

STEFANKA CHUKOVA
CURRICULUM VITA

SPECIALISATION

Theoretical Probability, Applied Probability and Statistics, Reliability Theory, Warranty Analysis.

PERSONAL

Address:

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Family Status: Married

Sex: Female

Citizenship: New Zealand, Bulgaria

Country of Residence: New Zealand

Languages: English, Bulgarian, Russian

DEGREE INFORMATION:

BSc Mathematics - University of Sofia, Bulgaria
MSc Mathematics (Probability and Statistics) - University of Sofia, Department of Mathematics and Computer Science, Bulgaria, Thesis: On the Statistics of Branching Processes with Immigration, 1978
PhD Mathematics (Probability and Statistics) - University of Sofia, Bulgaria, Thesis: Mathematical Models and Methods for Determining Warranty Period, 1988

PRESENT POSITION AND EMPLOYMENT RECORD

Jan 2019 - Visiting Scholar, Waseda University, Tokyo, Japan
April 2012 - Visiting Scholar, The University of Waterloo, ON, CANADA
March 2012 - Visiting Scholar, NPS, Monterey, CA, USA
Jan 2006 - present Reader in Operations Research, School of Mathematics, Statistics and Operations Research, Victoria University of Wellington, NZ
March 2005 - May 2005, Visiting Scholar, University of Michigan, Ann Arbor, Michigan, USA
Dec 2004 - Feb 2005 Visitor, UNC at Chapel Hill, NC, USA
July 2001 - Dec 2005 Senior Lecturer in Operations Research, School of Mathematical and Computing Sciences, Victoria University of Wellington, New Zealand
Apr 1996 - July 2001 Associate Professor in Mathematics and Statistics (tenured), Kettering University (former General Motors Engineering Management Institute, Flint, MI, USA)
May 1999 - August 1999 Visiting Associate Professor at Concordia University, Montreal, Canada
July 1993 - March 1996 Assistant Professor in Mathematics and Statistics, GMI Engineering and Management Institute, Flint, MI
June 1992 - June 1993 Visiting Professor, Concordia University, Montreal, Canada
Jan 1992 - May 1992 Visiting Professor, McGill University, Montreal, Canada

Apr 1985 - Dec 1991 Assistant Professor, Department of Applied Mathematics and Computer Science, Technical University, Sofia, Bulgaria

TEACHING

Courses taught and developed

I. Undergraduate courses

- Differential and Integral Calculus I, II, III
- Advanced Calculus I, II
- Fundamental concepts of Algebra
- Vectors and Matrices
- Linear Algebra I
- College Algebra
- Analytic Geometry
- Introduction, Concepts and Advanced Probability
- Stochastic Processes and Applications
- Introduction to Stochastic Methods of Operations Research
- Elementary Statistics
- Introduction to Mathematical Statistics
- Introduction to Numerical Methods (using computers)
- Math courses for engineering students
- ODE, Laplace Transform, Fourier Analysis, Applications in PDE for engineering students
- Simulation and Queueing Systems and Reliability
- Linear and Nonlinear Programming
- Introduction to Operations Research

II. Graduate courses

- Advanced Probability Theory I, II
- Topics in Statistics & Probability
- Stochastic Modelling: Warranty Analysis
- Topics in Reliability
- Simulation and Computer Networks
- Applied Linear Algebra for Engineers
- Reading courses
- Optimization

Most of the classes taught are supplemented with computer component. The software used in the teaching process is EXCEL, statistical programming language R, MINITAB, MATLAB, MAPLE, MATHEMATICA, GMPL, LINDO, Python and SimPy.

RECENT AND CURRENT RESEARCH

RESEARCH DERECTED AND PARTICIPATED IN:

- Mathematical Models and Methods in Warranty Analysis; Warranty Analysis is a financial implementation of Reliability Theory. New class of Models has been introduced - warranty models for complex products; (Research grant IK9-245/90, Technical University of Sofia).
- Extensions of Warranty Models in two or more dimensional case. Optimisation under incomplete information. Applications to industrial Products. (Research grant on Mathematical methods in Reliability and Quality Control 43-87, Council of Bulgarian Science).
- Characterization of a new family of probability distributions having almost-lack-of-memory property, generalization of the exponential, geometric and similar distributions (Research Grant on Risk Theory MM60-91 with Bulgarian National Science Foundation).
- Statistical estimations for the parameters of Branching Processes.

- Numerical and algorithmic methods in application of queuing models in computer network and complex transport system.
- Statistical studies with applications in Environmental Science.
- Studies in Warranty Analysis related to the degree of repair and approaches to model it.
- Batch Markovian Arrival Process - simulation, parameter estimation.
- Studies on bivariate failure models with possible censoring and their application in two-dimensional warranty for auto industry
- Studies on optimal warranty repair strategies
- Marked stochastic processes with dependent marks
- Warranty and Data Mining
- Information Asymmetry: quantifying the risk of misinforming
- Modelling failures for multi-component systems
- Counting Processes and their application in risk modelling

STUDENTS' SUPERVISION

MSc, Dinu Corbu (2006), Mathematical models in Credit Risk
 MSc, Sarah Marshall (2007), On the Analysis of Reliability Data, distinction
 MSc, Sima Varnosafaderani (2010), Warranty repair strategies with imperfect repairs
 MSc, Her Guan Teo (2010), Data Mining in Warranty Analysis, distinction
 MSc, Simon Anastasiadis (2013), An Inertia Model for the Adoption of New Farming Practices, distinction
 MSc, Boyd Anderson (2013), Parametric Approach for WDA, merit
 PhD, Sima Varnosafaderani (April 2015), Modeling Consecutive Failures of Repairable Systems, with Applications in Warranty Cost Analysis

PROFESSIONAL ACTIVITIES

- Served as Reviewer: Zentralblatt fur Mathematik;
Mathematical Review;
- Acted as Referee for: Journal of Applied Probability
IEEE Reliability Tr.
TEST
Kuwait Journal of Science and Engineering
- STATSci Journal Malaysian Institute of Statistics
Reliability Engineering & System Safety
Int Journal Reliability, Quality Safety Engineering
Journal Applied Mathematics and Decision Science
Int Journal of Quality and Reliability Management
Int Journal of Production Economics
Naval Research Logistics
International Journal of Risk and Safety
European Journal of Operational Research
Journal of Issues in Informing Science and Information Technology
International Transactions in Operational Research
Communications in Statistics - Theory and Methods
Int Journal of Technology Management
Scientia Iranica
Int Journal of Quality, Statistics and Reliability
Biotechnology and Biotechnological Equipment
Computers and Mathematics with Applications
IEEE Communications Letters
Methodology and Computing in Applied Probability
- Acted as an Article Editor on SAGE Open manuscript (June 2015)

- Acted as guest Editor for Applied Stochastic Models in Business and Industry, 2011
- Acted as guest Editor for the Asia-Pacific Journal of Operations Research 2011
- Acted as guest Editor for IEEE Transactions on Reliability, 2009/2010
- Acted as guest Editor for Journal of Risk and Reliability, 2007
- Acted as guest Editor for the International Journal of Quality and Reliability Management, 2005
- Associate editor for Advances in Decision Sciences (2006 - present)
- Regional Editor for the International Journal of Reliability and Applications
- Member of the Board of Editors for Applications and Applied Mathematics (AAM): An International Journal
- Member of the Board of Editors for The Open Operational Research Journal
- Member of the Board of Editors for The Open Statistics and Probability Journal
- Academic Editor of Journal of Scientific Research and Reports (2013-
- Member of the Advisory Board of Journal of Reliability & Statistical Studies - (2012-
- Member of the SAGE Open Editorial Board (2016 -
- Member of the Council of Operations Research Society of New Zealand - 2005-2013
- Member of the Organizing Committees of XII, XII, XIV, V and VI
- National Summer Schools Applied Mathematics in Technique;
- Member of the Bulgarian Statistical Association - 1978;
- Bulgarian Bernoulli Society - 1991;
- Member of the Organizing Committee of Workshop on Point Processes in Reliability - Wellington, NZ, September 6-7, 2003
- Organizer of a special session on Warranty Analysis, AIWARM 2004, Hiroshima, Japan, August 26-27, 2004
- Member of the Organizing Committee of Workshop on Hidden Markov Models and Complex Systems I, Lake Wanaka, NZ, 29 June - 1 July, 2005
- Member of the Organizing Committee of Workshop on Hidden Markov Models and Complex Systems II, Wellington, NZ, 5-8 December, 2005
- Member of the Organizing Committee of the 40th conference ORSNZ, Wellington, New Zealand, 2-3 December, 2005
- Member of the Organizing Committee of Workshop AIWARM 2006, Busan, Korea, August 26-27, 2006
- Member of the Organizing Committee (Co-Program Chair) of Workshop AIWARM 2008, Taichung, Taiwan, October 22-25, 2008
- Member of the Advisory Board of the Informing Science and Information Technology Education Joint Conference (InSITE), Varna, Bulgaria, June, 2008
- Member of the Organizing Committee of the 43th conference ORSNZ, Wellington, New Zealand, 24-25 November, 2008
- Member of the Organizing Committee of the 35th Conference on Applications of Mathematics in Engineering and Economics (AMEE'09), Sozopol, Bulgaria, 7-14 June, 2009
- Member of the Organizing Committee of NZSA conference, 2-3 September, 2009
- Member of the Organizing Committee, Workshop in Probability and Mathematical Statistics, 3-4 November, 2009, Wellington, New Zealand
- Member of the Organizing Committee of the 36th Conference on Applications of Mathematics in Engineering and Economics (AMEE'10), Sozopol, Bulgaria, June, 2010
- General Co-Chair of APARM2010, 4th Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modelling, Wellington, NZ, 2-4 December 2010

- Member of the Programme Committee of the Seventh International Conference on Mathematical Methods in Reliability- Theory, Methods, Applications (MMR2011), Beijing, China, 19-24 June 2011
- Programme Chair of the International Conference on Quality, Reliability, Risk, Maintenance and Safety Engineering (ICQR2MSE 2011), June 17-19 2011, Xian, China
- Organizing an invited session at the Second International Conference on the Interface between Statistics and Engineering (The 2nd ICISE, Taiwan), June 2012
- Member of the steering committee for Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modelling, APARM2012, Nanjing, China
- Member of the Advisory Board of the International Conference on Quality, Reliability, Risk, Maintenance and Safety Engineering (ICQR2MSE2012),
- Co-Chair of the Organizing Committee, 46th ORSNZ Conference, Dec 2012, NZ
- Member of the Organizing Committee of the 38th Conference on Applications of Mathematics in Engineering and Economics (AMEE'12), Sozopol, Bulgaria, June, 2012
- Member of the Programme Committee of the Eight International Conferences on Mathematical Methods in Reliability (MMR2013), Stellenbosch, South Africa
- Member of the Advisory Board of the International Conference on Quality, Reliability, Risk, Maintenance and Safety Engineering (ICQR2MSE2013)
- Member of the Scientific Committee of the International Conference on "Applications of Mathematical Sciences in Engineering (ICAMSE 2013)", October 2013, Dehradun, India
- Member of the Advisory Board of the International Conference on Quality, Reliability, Risk, Maintenance and Safety Engineering (ICQR2MSE 2014), Dalian, Liaoning, China, July 22-25, 2014
- Elected member ISI - 2012
- Member of the Committee for the 2015 ISI Mahalanobis Award - regional representative from Australia/New Zealand/North America
- Member of the International Advisory Committee of QR2MSE2015, July 2015, Beijing
- Organizing an invited session "Warranty Data Analysis" at the Ninth International Conferences on Mathematical Methods in Reliability (MMR2015), June 2015 Tokyo
- Member of the International Advisory Board of the ICMTEA2016, April 2016, Dehradun, India
- Invited keynote speaker at ICMTEA2016, April 2016, Dehradun, India
- Program Committee Member of QR2MSE2016 & WCEAM2016, July 2016, Jiuzhaigou, China
- Co-chair of the Program Committee for Queueing Theory and Network Applications conference (QTNA2016), Dec 2016, Wellington, NZ
- Member of the International Advisory Board of the International Conference on Soft Computing and Mathematical Modelling-2017, December 22-23, 2017, Ghaziabad ((U.P), India
- Member of the International Advisory Committee Member of ICMR2017 & QR2MSE2017, October 24-27, 2017, Chengdu, Sichuan, China
- Member of the International Advisory Board of the ICMTEA2018, December 2018, Dehradun, India
- Invited keynote speaker at ICMTEA2018, 3rd International Conference on Mathematical Techniques in Engineering Applications, December 7-8, 2018, Dehradun, India
- Member of the International Advisory Committee Member of APARM 2018 & QR2MSE2018, Qingdao, Shandong, China, August 21-24, 2018

GRANTS and AWARDS

- PI - FSR grant NZ\$891.90, Modelling non-negligible repair times, April, 2018
- AI - 2018 KAKENHI grant (a major and very prestigious Scientific Research grant in Japan) - together with PI Prof Yu Hayakawa and AI - AP Richard Arnold. We have been applying for this grant for the last 5-6 years and finally this year our application was successful.
- AI - Waseda Internal Grant B (Awarded June 2017) Waseda University; PI=Yu Hayakawa, AI=Richard Arnold, Stefanka Chukova, Yiki Rikimaru. 'Warranty cost analysis with non-zero repair times through hierarchical stochastic processes'. (400000 yen, about 5200 NZD, July 2017-June 2018).

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- AI - Waseda Internal Grant B (Awarded June 2015) Waseda University; PI=Yu Hayakawa, AI=Richard Arnold, Stefanka Chukova, Fan Wang. 'Stochastic approaches to modeling system reliability'. (500000 yen, about 5600 NZD, July 2015-June 2016).
- PI - FSR Grant NZ\$4869, Insurance: Modeling with Pólya - Aepli Risk Process and its extensions, November 2015
- PI - URF Grant NZ\$10000, Multivariate Stochastic Orderings: Application to Imperfect Repair Modelling, August 2014
- AI -Waseda Internal Grant B (Awarded June 2014) Waseda University; PI=Yu Hayakawa, AI=Richard Arnold, Stefanka Chukova, T.Y. Chen. "Generalised Geometric Renewal Process: Bayesian statistical Inference". (500000 yen, about 5600 NZD, July 2014-June 2015).
- AI -Waseda Internal Grant B (Awarded June 2013) Waseda University; PI=Yu Hayakawa, AI=Richard Arnold, Stefanka Chukova, Yimo Xu. "Warranty Cost Analysis with non-zero repair times: Models and Inference" (500000 yen, about 5600 NZD, July 2013-June 2014).
- AI - URF Grant NZ\$10000, Failures in Multi-state systems, September, 2009
- PI - VUW service grant NZ\$3500, February, 2009
- PI - URF Grant NZ\$13000, Multidimensional Risk Processes with correlated arrivals, September, 2008
- PI - VUW travel grant NZ\$4200, January 2008
- PI - Grant of NZ\$27000 from General Motors for studies on two-dimensional auto warranty, March, 2005
- PI - Transforming grad class Advanced Engineering Mathematics to a Web-based course, supported by Sloan foundation, Kettering University, February 2000
- PI - Teaching Improvement Grant - Kettering University, March 2000
- PI - Teaching Improvement Grant - GMI, March, 1996.
- PI - Research Initiation and Improvement Grant - GMI - Warranty Analysis and Optimal Maintenance for Items Under Minimal and Replacement Policy.
- PI - Technical University of Sofia Grant IK9-245/90: Mathematical Methods for determining the Optimal Warranty Period.

Participation in-group of researchers on grant Mathematical methods in Reliability and Quality Control 43-1987-1990, Council of Bulgarian Sciences.

Participation in-group of researchers on grant Risk Theory and Applications MM60-91, Bulgarian National Science Foundation.

PUBLICATIONS

Chapter in Books (quality assured)

- I.Vasilev N., Mitov B., Tzanov L., Chukova S., (1985), Applied mathematics, DVI, 1985 (in Bulgarian)

- 2.Chukova, S., Dimitrov, B., (1996), Chapter 22: Warranty Analysis for Complex Systems, Product Warranty Handbook, Eds. W. Blischke and P. Murthy, Marcel Dekker, Inc. 543 - 584
- 3.S. Chukova, J. Robinson, (2005), Chapter 9: Estimating Mean Cumulative Functions from Truncated Automotive Warranty Data, Mathematical and Statistical Methods in Reliability, series on Quality, Reliability and Engineering Statistics, Eds. A. Wilson, N. Limnios, S Keller-McNulty, Y. Armijo, World Scientific, Singapore, 121 - 136
- 4.Chukova. S., Hayakawa Y., Arnold R., (2007) Warranty Analysis: Estimation of the degree of repair via a Bayesian approach, special volume of Recent Advancement of Stochastic Operations Research, World Scientific, Ed. T.Dohi, S.Osaki, K.Sawaki, 3-21
- 5.Christozov D., Chukova S., Mateev P., (2009), Chapter 11: Informing Processes, Risks, Evaluation of the Risk of Misinforming, Foundations of Informing Science: 1999-2008, Eds. T. G. Gill and E. Cohen, Santa Rosa, California: Informing Science Press, 335-368
- 6.S.Chukova, Y. Hayakawa (2011), Chapter 3: Warranty/Maintenance: On Modelling Non-Zero Rectification Times, Stochastic Reliability and Maintenance Modeling -Essays in Honour of Professor Shunji Osaki on his 70th Birthday, eds. T. Dohi and T. Nakagawa, Springer, 63 - 99
- 7.R. Arnold, S.Chukova, Y. Hayakawa (2017), Multi-component Systems with Dependent Failures, Stochastic Operations Research in Business and Industry, World Sceintific.

Edited Books (quality assured)

- 8.S. Chukova, J. Haywood, T. Dohi (eds) (2010), Advanced Reliability Modelling IV, McGraw Hill, Taiwan, 890 pages

Journal Articles (quality assured)

9. Yanev N., Chukova S., (1980), On the statistics of branching processes with immigration, Journal of .Bulgarian Academy of Science, 33: 4, 469-471.
10. Chukova S., (1983), A discrete model for calculating the assurance period of homogeneous production, Annual Journal of High Education, Applied Math., v.19:3 (in Russian)
- 11.Chukova S., (1984), Probability models for determination of warranty periods in the industrial production, Studies of High school "A. Kunchev", 25, 75-81, (in Bulgarian).
- 12.Chukova S., (1985), A probabilistic approach for determination of warranty periods of homogeneous products, Annual Journal of High education , Applied Math., 23, 207-220, (in Russian)
- 13.Yanev N., Chukova S., (1986), Limit theorems for variance estimation in a branching process with immigration, Serdica,v.12,143-153, (in Russian).
- 14.Chukova S., (1988), A probabilistic approach for determination of warranty period, Reliability and Quality control, Moscow, 8, p.55-59, (in Russian).
- 15.Chukova S., Khalil Z., (1990), On the moving T-screening of nonstationary Poisson processes, Jour.Bulg.Acad. of Science,v.43:8
- 16.Chukova S., Khalil Z., (1990), On the conservative T-screening of nonstationary Poisson processes and optimal warranties, Jour. Bulg. Acad. of Science, v.43:7
- 17.S.Chukova, B.Dimitrov. Warranty analysis. A survey. (1991) EQC Newsletters and Journal on Quality Control and Reliab. 2, 61-82.
- 18.Chukova S., Dimitrov B. (1992), On distributions almost having the almost lack of memory property, J. Appl. Prob. 29, 691 - 698 (ARC:A)
- 19.Chukova, S., Dimitrov, B. and Garrido, J., (1993), Renewal and non-homogeneous Poisson processes generated by distributions with periodic failure rate. Statistics and Probability Letters, 17:5, 19 - 25 (ARC:B)
- 20.Chukova, S., Dimitrov, B. and Khalil, Z., (1993), A characterization of

- probability distributions similar to the exponential, *The Canadian Jour. of Statistics*, v. 21, No 3, 269 - 276. (ARC:B)
- 21.Chukova S, Dimitrov B. and Rykov V., (1993), Warranty Analysis (review), *Journal of Soviet Mathematics*, 67:6, 3486 - 3508
 - 22.S.Chukova, B.Dimitrov and J.- P. Dion, (1993), Relevation transforms characterize probability distributions, *Journal of Appl. Math and Stochastic Analysis*, 6:4, 345 - 358 (ARC:B)
 - 23.S.Chukova, B.Dimitrov and Z.Khalil, (1994), Bivariate probability distributions similar to exponential, *Approximation, Probability and Related Fields*, Plenum Press, NY, 167 - 178.
 - 24.Dimitrov, B., Chukova, S., Khalil, Z., (1995), Definitions, Characterizations and Structural Properties of Probability Distributions Similar to the Exponential, *Journal of Statistical Planning and Inference*, No. 430, 271 - 287 (ARC:A)
 - 25.El-Saidi, M.A., Dimitrov, B., Chukova, S., (1996), Some Moment Properties and Limit Theorems of the Reversed Generalized Logistic Distribution with Applications, *Communications in Statistics: Theory and Methods*, 25:3, 609-630 (ARC:B)
 - 26.Dimitrov B., Chukova S., Green D., (1997), Periodic distributions in periodic random environment and their applications, *SIAM J. Appl. Math.*, 57:2, 501 - 517 (ARC:A*)
 - 27.Chakravarthy S., Chukova S., Dimitrov B., (1998), Analysis of MAP/M/2/K queueing model with infinite resequencing buffer, *Performance Evaluation*, 31, 211 - 228 (ARC:A)
 - 28.Dimitrov B., Chukova S., (1999), Environmental Modelling in Driving Periodic Conditions, *Applications of Mathematics in Engineering'* 24, Heron Press, Sofia, Bulgaria, 21-30
 - 29.Dimitrov B., Chukova S., Green D., (1999), The Bivariate Probability Distributions with Periodic Failure Rate via a Hyperbolic Differential Equation, *Dynamics of Continuous, Discrete and Impulsive Systems*, 5:(1-4) , 81-92 (ARC:B)
 - 30.Dimitrov B., Chukova S., Khalil Z., (1999), Processing Times Modelled by Reliability Systems with Random Number of Spare Units, *European Journal of Engineering Education (EJEE)*, 24:3, 279 - 291 (ARC:A)
 - 31.Dimitrov B., Chukova S., El-Saidi M., (1999), Modelling uncertainty in Periodic Random Environment. Applications to Environmental Studies, *Environmetrics*, 10, 467-485. (ARC:B)
 - 32.Dimitrov B., Chukova S., Garrido G. , (2000), Compound Counting Processes in a Periodic Random Environment, *Journal of Stat Research, Bangladesh*, 34(2), 99-111 (ARC:C)
 - 33.Dimitrov, B., Chukova S., Chakravarthy, S., (2001), A Simple Unreliable Service Model Characterizes Exponential Distribution, *Kuwait Journal of Science and Engineering*, v.28, No 2, 203-212. (ARC:C)
 - 34.Dimitrov, B., Chukova S., Rumchev V., (2001), Warranty Claims as Marked Point Process, *Nonlinear Analysis: Theory, Methods & Applications*, v. 47, 2145 - 2150. (ARC:A)
 - 35.Dimitrov B., Chukova., Vogt H., (2002), A class of Symmetric Probability Distributions Similar to the Double Exponential, *Electronnoe Modelirovanie*, 24/5, 25 - 37.
 - 36.S.Chukova, Y.Hayakawa, (2004), Warranty Cost Analysis: Non- Zero Repair Time, *Applied Stochastic Models in Business and Industry*, 20 (1): 59-71 (ARC:B)
 - 37.S. Chukova, Y. Hayakawa, (2004), Warranty Cost Analysis: Renewing Warranty with Non-Zero Repair Time, *International Journal of Reliability, Quality and Safety Engineering*, 11:2, 1-20
 - 38.S. Chukova, R. Arnold, D. Wang, (2004) Warranty Analysis: An Approach to Modelling Imperfect Repairs, *International Journal of Production Economics*, 89:1,57-68 (ARC:A)
 - 39.D. Wang, S. Chukova, C D Lai, (2004) On the relationship Between Regression Analysis and Mathematical Programming, *Journal of Applied Mathematics and*

- Decision Sciences, 8(2), 131-140
40. Dimitrov, B., Chukova S., Khalil Z., (2004), Warranty Costs: An Age - Dependent Failure/Repair Model, *Naval Research Logistics*, 51, 959 - 976.
 41. S. Chukova, Y. Hayakawa, (2005), Warranty Cost Analysis: Quasi-Renewal Interrepair Times, *International Journal of Quality and Reliability Management*, 22(7), 687 - 698 (ARC:B)
 42. S. Chakravarty, S. Chukova, (2005), A finite capacity resequencing model with Markovian Arrivals, *Asia-Pacific Journal of Operational Research*, 22 (3), 409 - 443.
 43. Wang, D., Chukova, S., Lai C.D., (2005) Reducing the Quadratic Programming Problem to Regression Problem: Stepwise Algorithm, *European Journal of Operation Research* 164(1), 79-88. (ARC:A)
 44. S. Chukova, M. Johnston, (2006), Two-dimensional warranty repair strategy based on minimal and complete repairs, *Mathematical and Computer Modelling*, 44:(11-12), 1133-1143 (ARC:B)
 45. D. Christozov, S. Chukova, P. Mateev, (2006), A Measure of Risk Caused by Information Asymmetry in e-Commerce, *Issues in Informing Science and Information Technology*, 3, 147-158 (ARC:C; new journal)
 46. D. Christozov, S. Chukova, P. Mateev, (2007), On the Relationship between Warranty and the Risk of Information Asymmetry, *Issues in Informing Science and Information Technology*, vol.4, 235-249 (ARC:C; new journal)
 47. Chukova, Y. Hayakawa and M. Johnston, (2007), Two-dimensional warranty: optimal minimal/complete repair strategy, *Journal of Risk and Reliability*, issue 4, 265-273 (ISI new journal)
 48. A. Haghghi, D. Mishev and S. Chukova, (2008), A Single-server Poisson Queueing System with Delayed-Service, *International Journal of Operational Research*, 3, 363-383. (ARC:C; new journal)
 49. D. Corbu, S. Chukova and J. O'Sullivan, (2008), Product Warranty: Modelling with 2D-Renewal Process, *International Journal on Reliability and Safety (IJRS)*, 2:3, 209-220 (ARC:C)
 50. D. Christozov, S. Chukova, P. Mateev, (2008), Warranty and the Risk of Misinforming: Evaluation of the Degree of Acceptance, *Journal of Issues in Informing Science and Information Technology*, vol 5, 667-677. (ARC:C; new journal)
 51. Chukova, S., Christozov, D., Mateev, P. (2008), Обучението по вероятности и статистика в училищата на Нова Зеландия, (Teaching probability and statistics in the school of New Zealand), *Математика и информатика*, Изд. МОН (ISSN 1310-2230), XXXIII(LI), 4, 3-14 (in Bulgarian)
 52. T. Battestilli, H. Perros and S. Chukova, (2009) Burst Lost Probabilities in a Network with Simultaneous Link Possession: A Single-Node Decomposition Algorithm, *IET Communications*, 3:3, 441-453 (H:34, 50/231 Computer Science Applications)
 53. Dimitrov, N., Chukova, S., (2009), Warranty Analysis in a Dynamic Environment, *Journal of Applied Mathematics and Decision Science*, Volume 2009 , Article ID 414507, 14 pages, doi:10.1155/2009/414507
 54. D. Christozov, S. Chukova, P. Mateev, (2009), The risk of misinforming for competing messages, *Issues in Informing Science and Information Technology*, 6, 351-364 (ARC:C; new journal)
 55. D. Christozov, S. Chukova, P. Mateev, (2009), On two types of warranties: warranty of malfunctioning and warranty of misinforming, *Asia-Pacific Journal of Operational Research*, vol.26:3, 399-420 (H:17, 47/86 Management Science and Operations Research)
 56. D. Christozov, S. Chukova, P. Mateev, (2010), Assessment of Quality of Warranty Policy, *Interdisciplinary Journal of Information, Knowledge and Management (IJIKM)*, 5, 61-72 (ARC:C; new journal)
 57. Marshall, S., Chukova, S., (2010), On Analysing Warranty Data from Repairable Items, *Quality and Reliability Engineering International*, 26:1, 43-52 (H:30, 37/86, Management Science and Operations Research)
 58. D. Christozov, S. Chukova, J. Robinson, (2010), Automotive Warranty Data:

- Stratification Approach for Estimating the Mean Cumulative Function, *International Journal of Product Development*, 12:(3/4), 254-273, (H:9, 69/183 Strategy and Management)
- 59.M. Shafiee, S. Chukova, M. S. Mehrabad, and S.T.A. Niaki, (2011), Two-dimensional Warranty Cost Analysis for Second-hand Products, *Communications in Statistics - Theory and Methods*, 40:4, 684-701 (H:28, 28/83 Safety, Risk, Reliability and Quality)
 - 60.Haghighi, A., Mishev, D. and Chukova, S., (2011), Single-server Poisson Queueing System with Splitting and Delayed-Feedback, *International Journal of Mathematics in Operational Research*, 3:1, 1-21, (H:6, 73/110, Modeling and Simulation)
 - 61.S.Anastasiadis, S. Chukova, (2011) Multivariate Insurance Models: An Overview, *Insurance: Mathematics and Economics*, 51:1, 222-227 (H:41, 6/34 Statistics, Probability and Uncertainty) (ARC:A)
 - 62.S.Varnosafaderani, S. Chukova, (2011), An Imperfect Repair Strategy for Two-Dimensional Warranty, *Journal of the Operational Research Society*, 63, 846-859 (H:55 14/86 Management Science and Operations Research) (ARC:A)
 - 63.M. Shafiee, M.S Finkelstein, S. Chukova (2011), Burn-in and imperfect preventive maintenance strategies for warranted products, *Journal of Risk and Reliability*, 225:2, 211-218 (H:7, 55/83 Safety, Risk, Reliability and Quality)
 - 64.D.Christozov, S. Chukova, P. Mateev, (2011), Assessment of Risk of Misinforming: Dynamic Measures, *Interdisciplinary Journal of Information, Knowledge, and Management*, Volume 6, 163-176
 - 65.M. Shafiee, S. Chukova, M.S. Finkelstein (2011), Warranty and optimal upgrade strategy for used systems: An electric drill case study, *Asia-Pacific Journal of Operational Research*, 29:4, 1250023-1-1250023-21 (H:17, 47/86 Management Science and Operations Research)
 - 66.H. Vahdani, S. Chukova, H. Mahlooji, (2011), On optimal replacement-repair policy for multi-state deteriorating products under renewing free-replacement warranty, *Computers and Mathematics with Applications*, 61:4, 840-850 (H: 59, ranking 5/110 Modelling and Simulation) (ARC: A)
 - 67.M. Shafiee, S. Chukova, W.Y. Yun, S.T.A. Niaki, (2011), On the Investment in Reliability Improvement Program for Warranted Second-hand Items, *IIE Transactions*, 43:7, 525 - 534
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 - 73.S. Anastasiadis, R. Arnold, S. Chukova and Y. Hayakawa, (2013), Multicomponent System with Multiplicative Ageing and Dependent Failures, *IEEE Transactions on Reliability*, v.62:1, p.286 - 295 Journal Ranking: H index = 49, ranking 10/83; category Safety, Risk, Reliability and Quality; (ARC:A)
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 - 75.D.Christozov, S.Chukova, P.Mateev, (2013), The role of Warranty of

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 - 83.L. Battestilli, H. Perros and S. Chukova, (2015), Performance Evaluation of an OBS Network as a Network of IPP/M/W/W Nodes, *Applied Mathematical Modelling*, 38(4), 965-981 (H:37, 17/70 Computational Mechanics)
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 - 85.R. Arnold, S. Chukova, Y. Hayakawa, (2015), Failure distributions in multicomponent systems with imperfect repairs, *Journal of Risk and Reliability*, IF:0.775 | Ranking: Engineering: Industrial 31/43|Multidisciplinary 50/87| *Operations Research & Management Science* 52/79 <http://pio.sagepub.com/content/early/2015/05/23/1748006X15584853.abstract>
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 - 88.S.Anastasiadis, S. Chukova, (2016), An inertia model for the adoption of new farming practices, *International Transactions in Operational Research* DOI: 10.1111/itor.12336
 - 89.R. Arnold, S. Chukova, Y. Hayakawa, (2017), Inference for Multicomponent Systems with Dependent Failures, *IEEE Transactions on Reliability*, <http://ieeexplore.ieee.org/document/7927460/> with DOI 10.1109/TR.2017.2696542
 - 90.S. Marshall, R. Arnold, S. Chukova, Y. Hayakawa, (2018), Warranty Cost Analysis: Increasing Warranty Repair Time, *Applied Stochastic Models in Business and industry*, <https://doi.org/10.1002/asmb.2323>
 - 91.S. Chukova, L. Minkova, (2018), Non-homogeneous Polya-Aeppli process, *Communications in Statistics - Simulation and Computation*, <https://doi.org/10.1080/03610918.2018.1469763>
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 - 93.S. Varnosafaderani and S. Chukova, R. Arnold (2019), Modeling Failures of a repairable system with bathtub-shaped failure rate function, *Journal of Risk and Reliability (under revision)* L. Vern, S. Chukova, R. Arnold, K. Neshatian,

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- 94.L. Vern, S. Chukova, R. Arnold, K. Neshatian, (2019), Modeling Failures of a Repairable System having a Bivariate Increasing Failure Rate Lifetime (Part II), (under review)

Conference Contributions (quality assured)

- 95.Yanev N., Chukova S., (1979), Estimating of variances in a branching process with immigration, Math and Education in Math, 608-617, (in Bulgarian).
- 96.Chukova S., (1984), A probabilistic model for determination of the warranty period with multiple responses, Math and Education in Math, 482-489, (in Bulgarian).
- 97.Chukova S., (1985), A stochastic model for determination of the warranty period by random size of the purchases, Math and Education in Math, pp 577-584, (in Bulgarian)
- 98.Chukova S., (1986), Determining the optimal assurance period under constrained information for the life-time distribution, Math and Education in Math., 505-510, (in Russian).
- 99.Chukova S., (1987), Probabilistic methods for modelling and determining the quarantine periods, Math and Educ. in Math., 557-562
- 100.Chukova S., (1988), Determination of the guarantee period under given product durability of life, Math and Education in Math., 380-384
- 101.Chukova S., (1989), On the problem of determining of the optimal warranty period, Math and Educ. in Math, 546-549, (in Bulgarian).
- 102.Chukova S., Dimitrov B., (1990), Discrete and continuous distributions almost having the "lack of memory" property and some effects in service with unreliable server, Studies of III Seminar of Teletraffic Theory and Computer Modelling , 17 - 22, Sofia
- 103.Chukova S., (1990), On determination of the warranties for complex items", Math. and Math. Educ., 425-430
- 104.Chukova S., (1991), Determination of the warranty period in Markovian model with income, Mathem. and Education in Math., (in Russian)
- 105.Chukova, S., Dimitrov, B. and Garrido, J. (1992), Renewal processes generated by distributions with periodic failure rates. Proc. 26-th Annual Actuarial Research Conference, Univ. of Iowa, Aug. 1992, Edtrs: James Broffitt and Elias S. Shiu, Actuarial Research Clearing House, Part 1, 83 - 95
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- 111.S. Chukova, D. Christozov, (2008) Mining Automobile Warranty Data, Research

Papers: Knowledge Acquisition and Management, Wroclaw University of Economics, edited by Malgorzata Nycz, Mieczyslaw Owoc, Wroclaw, 48-55

- 112.R. Arnold, S. Chukova, Y. Hayakawa, (2008), Schur-Concavity, Aging and a New Model for Damage Accumulation in Multi-Component Systems, Proceedings of the Asian International Workshop in Advance Reliability Modelling, Taichung, Taiwan, October 23-25, 2008, 627-63
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- 115.S. Anastasiadis, R. Arnold, S. Chukova and Y. Hayakawa, (2010), Failures in Multicomponent Systems, In APARM2010 proceedings: Advanced Reliability Modelling IV, eds. S.Chukova, J. Haywood, T.Dohi, December 2010, Wellington, New Zealand, 9-16
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- 119.S. Chukova and H. G. Teo, (2011), Auto Warranty Data: Mean Cumulative Function, In Proceedings: 40th conference of the Union of Bulgarian Mathematicians, Borovetz, April 2011, 253-259
- 120.S. Chukova, Y. Hayakawa, (2011), Warranty Cost Analysis: on Modelling Warranty Repairs, In Proc: MMR2011, Beijing, China, June 2011, 7-13
- 121.M. Shafiee, S. Chukova and M.R. Soltani, (2011), Optimal Reliability Improvement, Warranty Policy and Sale Price for Second-Hand Products, In Proc: MMR2011, Beijing, China, June 2011, 214-227
- 122.S. Chukova, S. Anastasiadis and B. Anderson, (2011) Automotive Warranty Data: On the relationship between the driving patterns and warranty, In Proc: ICQR2MSE 2011, Xian, China, June 2011, 582 - 587
- 123.M. Shafiee and S. Chukova, (2012), Warranty and Maintenance: under-researched areas, In Proc: The 5th Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modeling, 1-3 Nov, Nanjing, China, Eds: H.Yamamoto, C.Qian, L.Cui, T.Dohi, Taiwan: McGraw Hill, 414-421
- 124.R. Arnold, S. Chukova and Y. Hayakawa, (2012), Inference for Multicomponent Systems with Dependent Failures, In Proc: The 5th Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modeling, 1-3 Nov, Nanjing, China, Eds: H.Yamamoto, C.Qian, L.Cui, T.Dohi, Taiwan: McGraw Hill, 9-16
- 125.R. Arnold, S. Chukova, Y. Hayakawa, (2014), Warranty Cost Analysis: Non-Zero Geometric Repair Times, In Proc: The 6th Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modeling, 21-23 Aug, Sapporo Japan, Eds: H.Yamamoto, T.Dohi, Taiwan: McGraw Hill, 9-16
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- 127.R. Arnold, S. Chukova, Y. Hayakawa, (2014), Failure Distribution in Multicomponent Systems with Imperfect Repair, In Proc: The 6th Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modeling, 21-

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- 128.S. Varnosafaderani and S. Chukova, (2014), Modeling General Repairs of a System with a Bathtub-Shaped Failure Rate Function, In Proc: The 6th Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modeling, 21-23 Aug, Sapporo Japan, Eds: H.Yamamoto, T.Dohi, Taiwan: McGraw Hill, 474 - 481
- 129.R. Arnold, S. Chukova, Y. Hayakawa, (2015), Warranty Cost Analysis: Increasing Warranty Repair Times, In Proc: The Ninth International Conference on Mathematical Methods in Reliability, 229-236
- 130.S. Chukova, Y. Hayakawa, (2015), Auto Warranty Data: Estimation of the Mean Cumulative Function, In Proc: The Ninth International Conference on Mathematical Methods in Reliability, 1033-1040
- 131.R. Arnold, S. Chukova and Y. Hayakawa (2016), Delayed Reporting of Faults in Warranty Claims, Advanced Reliability and Maintenance Modeling VII: Recent Developments on Reliability, Maintainability and Dependability (Proceedings 7 Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modeling (APARM 2016), (Eds: Jung, K. M., Kimura, M. and Cui, L.-R.), McGraw Hill, 9-16
- 132.R. Arnold, S. Chukova, Y. Hayakawa, (2017), Delayed Reporting of Faults in Warranty Claims, In Proc: The Tenth International Conference on Mathematical Methods in Reliability (in print)

Research Outputs

Non Quality Assured (not referred)

Journal Articles (non quality assured)

- 133.S. Chukova and Y. Hayakawa (2007), The effect of Bayesian and frequentist methods on reliability studies, Communications of Operations Research of Japan, 52:7, 390-396 (in Japanese)
- 134.S.Varnosafaderani and S.Chukova, (2012), Modeling Repairs of Systems with Bathtub-Shaped Failure Rate Function, <http://arxiv.org/abs/1211.3792>

Conference Contributions (non-quality assured)

- 135.Chukova S., (1987), Determination of the warranty period for complex items, Studies of XIII National Summer School "Applied math. in Technique", Varna, Bulgaria (in Bulgarian)
- 136.Chukova S., (1989), Classification of models for determination of the warranties, Studies of XV National Summer School "Applied math. in Technique", Varna, Bulgaria (in Bulgarian)
- 137.B.Dimitrov, S.Chukova and D.Green, (1994), Probability Distributions in Periodic Random Environment and its Application, Proceedings of ASA, Section of Quality and Productivity, 251 - 256
- 138.Chakravarthy, S., Chukova, S., Dimitrov, B., (1995), A Stochastic Model with Resequencing of Messages, IEMS'95 Proceedings: Annual International Conference on Industry, Engineering and Management Systems, 601 -606
- 139.Chukova S., (1996), Warranty Analysis: Concepts, Models and Methods, Proceedings of the XXII Summer School "Applications of Mathematics in Engineering and Business", Bulgaria
- 140.Chukova S., Arnold R., (2002), Warranty Analysis: An Approach to Modelling Imperfect Repairs, Proceed. 28th Summer School " Applications of Maths in Engineering & Economics", Sozopol, Bulgaria, June, 171-178
- 141.Chukova S., Arnold R., (2002) Mathematical Modelling in Warranty Cost Analysis: Repairable Items, Proceedings 4th AWIS Conference, 181-186, Auckland
- 142.S. Chukova, Y. Hayakawa, (2002), Warranty Cost Analysis: Non- Zero Repair Time, Proceeding of the 37th Annual Conference of the Operational Research

Society of NZ, 315-324

- 143.S. Chakravarty, S. Chukova, (2003), MAP/M/2 with a finite capacity resequencing buffer, Proceeding of the 38th Annual Conference of the Operational Research Society of NZ, 39-46
- 144.J. Robinson, S. Chukova, (2004), Estimating Mean Cumulative Functions from Truncated Automotive Warranty Data , Communications of the Fourth International Conference on Mathematical Methods in Reliability, Methodology and Practice (in CD, 4 pages), Santa Fe, New Mexico, USA, June 21-25
- 145.S. Chukova, M. Johnston, (2005), Optimal Warranty Repair Strategy in R2, Proceeding of the 40th Annual Conference of the Operational Research Society of NZ, 336 - 345
- 146.D. Corbu, S. Chukova and J.O'Sullivan, (2006), Application of Two-Dimensional Renewal Processes in Modelling Product Warranties , Proceedings of the 41st ORSNZ conference, Nov 30 - Dec 1, 2006, Christchurch, NZ, 235-24
- 147.D. Christozov, S. Chukova, P. Mateev, (2007), Probability and Statistics in the schooling system of New Zealand, Proceedings of the National Workshop on Education in Probability and Statistics in Bulgaria", 25-30 June, Kiten, Bulgaria
- 148.Johnston, M., Chukova, S., (2007), Rural Postmen, Rewards and Grid Networks, Proceedings of the 42 ORSNZ conference, November 28-29, 2007, Auckland, NZ, 85-94
- 149.S. Chukova and Y. Hayakawa (2007), The effect of Bayesian and frequentist methods on reliability studies, Proceedings of the 57th Symposium of the Operations Research Society of Japan, 19-33
- 150.S. Anastasiadis and S. Chukova (2012), Modeling Technology Adoption Decisions where Farmers are Resistant to Change, In Proc.46th Annual Conference of the ORSNZ, Ed. John Haywood, Wellington, December 2012, ISSN 0114-6602, 15-24
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Other (non-quality assured)

- 151.S. Chukova, J. Robinson, (2005), Estimating Mean Cumulative Functions from Truncated Automotive Warranty Data, GM Internal Report, General Motors, R&D Center, Warren, MI, USA

INVITED LECTURES and CONFERENCE PRESENTATIONS

1. USSR, Moscow, December 1987, On determination of the optimal Warranty Period, Seminar on reliability supervised by Prof. B.V. Gnedenko.
2. Canada, Montreal, December 1988, On the conservative T-screening and moving T-screening of nonstationary Poisson processes and warranties, Seminar on mathematics in Concordia University.
3. USSR, Suzdal, November 1989, Classification of mathematical models in warranty analysis, International seminar on Applied Mathematics and Operational Research.
4. USSR, Perm, September 1990, Warranty analysis (a survey), All-union conference on reliability and quality control.
5. Bulgaria, Sofia, May 1990, Seminar on Optimization and probability Theory at the Technical University, Sofia, Bulgaria.
6. Bulgaria, Sunny Beach, Spring Conference of the Union of Bulgarian Mathematicians 1979, 1984, 1985, 1986, 1987, 1988, 1989, 1990.
7. Greece, Thessalonica, August 1986, XIX European Meeting of statisticians.
8. Bulgaria, Varna, September 1988, 1989, 1990, National summer School Applied Mathematics in Technique.
9. Bulgaria, Russe, June 1988, Third Seminar on quality control.
10. Bulgaria, Plovdiv, February 1986, Third National Seminar on mathematical methods for quality control.
11. Canada, Montreal, February 1992, McGill University.

12. Canada, Montreal, April 27, 1992, 5th Actuarial Day, Concordia University
13. Canada, April 4, 1992, The Spring Conference of Quebec Mathematicians, Univ. de Quebec at Trois Riviers.
14. USA, San Francisco, November 2, 1992, ORSA/TIMS meeting.
15. Canada, Montreal, April 16, 1993, 6th Actuarial Day, Concordia University.
16. USA, Oakland, MI, August 21, 1993, Industrial Statistics Conference.
17. USA, Flint, GMI, November, 1993.
18. USA, Boston, June 1994, International Research Conference on Lifetime Data Models in Reliability and Survival Analysis. Chairing session on Applications in Economical Studies.
19. Canada, Burlington, August 1994, International Conference on Statistical Methods for the Environmental Sciences.
20. Performance Analysis of a Finite Capacity Resequencing Queuing Model, VI Latin American Congress on Probability and Mathematical Statistics, CLAPEM '95, Vina del Mar-Chile, November 1995.
21. Extended Generalized Logistic Distribution, Statistical Data Analysis '95, Bulgaria, Varna, Bulgaria, September 1995.
22. On Taxonomy of Mathematical Models in Warranty Analysis, Statistical Data Analysis '96, Bulgaria, September 1996.
23. Warranty Analysis: Concepts, Models and Methods, XXII Summer School Applications of Mathematics in Engineering and Business, Bulgaria, September 1996
24. A Warranty Analysis, American University in Bulgaria, Blagoevgrad, Bulgaria, September 1996.
25. University of Wurzburg, Wurzburg, Germany, August, 1997
26. Innsbruck, Austria, August 1997, Conference on Environmetrics
27. GMI, Flint, MI, September 1998, Annual Industry Symposium
28. Concordia University, Montreal, Canada June, 1999
29. International conference SESS-TTES'99 on Environmetrics and Statistics in the Earth and Space Sciences (ECESS), Athens, Greece, August 1999
30. Lulea University of Technology, Division of Quality Technology and Statistics, Lulea, Sweden September, 1999
31. MODSIM'99, Modeling the Dynamics of Natural, Agricultural, Tourism and Socio-economic Systems, Hamilton, New Zealand, December, 1999
32. Otago University, Dunedin, New Zealand, June 2000
33. 28th Summer School Applications of Mathematics in Engineering and Economics (co-author Dr. R. Arnold), Sozopol, Bulgaria, June, 2002
34. 4th AWIS Conference, Auckland (co-author Dr. R. Arnold), New Zealand, July 2002
35. 37th Annual Conference of the Operational Research Society of New Zealand (co-author Dr. Y. Hayakawa), Auckland, New Zealand, November 29-30, 2002
36. International Conference on Reliability and Survival Analysis (co-author Dr. Y. Hayakawa), Columbia, South Carolina, USA, May 21-24, 2003
37. Workshop on Point Processes in Reliability (in collaboration with Dr. J. Robinson), Wellington, New Zealand, September 6-7, 2003
38. 38th Annual Conference of the Operational Research Society of New Zealand (co-author Dr. S. Chakravarthy), Hamilton, New Zealand, November 21-22, 2003, chairing session on Stochastic OR.
39. Wellington, NZ, Statistics Group (WSG), (co-author Dr. Y. Hayakawa) Meeting, November 26, 2003
40. Bernoulli Society East Asian and Pacific Regional Conference (co-author Dr. Y. Hayakawa), Hong-Kong, December 18-20, 2003
41. Mathematical Methods in Reliability (co-author Dr. J. Robinson), MMR'04, Santa Fe, NM, USA, June 21-24, 2004
42. Warranty and Imperfect repairs (co-author Dr. Yu Hayakawa), AIWARM 2004, Hiroshima, Japan, August 26-27, 2004, organising a special session on Warranty Analysis.
43. Seminar Warranty and Quasi-Renewal Repair times, King Mongkut's University of Technology Thonburi, Bangkok, Thailand, October, 2004
44. Warranty Analysis: An Overview, Operations Research Colloquium, Spring 2005, Department of Statistics and Operations Research, The University of North Carolina at Chapel Hill, Feb, 2005.

45. Warranty Analysis, 31st Summer School Applied Mathematics in Economics and Engineering, invited speaker and chairing OR session, Sozopol, Bulgaria, June, 2005.
46. Warranty repair strategy in R2 , (co-author Dr. M. Johnston), 40th ORSNZ conference, chairing a session Wellington, NZ, December 2-3, 2005.
47. Batch Markovian Arrival Process, Workshop on Hidden Markov Models and Complex Systems II, chairing a session, Wellington, NZ, 5-8 December, 2005.
48. Warranty Analysis: Recent Development, invited seminar, Prairie View, Texas A&M, 23 Jan, 2006
49. Warranty Repair Strategy: Minimal/Complex Repairs, (with co-authors M. Johnston and Y. Hayakawa), Sozopol, Bulgaria, SDA, June, 2006
50. A Measure of Risk Caused by Information Asymmetry in e-Commerce, (with D. Christozov and P. Mateev, presented by D. Christozov), Informing Science and Information Technology Education Joint Conference (InSITE), Manchester, June 26-29, 2006
51. MAP/M/2 queue with requeuing and Batch Markovian Arrival Process, invited seminar, Waseda University, Tokyo, Japan, 21 August, 2006
52. Warranty Repair Strategy: Minimal/Complex Repairs (with co-authors M. Johnston and Y. Hayakawa), AIWARM 2006, Busan, Korea, August 23-26, 2006, organising a special session on Warranty Analysis.
53. Estimation of the Mean Cumulative Functions from Automotive Warranty Data: Stratification Approach, Wellington, NZ, Statistics Group (WSG) Meeting (co-author Dr. D. Christozov), October 12, 2006
54. Application of Two-Dimensional Renewal Processes in Modelling Product Warranties, (co-authors D. Corbu and J. O'Sullivan), 41st ORSNZ conference, Christchurch, NZ, Nov 30-Dec 1, 2006
55. Warranty and the Risk of Misinforming: Evaluation of the Degree of Acceptance, (co-authors D. Christozov and P. Mateev), Informing Science and Information Technology Education Joint Conference (InSITE), Varna, Bulgaria, June 22-25, 2008
56. Warranty Data: A Stratification approach for Estimating the Mean Cumulative Function, (co-authors D. Christozov and J. Robinson), Sozopol, Bulgaria, ICPSP, June 21 - 27, 2008
57. Warranty Data: An Estimation of Two-Dimensional Mean Cumulative Function and Automotive Warranty Data: An Estimation of the Mean Cumulative Function using Strata, Asian International Workshop on Advance Reliability Modelling, Taichung, Taiwan, October 23-25, 2008
58. Online Algorithm for Warranty Optimization, (co-author N. Dimitrov) 43rd ORSNZ Conference, Wellington, NZ, 24-25 November, 2008
59. The risk of misinforming for competing messages, (co-authors D. Christozov and P. Mateev), Informing Science and Information Technology Education Joint Conference (InSITE), Macon, Georgia, USA, June 12-15, 2009
60. Statistics and Applied Statistics at Victoria University of Wellington, New Zealand, National Seminar on Statistics Education, 22-27 June, Kiten, Bulgaria, 2009
61. Analysing Truncated Warranty Data, 60th Annual New Zealand Statistical Association Conference, Wellington, New Zealand, 2-3 September 2009
62. Quality Assessment of Warranty Policy, (co-authors D. Christozov and P. Mateev), Informing Science and Information Technology Education Joint Conference (InSITE), Cassino, Italy, June 2010
63. Multidimensional Risk Processes with Dependencies, (co-authors S. Anastasiadis and S. Lu), XIVth International Summer Conference on Probability and Statistics, Sozopol, Bulgaria, June 2010
64. 2D Warranty: An Imperfect Repair Strategy, (co-author Sima Varnosafaderani), 4th Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modeling (APARM 2010), 2-4 December 2010, Wellington, New Zealand
65. Auto Warranty: Mean Cumulative Function, (co-author Her Guan Teo), 40th Spring Conference of the Union of Bulgarian Mathematicians, 5-9 April 2011, Borovetz, Bulgaria
66. Warranty Analysis: Introduction and Recent Advances, Colloquium, Spring 2011, The Faculty of Mathematics and Informatics, Department of Statistics

- and Operations Research, The University of Sofia St. Kliment Ohridski, April 2011.
67. Auto Warranty and Driving Patterns, (co-authors S. Anastasiadis and B. Anderson), 2011 International Conference on Quality, Reliability, Risk, Maintenance, and Safety Engineering, June 2011, Xian, China
 68. Warranty Cost Analysis: on Modelling Warranty Repairs, (co-author Y. Hayakawa), The Seventh International Conference on Mathematical Methods in Reliability (MMR2011) - Theory, Methods, and Applications, Beijing, China, June 20-24, 2011
 69. Optimal Reliability Improvement, Warranty Policy and Sale Price for Second-Hand Products, (co-authors M. Shafiee), The Seventh International Conference on Mathematical Methods in Reliability (MMR2011) - Theory, Methods, and Applications, Beijing, China, June 20-24, 2011
 70. Warranty Analysis - Introduction and Recent Advances, invited seminar, OR seminar, Naval Postgraduate School, 20 March 2012, Monterey, CA, USA
 71. Why Study Warranties? invited seminar, Management Sciences Seminar, University of Waterloo, 9 April 2012, Waterloo, ON, Canada
 72. Warranties: Problems and Challenges, invited talk, 38th Conference on Applications of Mathematics in Engineering and Economics (AMEE2012), 9 June 2012, Sozopol, Bulgaria
 73. Modelling Failures in Multi-Component Systems with Dependencies, (co-authors S. Anastasiadis, R. Arnold and Y. Hayakawa), International Conference on Probability Theory and its Applications, devoted to B.V Gnedenko, Moscow, Russia, June 2012
 74. Warranty and Maintenance: Under-researched areas, (co-author Mahmoud Shafiee), 5th Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modeling (APARM 2012), 1-3 November 2012, Nanjing, China
 75. Modeling Repairs of Systems with a Bathtub-Shaped Failure Rate Function, co-author Sima Varnosafaderani, 46th ORSNZ conference, December 2012 Modeling Rep
 76. Repairs of Systems with a Bathtub-Shaped Failure Rate Function, co-author Sima Varnosafaderani, The Eighth International Conference on Mathematical Methods in Reliability (MMR2013) - Theory, Methods, and Applications, Stellenbosch, South Africa, July 2013
 77. Warranty of Misinforming: An Overview, co-authors D. Christozov and P. Mateev, Informing Science & IT Education Conference (InSite2014), Wollongong, Australia, 30 June - 4 July 2014
 78. Modeling General Repairs of a System with a BFR Function, co-authors Sima Varnosafaderani and R. Arnold, 6th Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modeling (APARM 2014), 21-24 August 2014, Sapporo, Japan
 79. Warranty Cost Analysis: Non-Zero Geometric Repair Times, *invited talk*, co-authors R. Arnold and Y. Hayakawa, ISI-RSC 2014, November 2014, Kuala Lumpur Malaysia
 80. Why study warranties? *keynote talk*, AUT Mathematical Sciences Symposium, November 2014, Auckland, New Zealand
 81. Weathering the Chikungunya Storm: Arbovirus Risk in Texas, *keynote talk*, AUT Mathematical Sciences Symposium, Dec 2015, Auckland, New Zealand (unable to attend)
 82. Modelling Repairs of Systems with a Bathtub-Shaped Failure Rate Function, AUT Mathematical Sciences Symposium, Dec 2016, Auckland, New Zealand

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