. Dochviri, **O. Purtukhia**, G. Sokhadze. On the optimal stopping of partially observable processes. *Reports of Enlarged Sessions of the Seminar of I. Vekua Institute of Applied Mathematics*, **27**, pp. 5-9 (2013).
16. B. Dochviri, **O. Purtukhia**, G. Sokhadze, G. Tkemaladze. On One Stochastic Model of a Chemical Reaction. *Bulletin of the Georgian Academy of Sciences*, **7**, **2**, pp. 92-96 (2013).
17. P. Babilua, B. Dochviri, **O. Purtukhia**. On the Convergence of Payoffs. *The 4th International Conference "Problems of Cybernetics and Informatics". September 12-14, 2012, Baku, Azerbaijan*, **III**, pp. 178-179 (2012).
18. V. Jaoshvili, **O. Purtukhia**. Sobolev-Poincare Type Inequalities for Poisson Functionals. *The 4th International Conference "Problems of Cybernetics and Informatics". September 12-14, 2012, Baku, Azerbaijan*, **III**, pp. 173-177 (2012).

19. **O. Purtukhia.** Sobolev and Logarithmic Sobolev Type Inequalities. *Applied Mathematics, Informatics and Mechanics - AMIM*, **17, 2**, pp. 26-39 (2012).
20. E.Nadaraya, **O. Purtukhia**, G.Sokhadze. On the Cramer-Rao inequality in an infinite dimensional space. *Proceedings of A.Razmadze Mathematical Institute*, **160**, pp. 121-134 (2012).
21. P. Babilua, B. Dochviri, **O. Purtukhia.** О задаче редукции в оптимальной остановке по неполным данным. *Труды XX международной конференции «Проблемы управления безопасностью сложных систем»*. Москва, pp. 349-352 (2012).
22. V. Jaoshvili, **O. Purtukhia.** Ito type formula for Poisson anticipating integral. *Reports of Enlarged Session of the Seminar of I. Vekua Institute of Applied Mathematics*, **25**, pp. 103-108 (2011).
23. B.Dochviri, E.Nadaraya, **O. Purtukhia**, G.Sokhadze. On one problem of Stefan. *Applied Mathematics, Informatics and Mechanics - AMIM*, **16, 1**, pp. 3-7 (2011).
24. P. Babilua, B. Dochviri, **O. Purtukhia.** On one problem of statistical estimation. *Proceedings of the 19th International Conference "Problems of Management of Safety of Difficult Systems"*. Moscow, pp. 384-387 (2011).
25. P. Babilua, B. Dochviri, **O. Purtukhia.** On One Problem of Disruption. *Proceedings of the 19th International Conference "Problems of Management of Safety of Difficult Systems"*. Moscow, pp. 78-82 (2011).
26. P. Babilua, B. Dochviri, **O. Purtukhia**, G.Sokhadze. Об одной задаче различения гипотез. *Труды научной конференция «Проблемы современной математики»*. Карши, Узбекистан, pp. 77-80 (2011).
27. B. Dochviri, **O. Purtukhia**, G.Sokhadze. On the modeling of the standard options pricing process. *Proceedings of the Sciences Conference "Problems of Modern Mathematics"*. Karshi, Uzbekistan, pp. 7-10 (2011).
28. P. Babilua, B. Dochviri, **O. Purtukhia.** On the pricing of American option. *Proceedings of the 18th International Conference "Problems of Management of Safety of Difficult Systems"*. Moscow, pp. 155-159 (2010).
29. P. Babilua, B. Dochviri, **O. Purtukhia.** On the pricing of European option. *Proceedings of the 18th International Conference "Problems of Management of Safety of Difficult Systems"*. Moscow, pp. 146-154 (2010).
30. V. Jaoshvili, **O. Purtukhia.** The Stein's identity and Poisson functionals. *Reports of Enlarged Session of the Seminar of I. Vekua Institute of Applied Mathematics*, **24**, pp. 113-118 (2010).
31. B.Dochviri, E.Nadaraya, **O. Purtukhia**, G.Sokhadze. On one problem of Hypotheses testing. *Reports of Enlarged Session of the Seminar of I. Vekua Institute of Applied Mathematics*, **24**, pp. 31-34 (2010).
32. V. Jaoshvili, **O. Purtukhia.** Stochastic derivative operator of two-dimensional Poisson functionals. *The Third International Conference "Problems of Cybernetics and Informatics"*. September 6-8, 2010, Baku, Azerbaijan, **II**, pp. 189-192 (2010).
33. B.Dochviri, **O. Purtukhia**, G.Sokhadze. On existence and uniqueness of solutions of general second order elliptic type differential equation in Hilbert space. *Reports of Enlarged Session of the Seminar of I. Vekua Institute of Applied Mathematics*, **23**, pp. 20-24 (2009).
34. V. Jaoshvili, **O. Purtukhia.** Stochastic Integral Representation of Multidimensional Poisson Functionals. *Seminar of I.Vekua Institute of Applied Mathematics. REPORTS*, **23**, pp. 92-95 (2009).
35. V. Jaoshvili, **O. Purtukhia.** An Extension of the Ocone-Haussmann-Clark Formula for the Compensated Poisson Processes. *SIAM J. Theory of Probability & Its Applications*, **53, 2**, pp. 316-321 (2009).
36. V. Jaoshvili, **O. Purtukhia.** Martingale Representation Theorems for Multidimensional Wiener Functionals. *Bulletin of the Georgian National Academy of Sciences*, **2, 1**, pp. 41-46 (2008).
37. V. Jaoshvili, **O. Purtukhia.** Stochastic Integral Representation of Multidimensional Polynomial Poisson Functionals. *Bulletin of the Georgian National Academy of Sciences*, **2, 4**, pp. 19-22 (2008).
38. V. Jaoshvili, **O. Purtukhia.** Stochastic Integral Representation of Poisson Functionals. *The second international conference "Problems of cybernetics and informatics"*, Baku, 2008, **II**, pp. 242-245 (2008).
39. V. Jaoshvili, **O. Purtukhia.** Stochastic Derivative of Poisson Polynomial Functionals. *Proceedings of I.Vekua Institute of Applied Mathematics*, **58**, pp. 59-66 (2008).
40. V. Jaoshvili, **O. Purtukhia.** Stochastic Integral Representation of Two-Dimensional Poisson Functionals. *Reports of Enlarged Session of the Seminar of I.Vekua Institute of Applied Mathematics*, **22**, pp. 94-98 (2008).
41. V. Jaoshvili, **O. Purtukhia.** Обобщение формулы Оконе-Хаусмана-Кларка для компенсированного пуассоновского процесса. *Теория вероятн. и ее примен.*, **53, 2**, pp. 349-354 (2008).
42. V. Jaoshvili, **O. Purtukhia.** Stochastic Integral Representation of Functionals of Poisson Processes. *Proceedings of A. Razmadze Mathematical Institute*, **143**, pp. 37-60 (2007).

43. V. Jaoshvili, **O. Purtukhia**. Stochastic Integral Representation of Functionals of Poisson Processes II. *Bulletin of the Georgian National Academy of Sciences*, **174**, **1**, pp. 29-32 (2006).
44. V. Jaoshvili, **O. Purtukhia**. Stochastic integral representation of functionals of Poisson processes I. *Bulletin. Georgian Acad. Sci.*, **172**, **2**, pp. 189-192 (2005).
45. V. Jaoshvili, **O. Purtukhia**. Stochastic integral representation of functionals of Wiener processes. *Bulletin. Georgian Acad. Sci.*, **171**, **1**, pp. 17-20 (2004).
46. **O. Purtukhia**. An Extension of Ocone-Haussmann-Clark's Formula for a class of Normal Martingales. *Proceedings of A. Razmadze Mathematical Institute*, **132**, pp.127-136 (2003).
47. **O. Purtukhia**. Fubini Type Theorems for Ordinary and Stochastic Integrals. *Proceedings of A. Razmadze Mathematical Institute*, **130**, 101-114 (2002).
48. **O. Purtukhia**. On the Representation of Measure-Valued Solution of Second Order Stochastic Parabolic Equations. *Proceedings of A. Razmadze Mathematical Institute*, **116**, pp. 133-158 (1998).
49. **O. Purtukhia**. On Ito-Ventsel formulas for anticipative processes. *New trends in probability and statistics*, 1, Vilnius, Lithuania, pp. 503-527 (1990), VSP, Utrecht (1991).
50. **O. Purtukhia**. On the Filtering Equations of a Multidimensional Diffusion Processes (Increasing Coefficients). *Theory Probab. Appl.*, **33**, **3**, pp. 574-578 (1989).
51. **O. Purtukhia**, B. Rozovskii. Measure-valued solutions of second-order stochastic parabolic equations (in Russian). *Statistics and control of random processes*, 'Nauka', Moscow, pp. 177-179 (1989).
52. **O. Purtukhia**. Conditional distributions of degenerate diffusion processes with unbounded coefficients (in Russian). *Proceedings of A. Razmadze Mathematical Institute*, **92**, pp. 73-88 (1989).
53. **O. Purtukhia**. Об уравнениях фильтрации многомерного диффузионного процесса (растущие коэффициенты). *Теория вероятн. и ее примен.*, **33**, **3**, pp. 616–621 (1988).
54. **O. Purtukhia**. The Cauchy problem for second-order ρ -parabolic Ito equation (in Russian). *Communications of Academy of Sciences of the Georgian SSR*, **124**, **3**, pp. 473-476 (1986).
55. **O. Purtukhia**. On the Characteristics of ρ -Parabolic Second Order Ito Equations. *Proceedings of Lithuanian Mathematics and Cybernetics Institute, Vilnius*, pp. 230-241 (1985).
56. **O. Purtukhia**. The Cauchy problem for linear partial differential Ito equation (increasing coefficients) (in Russian). *Random analysis and asymptotic problems of probability theory and mathematical statistics*, "Metsniereba", Tbilisi, pp. 57-71 (1984).
57. N. Krylov, **O. Purtukhia**. On Innovation Problem for the Degenerated Diffusion Processes with Unbounded Coefficients (in Russian). *Russian Mathematical Surveys (Uspekhi Mat. Nauk.)*, **39**, **4**, pp. 177-179 (1984).

Textbooks

1. K. Manjgaladze, **O. Purtukhia**, G. Sokhadze. The basics of applied statistics. TSU Publishing House, Tbilisi, 2015, ISBN 978-9941-13-397-8., 343 pages.
2. **O. Purtukhia**. Probability-statistical tasks. TSU Publishing House, Tbilisi, 2012, 2013, 2015, ISBN 978-9941-13-217-9, 562 pages; Fourth edition – 2017.
3. **O. Purtukhia**. The theory of random processes. TSU Publishing House, Tbilisi, 2009, ISBN 978-9941-13-075-5, 295 pages; Second edition – 2013.
4. **O. Purtukhia**. Probability theory and mathematical statistics for economists. TSU, Tbilisi, 2013: <http://e-learning.tsu.ge>.
5. K. Manjgaladze, **O. Purtukhia**, Z. Tsigroshvili. Higher Mathematics, Part III, Probability and Mathematical Statistics. TSU Publishing House, Tbilisi, 2009, ISBN 978-9941-13-133-2, 252 pages.
6. K. Manjgaladze, **O. Purtukhia**. Elements of probability theory and statistics (Assistant Manual for Teacher Professional Development). Publishing House "Meridiani", Tbilisi, 2009, ISBN 978-9941-10-184-7, 192 pages.
7. L. Aleksidze, Z. Khechinashvili, **O. Purtukhia**, Z. Zarakidze. Probability theory and mathematical statistics. Tbilisi 2009, ISBN 978-9941-0-1461-1, 230 pages.
8. **O. Purtukhia**. Probability and statistics in examples and tasks. Publishing House "Mtsignobari", Tbilisi, 2009, ISBN 978-9941-0-1204-4, 268 pages.
9. **O. Purtukhia**. Descriptive statistics, probability, theory of statistical conclusions. Publishing House "Mtsignobari", Tbilisi, 2008, ISBN 978-9941-0-0693-7, 418 pages.
10. **O. Purtukhia**. Probability theory and mathematical statistics. Publishing House "Mtsignobari", Tbilisi, 2008, ISBN 978-9941-0-0391-2, 204 pages.