Arkady Cherkassky, Ph.D., D.Sc.

List of publications

Refereed papers in professional journals

- 1. Cherkassky, A.E. (1968). Measuring of the mass density of nonwoven by photoelectric method. *Technology of the Textile Industry*, No.6, 101-102.
- 2. Khawkin, V.P., Cherkassky, A.E. (1969). An Investigation of the two-dimensional fabric irregularity. Moscow. *Central Scientific Research Institute*, 2(34), 15-28.
- 3. Khawkin, V.P., Cherkassky, A.E. (1969). An analogue device for modelling of the random processes. Moscow. *Central Scientific Research Institute*, issue XY, 6(60), 11-15.
- 4. Khawkin, V.P., Cherkassky, A.E. (1969). Carding machine smoothing effect in the cross direction. Moscow. *Central Scientific Research Institute*, No.3, 6-9.
- 5. Cherkassky, A.E., Khawkin, V.P., and Milman, J.V. (1969). Dynamic model of the carding machine. *Technology of the Textile Industry U.S.S.R*, No.6, 46-49.
- 6. Cherkassky, A.E. (1970). Mathematical model for ideal two-dimensional textile product. *Technology of the Textile Industry U.S.S.R*, No. 4, 42-46. (In English).
- 7. Cherkassky, A.E. (1971). Two-dimensional probabilistic model of textile fabric. *Transactions of the Moscow Textile Institute*, vol. XXII, 49-53. *World Textile Abstracts*, 1971, 720. (In English).
- 8. Cherkassky, A.E., Dlugi, A.I. (1971). On the washer thread stretcher smoothness effect. Moscow. *Central Scientific Research Institute*, No. 11, 31-37.
- 9. Cherkassky, A.E., Badalowa, E.I., Kretowa, K.M., and Khawkin, V.P. (1971). On the linen structures formed from glass chopped threads. Moscow. *Glass-fiber and glass-plastic*, 1971, No. 5, 5-12.
- 10. Khawkin, V.P., Cherkassky, A.E. (1971). Measurement of the random fields by inertial exponential sensor. Novosibirsk. *Autometry*, No.3, 79-81.
- 11. Khawkin, V.P., Cherkassky, A.E. (1972). The random irregularity of two-dimensional textile product. *Technology of the Textile Industry U.S.S.R.* No.2. (In English).
- 12. Tatochenko, L.K., Cherkassky, A.E. (1972). Noise generator for study of the drafting process. Moscow. *Central Scientific Research Institute*, No. 12, 30-34.
- 13. Cherkassky, A.E., Khawkin, V.P. (1972). Measurement of the random field's irregularity. *Technology of the Textile Industry U.S.S.R,* No. 2, 50-53. *World Textile Abstracts*, 1973, 804. (In English).
- Khawkin, V.P., Cherkassky, A.E. (1972). Control of the wide textile materials irregularity by scanning. *Technology of the Textile Industry U.S.S.R*, No. 3, 34-37. *World Textile Abstracts*, 1973, 2587; 9669. (In English).
- 15. Cherkassky, A.E., Badalowa, E.I., and Kretowa, K.M. (1972). Study of the line from chemically bonded chopped glass threads. Moscow. *Glass-fiber and glass-plastic*, No. 1, 12-21.
- 16. Cherkassky, A.E., Alekseev, M.A. (1973). On the control system parameters for irregularity layer. Moscow. *Central Scientific Research Institute*, No. 1, 19-25.
- 17. Khawkin, V.P., Cherkassky, A.E., and Alekseev, M.A. (1974). Automatics control for forming of the fibrous layer. *Textile Industry U.S.S.R*, issue A, 10-16.

- 18. Kretowa, K.M., Cherkassky, A.E., and Khawkin, V.P. (1974). Method of estimating of common, inner and other irregularities of the chopped glass thread linen. Moscow. *Glass-fiber and glass-plastic*, No. 5, 19-27.
- 19. Cherkassky, A.E. (1975). Modification of the fabric irregularity in shrinkage process. *Technology of the Textile Industry U.S.S.R.*, No. 1, 105-108. *World Textile Abstracts*, 1975, 3656. (In English).
- 20. Cherkassky, A.E., Sebina, L.P. (1975). Estimation of homogeneity of the fibrous layer's. Moscow. *Central Scientific Research Institute*, No. 7, 13-15.
- Cherkassky, A.E. (1976). A measurement of the probabilistic characteristics of the random field using scanning systems. Moscow. *The Transactions of the Moscow Textile Institute*, No. 1, 17-23.
- 22. Cherkassky, A.E., Khawkin, V.P. (1976). Mathematical modelling of roll-drafting process. Moscow. *The Transactions of the Moscow Textile Institute*, No. 2, 16-30.
- 23. Alekseev, M.A., Grinberg, A.I., and Cherkassky, A.E. (1976). A surface mass density's automatic control. Moscow. *Central Scientific Research Institute*, No. 25, 94-107.
- 24. Cherkassky, A.E., Kipnis, A.B., and Aisenberg, L.G. (1977). Experimental investigation of the thermal shrinking of the fibrous base. Moscow. *Central Scientific Research Institute*, No. 7, 13-19.
- 25. Cherkassky, A.E., Kipnis, A.B., and Aisenberg, L.G. (1977). Regression model for the thermal shrinkage process. Moscow. *Central Scientific Research Institute*, No. 8, 19-23.
- 26. Cherkassky, A.E., Wolkov, A.G. (1977). Automatic control of the width of the fibrous layer. Moscow. *Central Scientific Research Institute*, No. 10, 14-17.
- 27. Cherkassky, A.E., Sebina, L.P., and Wolkov, A.G. (1978). Experimental study of the thermal shrinkage kinetic. *Technology of the Textile Industry U.S.S.R.,* No. 6, 59-61. *World Textile Abstracts*, 1978, 3252. (In English).
- 28. Khawkin, V.P., Cherkassky, A.E. (1977). Mathematical modelling of the thermal shrinkage of the two-dimensional layer. *Technology of the Textile Industry U.S.S.R.*, No. 6, 55-59. *World Textile Abstracts*, 1978, 3251. (In English).
- 29. Cherkassky, A.E. (1978). Analysis of automatic control system for the fibrous base shrinkage using simulation. *Technology of the Textile Industry U.S.S.R.*, No. 4, 111-113.
- 30. Cherkassky, A.E., Sebina, L.P., and Wolkov, A.G. (1978). Multifactor regression model of thermal shrinking process. *Technology of the Textile Industry U.S.S.R.*, No. 5, 46-50.
- 31. Cherkassky, A.E., Doroshenko, N.N. (1980). A prediction model of the shrinking process. *Technology of the Textile Industry U.S.S.R.*, No. 4, 104-107.
- 32. Milechin, G.W., Cherkassky, A.E. (1981). A staple diagram analysis by scanning. *Technology of the Textile Industry U.S.S.R.*, No. 5, 15-17.
- 33. Cherkassky, A.E., Milechin, G.W. (1981). Measurement exactness for the staple diagram analysis. *Technology of the Textile Industry U.S.S.R.*, No. 6, 15-18.
- 34. Cherkassky, A.E., Wolkov, A.G., and Senekin, M.B. (1982). Automatic control of the shrinkage process. Moscow. *Central Scientific Research Institute*, No. 3, 47-55.
- 35. Cherkassky, A.E. (1982). A matrix dynamic model of the sectional bunker feeder. *Technology* of the Textile Industry U.S.S.R., No. 6, 89-91.
- 36. Cherkassky, A.E., Kagan, V.M. (1983). A structure of the CAD system for the textile industry. Moscow. *Central Scientific Research Institute,* (368ml-D83), 17-24.

- 37. Cherkassky, A.E., Naidich, F.Z., Dimitrashchuk, M.N., and Moklitsa V.I. (1984). An evaluating of irregularity of the fibrous layer. *Textile Industry U.S.S.R.*, No. 2, 49-52. *World Textile Abstracts*, 1984, 3163. (In English).
- 38. Cherkassky, A.E., Trebuchina, E.V. (1984). A study of the fibrous layer's irregularity. Moscow. *Central Scientific Research Institute*, (949lp-D84), 7-12.
- 39. Cherkassky, A.E., Belogolovsky, A.M. (1984). Application of CAD systems in textile industry. Moscow. *Central Scientific Research Institute*, No.6, 8-15.
- Pasynkov, V.I., Tishcenko, T.N., and Cherkassky, A.E. (1985). Fiber-optical transducer for measuring of the yarn tension. *Technology of the Textile Industry U.S.S.R.*, No. 5, 103-104. *World Textile Abstracts*, 1985, _5731. (In English).
- 41. Cherkassky, A.E. (1984). Mathematical modelling of the web conversion process. *Technology* of the Textile Industry U.S.S.R., No. 2, 49-52. World Textile Abstracts, 1984, 4656. (In English).
- 42. Cherkassky, A.E., Belogolovsky, A.M. (1984). Simulation of the sectional bunker feeder. Moscow. *Institute for Science and Technical Information*, (947), 93-101.
- 43. Cherkassky, A.E., Trebuchina, E.V. (1984). Investigation of the fibrous base irregularity of synthetic leather. Moscow. *Institute for Science and Technical Information*, (949lp-D84), 15-18.
- Pasynkov, V.I., Tishcenko, T.N., and Cherkassky, A.E. (1984). Application of the fibrous optical sensor. *Technology of the Textile Industry U.S.S.R.*, No. 5, 103-104.
- 45. Cherkassky, A.E., Kozik, E.V. (1984). Software for statistical analysis of the random field irregularity. Moscow. *Institute for Science and Technical Information*, (1055lp-84ep), 13-19.
- 46. Cherkassky, A.E., Belogolovsky, A.M. (1985). Automatic control of the fibrous layer's forming process. *Textile Industry U.S.S.R.*, No. 4, 47-48.
- 47. Cherkassky, A.E. (1985). A Two-dimensional dynamic model of aerodynamic web forming. *Technology of the Textile Industry U.S.S.R.,* No. 2, 81-86.
- 48. Brazlawskaja, M.V., Cherkassky, A.E. (1985). Sectional bunker feeder in nonwoven manufacturing. Moscow. *Central Scientific Research Institute,* issue 9.
- 49. Shakhnin, V.N., Cherkassky, A.E. (1985). Optical-electronic transducer for area-density testing of the fibrous web. Moscow. *Central Scientific Research Institute*, No. 6, 1-3.
- 50. Cherkassky, A.E., Kozik, E.V. (1985). Statistical characteristics of the nonwoven fabric irregularity. *Textile Industry U.S.S.R.*, No. 5, 73-75.
- 51. Pickel, B.S., Cherkassky, A.E. (1985). Simulation software for automatic control systems. *Institute for Science and Technical Information,* (1129lp-84ep), 24-31.
- 52. Cherkassky, A.E., Shakhnin, V.N. (1986). An application of the optical-electronic transformers for control of the surfaces density. *Textile Industry U.S.S.R.*, No. 12, 45-46. *World Textile Abstracts*, 1986, 5617. (In English).
- 53. Pickel, B.S., Cherkassky, A.E. (1986). The Gibbs description of the random fields' irregularity. *Technology of the Textile Industry U.S.S.R.,* No. 4, 34-39.
- 54. Cherkassky, A.E. (1986). Application of Linnik functional for estimating of nonwoven irregularity. *Technology of the Textile Industry U.S.S.R.*, No. 2, 64-68.
- 55. Belogolovsky, A.M., Cherkassky, A.E. (1987). On the problems of dialog decision for automatic control in textile. Moscow. *Institute for Science and Technical Information*, (184).
- 56. Cherkassky, A.E., Belogolovsky, A.M. (1987). Computer-aided simulation of control systems. *Technology of the Textile Industry U.S.S.R*, No. 3, 40-43.

- 57. Cherkassky, A.E., Belogolovsky, A.M. (1987). Analysis of the scanning system for twodimensional fabrics. *Technology of the Textile Industry U.S.S.R.*, No. 6, 40-42.
- 58. Cherkassky, A.E. (1989). Decomposition of the design problem for the technological complex. Moscow. *The Transactions of the Moscow Textile Institute*, 9-14.
- Cherkassky, A.E., Belogolovsky, A.M. (1988). Two-dimensional model of the Carding Machine. *Technology of the Textile Industry U.S.S.R.*, No. 2, 18-21. *World Textile Abstracts*, 1988, 4064. (In English).
- 60. Cherkassky, A.E. (1994). A Two-Dimensional Mathematical Model of the Carding Process. *Textile Research Journal*, 64(3), 169-175.
- 61. Cherkassky, A.E. (1995). Analysis of the Smoothing Effect of the Card Cylinder Using Simulation. *Textile Research Journal*, 65(12), 723-730.
- 62. Cherkassky, A.E., Kit, B. (1997). A Computer Simulation of Yarn Breakage in the Ring-Spinning Process, Part I: Model Structure, Investigation Strategy, and Experimental Design. *The Journal of the Textile Institute, Vol. 88, Part 2: Textile Economics, Management and Marketing,* No. 1, 29-46.
- 63. Cherkassky, A.E., Kit, B. (1997). A Computer Simulation of Yarn Breakage in the Ring-Spinning Process, Part II: Description and Analysis of the Simulation Results. *The Journal of the Textile Institute, Vol. 88, Part 2: Textile Economics, Management and Marketing,* No. 1, 47-70, 1997.
- 64. Cherkassky, A.E. (1998). Analysis and Simulation of Nonwoven Irregularity and Non-Homogeneity. *Textile Research Journal*, 68(4), 242-253.
- 65. Cherkassky, A.E. (1999). Evaluating of Nonwoven Fabrics Irregularity on the Basis of Linnik Functional. *Textile Research Journal*, 69(10), 701-708.
- 66. Cherkassky, A., Kit, B., and Porat, I. (2000). Two-Dimensional Analysis of Card Web Irregularity. *Textile Research Journal*, 70(10), 901-909.
- 67. Suh, M., Jasper, W., Cherkassky, A. (2002). A Electronic Imaging of Fabric Qualities by On-Line Yarn Data. *National Textile Center Briefs – Management System Competency*. S01-I1S12.
- Cherkassky, A., Weinberg, A. (2010). Objective Evaluation of Textile Fabric Appearance. Part 1: Statistical Evidence, Basic Principles, and Grading Procedures. *Textile Research Journal*, Vol. 80(3), 226-235.
- Cherkassky, A., Weinberg, A. (2010). Objective Evaluation of Textile Fabric Appearance. Part
 Probabilistic Neural Networks and Threshold Approaches. Testing Results. *Textile Research Journal*, Vol. 80(2), 135-144.
- 70. Kit E., Cherkassky, A., Sant T., Fernando H.J.S. (2010). Implementation of Neural Networks for calibration of hot-film anemometer based on in-situ sonic data measurements. *Journal of Atmospheric and Oceanic Technology*. Vol.27, No.1, 23-41.
- Cherkassky, A.E., (2010). Neural network meta-model of the fibrous materials based on discrete-evet simulation. Part 1: Discrete-event simulation model of the one-dimentional fibrous material. *The Journal of the Textile Institute*. 102(05), pp. 442-454.
- 72. Cherkassky, A.E., (2010). Neural network meta-model of the fibrous materials based on discrete-evet simulation. Part 2: Neural network meta-model. Development and testing. *The Journal of the Textile Institute*. 102(6), pp. 475-482.
- 73. Barad, M., Cherkassky, A. (2010). Timed Petri Nets Perspective on Weaving Processes. *The Processing of the* 10th *International Workshop on Dicrete Event System.* 448-453.
- 74. Cherkassky, A. (2011). Discrete-event simulation model of roll-drafting process. *The Journal of the Textile Institute*. 102(12), pp. 1044-1058.

- 75. Cherkassky, A. (2012). A Neural Network meta-model of roll-drafting process. *The Journal of the Textile Institute*. 103(01), pp. 166-178.
- 76. Cherkassky, A., Bumagin, E. (2014). A combined discrete event agent based approach to modeling tensile strength of one-dimensional fibrous materials. Part 1: Simulation algorithm on the base of the fiber slippage effect. *Journal of Engineering Fiber and Fabric.* Volume 9, Issue 4.
- 77. Cherkassky, A., Bumagin, E. (2014). A combined discrete event agent based approach to modeling tensile strength of one-dimensional fibrous materials. Part 2: Effect of the basic model parameters. *Journal of Engineering Fiber and Fabric. Submitted.*
- 78. Cherkassky, A. (2014). Fuzzy Logic based evaluation of textile fabric surface. *Innovative approaches for creation a barrier-free environment.* Moscow State University of Technology and Management, *in print*.

Book, Booklets, and Chapters in books

- 79. Alekseev, M.A., Cherkassky, A.E., Khawkin, V.P. (1976). *Modern Devices and Automatic Control Systems for Irregularity of Nonwoven Fabric*. Moscow. Central Scientific Research Institute Textile Industry, 43 pp.
- 80. Milman, J.V., Cherkassky, A.E. (1973). *Automatic Control for Textile Finishing and Dyeing Processes.* Moscow. Textile Industry Edition, 72 pp.
- 81. Cherkassky, A.E. (1977). *Mathematical Modeling and Control for Production Processes*. Moscow. Textile Industry Edition, 61 pp.
- 82. Smelyshev, V.L., Cherkassky, A.E., and Shpakova S.M. (1988). New Description Method for the Objects of Automatic Control. *In the book "Computer using in the Textile Industry"*, The Edition of the Moscow Textile Institute.
- 83. Shpakova, S.M., Cherkassky, A.E. (1988). Optimization of the Carding Sliver Production. *In the book "Computer using in the Textile Industry",* The Edition of the Moscow Textile Institute.
- 84. Cherkassky, A.E. (1989). *An Irregularity of Nonwoven Materials*. Moscow. Textile Industry Edition, 210 pp.

Proceedings of Conferences

- 1. Cherkassky, A.E. (1970). Modelling of the Textile Products Probability Characteristics. *Proc. Conf. "Theory and applications at tapes smoothness by auto regulators",* Moscow, 102-111.
- 2. Khawkin, V.P., Cherkassky, A.E. (1971). An Automatic Control of Nonwoven Fabric Density. *Proc. Conf. "Control of technological processes in the Textile Industry"*, Moscow, 40-45.
- 3. Cherkassky, A.E., Khawkin, V.P. (1974). Mathematical Models of Nonwoven Technological Processes. *Proc. Conf. "Mathematical Methods for Textile Research"*, Tbilisi.
- 4. Khawkin, V.P., Alekseev, M.A., and Cherkassky, A.E. (1975). Automatic Control System for Fibrous Layer's Irregularity. *Proc. Conf. on Textile Industry*, Moscow, (10), 13-18.
- 5. Cherkassky, A.E. (1980). On the Prediction Application of Thermal Shrinking Process by Automatic Control. *Proc. Int. Conf.*, Central Scientific Research Institute Textile Industry.
- 6. Cherkassky, A.E., Khawkin, V.P. (1980). Measuring System SCAN-1800 for Control of the Web Irregularity. Ibid.

- 7. Cherkassky, A.E. (1981). Automatic Control of the Surface Mass Density with Impulsive IR-Sensor. *Proc. Conf. "Optical and Radioactive Methods for Quality Materials Control"*, Fergana.
- 8. Cherkassky, A.E., Milechin, G.W. (1981). An Optical-Electronic Scanning System for Staple Analysis. Ibid.
- 9. Cherkassky, A.E., Tishcenko, T.N. (1981). Adapted Sensor for the Fibrous Fabrics Irregularity. Ibid.
- 10. Cherkassky, A.E., Shpakowa, S.M. (1986). Optimal Control for the Complex Technological System with Flexible Structure. *Proc. Conf. "Chemical Industry Automation and Robotization",* Tambov.
- Cherkassky, A.E., Shpakowa, S.M. (1986). On the Technological Process Optimal Control's Peculiarities Problems. *Proc. Conf. "Ways for Science-technical Progress in Textile Industry"*, Tbilisi.
- 12. Cherkassky, A.E. (1986). System Analysis of the Fibrous Linen and Nonwoven Fabrics Forming Processes. Ibid.
- 13. Cherkassky, A.E., Kozik, E.V. (1986). Modelling and Automatic Control for Shirking Process. Ibid.
- Cherkassky, A., Kenig, S., Bumagin, E., and Omer M. (2005). Application of Neural Networks for Control of Injection Molding Machine. *21st Annual Meeting of Polymer Processing Soc.*, Liepzig, Germany. 19-23 June.
- 15. Barad, M., Cherkassky, A. (2009). Timed Petri nets for textile batch planning under varying input characteristics. *20th International Conference on Production Research*. Shanghai.

Textbooks and Tutorials

- 1. Smirnov, V.I., Cherkassky, A.E. (1967). Industrial Electronics. Lectures. *The Edition of the Moscow Textile Institute*, 103 pp.
- 2. Smirnov, V.I., Cherkassky, A.E. (1967). Industrial Electronics. Tutorial. *The Edition of the Moscow Textile Institute*, 33 pp.
- 3. Cherkassky, A.E. (1972). Mathematical Modelling. Lectures. *The Edition of the Moscow Textile Institute,* 46 pp.
- 4. Cherkassky, A.E. (1978). Theory of Automatic Control, Part 1. Tutorial. *The Edition of the Moscow Textile Institute*, 48 pp.
- 5. Kostyleva, N.E., Cherkassky, A.E. (1981). Theory of Automatic Control, Part 2. Tutorial. *The Edition of the Moscow Textile Institute*, 36 pp.
- Cherkassky, A.E., Ermolaev, Y.A. (1981). Mathematical Modelling of Technological Processes. Tutorial. *The Edition of the Moscow Textile Institute*, 28 pp.
- 7. Cherkassky, A.E., Kostyleva, N.E., and Ermolaev, Y.A. (1982). Modelling of the Technological Processes, part 2. *The Edition of the Moscow Textile Institute*, 36 pp.
- 8. Kostyleva, N.E., Cherkassky, A.E. (1982). Theory of Automatic Control, Part 3. Tutorial. *The Edition of the Moscow Textile Institute,* 20 pp.
- 9. Cherkassky, A.E., Kostyleva, N.E., and Ermolaev, Y.A. (1983). Optimization of Technological Processes, Part 1. *The Edition of the Moscow Textile Institute*, 48 pp.
- 10. Cherkassky, A.E., Belogolowsky, A.M. (1988). Computer-Aided Simulation for Linear Control Systems. Lectures. *The Edition of the Moscow Textile Institute*, 58 pp.

- 11. Cherkassky, A.E., Timochin, A.N. (1989). Algorithms and Software for Control Systems. *The Edition of the Moscow Textile Institute*, 44 pp.
- 12. Cherkassky, A.E., Bondarev, A.G. (1990). Methods of Optimization of Technological Processes. *The Edition of the Moscow Textile Institute*, 48 pp.
- 13. Cherkassky, A.E. (1997). Computer-Aided Simulation. *Shenkar College*, 74 pp. (English-Hebrew).
- 14. Cherkassky, A.E. (1997). Nonwoven Technology. Shenkar College, 56 pp. (English-Hebrew).
- 15. Cherkassky, A. (2009). Discrete-event simulation. Tutorial, Shenkar College, (English-Hebrew).
- 16. Cherkassky, A. (2009). Discrete-event simulation. Practical Work, *Shenkar College*, (English-Hebrew).
- 17. Cherkassky, A. (2010). Instrumentation and Control. Introduction to Control Systems. 39 pp. *Shenkar College*, (English-Hebrew).
- 18. Cherkassky, A. (2011). Instrumentation and Control. Analysis and Design using MATLAB. 146 pp. *Shenkar College*, (English-Hebrew).
- 19. Cherkassky, A. (2012). Computer Added Simulation. Principles and approaches. 54 pp. *Shenkar College*, (English-Hebrew).
- 20. Cherkassky, A. (2012). Computer Added Simulation. Discrete event simulation with ARENA, Part 1, 46 pp. *Shenkar College*, (English-Hebrew).
- 21. Cherkassky, A. (2012). Computer Added Simulation. Discrete event simulation with ARENA, Part 2, 33 pp. *Shenkar College*, (English-Hebrew).
- 22. Cherkassky, A. (2012). Computer Added Simulation. Discrete event simulation with ARENA, Part 3, 18 pp. *Shenkar College*, (English-Hebrew).
- 23. Cherkassky, A. (2012). Computer Added Simulation. ARENA Workshop, 84 pp. *Shenkar College,* (English-Hebrew).
- 24. Cherkassky, A. (2013). Computer Added Simulation. Agent Based Simulation with Anylogic, 33pp. *Shenkar College*, (English-Hebrew).
- 25. Cherkassky, A. (2013). Computer Added Simulation. Discrete event simulation with Anylogic, 30 pp. *Shenkar College*, (English-Hebrew).
- 26. Cherkassky, A. (2013). Computer Added Simulation. System Dynamics simulation with Anylogic, 35 pp. *Shenkar College*, (English-Hebrew).
- 27. Cherkassky, A. (2013). Computer Added Simulation. AnyLogic Workshop, 71 pp. *Shenkar College*, (English-Hebrew).
- 28. Cherkassky, A. (2014). Computer Added Simulation. Multi-method modeling, 27 pp. *Shenkar College*, (English-Hebrew).
- 29. Cherkassky, A. (2014). Industrial Applications of Artificial Intelligence Systems. Introduction and Basic Principles, 57 pp. *Shenkar College*, (English-Hebrew).
- 30. Cherkassky, A. (2014). Industrial Applications of Artificial Intelligence Systems. Neural Networks, 200 pp. *Shenkar College*, (English-Hebrew).
- 31. Cherkassky, A. (2014). Industrial Applications of Artificial Intelligence Systems. Fuzzy Logic, 53 pp. *Shenkar College*, (English-Hebrew).
- 32. Cherkassky, A. (2014). Industrial Applications of Artificial Intelligence Systems. Genetic Algorithm, 38 pp. *Shenkar College*, (English-Hebrew).
- 33. Cherkassky, A. (2014). Industrial Applications of Artificial Intelligence Systems. Workshop with MATLAB, 65 pp. *Shenkar College*, (English-Hebrew).

Patents

- 1. Khawkin, V.P., Cherkassky, A.E., and Alekseev, M.A. (1974). A Device for Measurement of the *Textile Products Irregularity*. Patent USSR. No.456139.
- 2. Khawkin, V.P., Cherkassky, A.E., and Alekseev, M.A. (1977). A Device for Nonwoven Fabric's Irregularity Finding. Patent USSR. No.557726.
- 3. Khawkin, V.P., Cherkassky, A.E., Alekseev, M.A., Eberhadt, K., and Urban, B. (1977). *Schaltung-sanordnung zur Bestimmung der Ungleichmassigkait von Vliesmaterial*. Patent DDR. No.129279. (in German).
- 4. Khawkin, V.P., Diwinskii, L.A., and Cherkassky, A.E. (1977). *A Device for Measurement of the Fibrous Base Synthetic Leather Shrinkage.* Patent USSR. No.602777.
- 5. Kipnis, A.B., Aisenberg, L.G., and Cherkassky, A.E. (1980). *A Device for Fibrous Base Thermal Shrinking*. Patent USSR. No.793011.
- 6. Cherkassky, A.E., Alekseev, M.A., and Brazlawskaja M.V. (1985). *A Device for Textile Machines' Feed by Fibrous Material.* Patent USSR. No.1170009.
- 7. Cherkassky, A.E., Shakhnin, V.N. (1985). *A Device for Control of Surface Density of the Textile Fabrics*. Patent USSR. No.12114794.
- 8. Pasynkov, V. I. Cherkassky, A.E., and Shapiro, L.J. (1986). *The Turn's Angle Sensor*. Patent USSR. No.1280315.
- Cherkassky, A., Weinberg, A. (2007). An Electro-Optical Method and Apparatus for Evaluating Protrusions of Fibers from a Fabric Surface. U.S. Patent Application No.: 11/783,802, Publication No.: 2007/0248246A1.