Włodzimierz Ogryczak
Warsaw University of Technology
Institute of Control & Computation Engineering
Nowowiejska 15/19
00–665 Warsaw
Poland

May 13, 2004

Fax:	(48–22)/825–3719
Phone:	(48–22)/660–7397 (department)
	(48–22)/660–7862 (office)
E–Mail:	ogryczak@ia.pw.edu.pl
URL:	http://www.ia.pw.edu.pl/~wogrycza

Włodzimierz Ogryczak

Publications

Books (monographs)

- *Linear and Discrete Optimization with Multiple Criteria* (in Polish). Warsaw University Press, Warsaw, 1997.
- *Linear and Integer Programming* (in Polish). Scientific–Technical Publishers, Warsaw, 1981. (with K. Zorychta).

Books (textbooks)

- *Mathematical Programming with the MPSX Package* (in Polish). Warsaw University Press, Warsaw, 1989.

Chapters in Books

- Equitable Approaches to Location Problems. In *Spatial Multicriteria Decision Making and Analysis: A Geographic Information Sciences Approach*, J.–C. Thill (ed.), pp. 103–126. Ashgate, Brookfield, 1999. (with M.M. Kostreva).
- A Generalized Reference Point Approach to Multiobjective Transshipment Problem with Facility Location. In *Aspiration Based Decision Support Systems — Theory, Software and Applications*, A. Lewandowski and A. Wierzbicki (eds.), Lecture Notes in Economics and Mathematical Systems 331, pp. 213–229. Springer Verlag, New York, 1989. (with K. Studziński & K. Zorychta).
- Solving Multiobjective Distribution–Location Problems with the DINAS System. In *Aspiration Based Decision Support Systems — Theory, Software and Applications*, A. Lewandowski and A.P. Wierzbicki (eds.), Lecture Notes in Economics and Mathematical Systems 331, pp. 230–250. Springer Verlag, New York, 1989. (with K. Studziński & K. Zorychta).

Edited Volumes

- *Portfolio Optimization*, The Special Issue of *Control and Cybernetics*, **28**, No. 4, 1999. (with G.Kersten).
- *Methodological Foundations of Multi-Criteria Decision Making*, Feature Issue of *European Journal of Operational Research*, **158**, No. 2, 2004 (with R.Vetschera).

Peer–reviewed Journal Papers

- Equitable Aggregations and Multiple Criteria Analysis, *European Journal of Operational Research*, **158**, pp. 362–367, 2004. (with M.M.Kostreva and A.Wierzbicki).
- LP Solvable Models for Portfolio Optimization: A Classification and Computational Comparison, *IMA Journal of Management Mathematics*, **14**, pp. 187–220, 2003. (with R.Mansini and M.G.Speranza).
- On Multiple Criteria Decision Support for Suppliers on the Competitive Electric Power Market. *Annals of Operations Research*, **121**, pp. 79–104, 2003. (with M.Kaleta, E.Toczyłowski and I.Żółtowska).
- Fair resource allocation schemes and network dimensioning problems, *Journal of Telecommunications and Information Technology*, 3/2003, 34–42. (with T. Śliwiński and A.Wierzbicki).
- On LP Solvable Models for Portfolio Selection. *Informatica*, **14**, pp. 37–62, 2003. (with R.Mansini and M.G.Speranza).
- On Solving Linear Programs with the Ordered Weighted Averaging Objective. *European Journal of Operational Research*, **148**, pp. 80–91, 2003. (with T. Śliwiński).
- Minimizing the Sum of the k Largest Functions in Linear Time. *Information Processing Letters*, **85**, pp. 117–122, 2003. (with A. Tamir).
- Multiple Criteria Optimization and Decisions under Risk. *Control and Cybernetics*, **31**, pp. 975–1003, 2002.
- Dual Stochastic Dominance and Quantile Risk Measures. *International Transactions in Operational Research*, **9**, pp. 661–680, 2002. (with A. Ruszczyński).
- Conditional Median: A Parametric Solution Concept for Location Problems. *Annals of Operations Research*, **110**, pp. 167–181, 2002. (with M. Zawadzki).
- On Equitable Approaches to Resource Allocation Problems: The Conditional Minimax Solution. *Journal of Telecommunications and Information Technology*, 3/2002, pp. 40–48. (with T. Śliwiński).
- Dual Stochastic Dominance and Related Mean–Risk Models. *SIAM Journal on Optimization*, **13**, pp. 60–78, 2002. (with A. Ruszczyński).
- On Goal Programming Formulations of the Reference Point Method. *Journal of the Operational Research Society*, **52**, pp. 691–698, 2001.

- Extending the MAD Portfolio Optimization Model to Incorporate Downside Risk Aversion. *Naval Research Logistics*, **48**, pp. 185–200, 2001. (with W. Michalowski).
- Comments on Properties of the Minimax Solutions in Goal Programming. *European Journal of Operational Research*, **132**, pp. 17–21, 2001.
- On Consistency of Stochastic Dominance and Mean–Semideviation Models. *Mathematical Programming*, **89**, pp. 217–232, 2001. (with A. Ruszczyński).
- Multiple Criteria Linear Programming Model for Portfolio Selection. *Annals of Operations Research*, **97**, pp. 143–162, 2000.
- Inequality Measures and Equitable Approaches to Location Problems. *European Journal of Operational Research*, **122**, pp. 374–391, 2000.
- On the Distribution Approach to Location Problems. *Computers & Industrial Engineering*, **37**, pp. 595–612, 1999.
- A Recursive Procedure for Selecting Optimal Portfolio According to the MAD Model. *Control and Cybernetics*, **28**, pp. 725–738, 1999. (with W. Michalowski).
- Linear Optimization with Multiple Equitable Criteria. *RAIRO Operations Research*, **33**, pp. 275–297, 1999. (with M.M. Kostreva).
- From Stochastic Dominance to Mean–Risk Models: Semideviations as Risk Measures. *European Journal of Operational Research*, **116**, pp. 33–50, 1999. (with A. Ruszczyński).
- Relocation Problems Arising in Conservation Biology. *Computers & Mathematics with Applications*, **37**, pp. 135–150, 1999. (with M.M. Kostreva & D.W. Tonkyn).
- Location Problems from the Multiple Criteria Perspective: Efficient Solutions. *Archives of Control Sciences*, **7 (XLIII)**, pp. 161–180, 1998.
- A Spreadsheet Implementation of Aspiration/Reservation Based Decision Support. *Central European Journal for Operations Research and Economics*, **5**, pp. 111–129, 1997. (with J. Korycki).
- On Cent–Dians of General Networks. *Location Science*, **5**, pp. 15–28, 1997.
- On the Lexicographic Minimax Approach to Location Problems. *European Journal of Operational Research*, **100**, pp. 566–585, 1997.
- A Note on Modeling Multiple Choice Requirements for Simple Mixed Integer Programming Solvers. *Computers & Operations Research*, **23**, pp. 199–205, 1996.
- Multiple Criteria Location Problem: 2. Preference–based Techniques and Intertactive Decision Support. *Environment & Planning*, **A28**, pp. 69–98, 1996. (with J. Malczewski).
- Multiple Criteria Location Problem: 1. A Generalized Network Model and the Set of Efficient Solutions. *Environment & Planning*, **A27**, pp. 1931–1960, 1995. (with J. Malczewski).
- Dual Simplex Algorithm with Implicit Representation of Variable Upper Bounds. *Optimization*, **33**, pp. 321–338, 1995.

- On Solving Multiobjective Linear Programs with Implicit Representation of Minimax Scalarizing Function. *Archives of Control Sciences*, **3 (XXXIX)**, pp. 193–209, 1994. (with K. Zorychta).
- A Goal Programming Model for the Reference Point Method. *Annals of Operations Research*, **51**, pp. 33–44, 1994.
- Aspiration/Reservation Decision Support — A Step Beyond Goal Programming. *Journal of Multi–Criteria Decision Analysis*, **1**, pp. 101–117, 1992. (with S. Lahoda).
- DINAS — A Computer–Assisted Analysis System for Multiobjective Transshipment Problems with Facility Location. *Computers & Operations Research*, **19**, pp. 637–647, 1992. (with K. Studziński & K. Zorychta).
- An Implementation of Variable Upper Bounds via SUB Methodology. *Journal of Information & Optimization Sciences*, **13**, pp. 29–47, 1992.
- An Interactive Approach to the Central Facility Location Problem: Locating Pediatric Hospitals in Warsaw. *Geographical Analysis*, **22**, pp. 244–258, 1990. (with J. Malczewski).
- A Solver for the Multi–Objective Transshipment Problem with Facility Location. *European Journal of Operational Research*, **43**, pp. 53–64, 1989. (with K. Studziński & K. Zorychta).
- Simplex Method is not Always Well–behaved. *Linear Algebra and Its Applications*, **109**, pp. 41–57, 1988.
- The Analysis of Liquid Milk Supply to Urban Agglomeration by a Bicriterion Linear Transportation Model with the MPSX/370 Package. *Archives of Control Sciences*, **XXXIII**, pp. 368–376, 1988. (with W. Szymanowski).
- Symmetric Duality Theory for Linear Goal Programming. *Optimization*, **19**, pp. 373–396, 1988.
- A Multiobjective Approach to Reorganization of Health Service Areas: A Case Study. *Environment & Planning*, **A20**, pp. 1461–1470, 1988. (with J. Malczewski).
- A Counterexample to Transformations in Multiphase and Sequential Linear Goal Programming. *Control and Cybernetics*, **17**, pp. 79–84, 1988.
- On Practical Stopping Rules for the Simplex Method. *Mathematical Programming Study*, **31**, pp. 167–174, 1987.
- Health Care Districts Planning by Multiobjective Analysis with the MPSX/370 Package. *Archives of Control Sciences*, **XXXII**, pp. 369–381, 1987. (with J. Malczewski).
- General Concept of the Dynamic Interactive Network Analysis System (DINAS). *Archives of Control Sciences*, **XXXII**, pp. 279–289, 1987. (with K. Studziński & K. Zorychta).
- A Symmetric Duality Concept for Linear Goal Programming: Principal Results. *Control and Cybernetics*, **15**, pp. 413–423, 1986.

Peer–reviewed Papers in Proceedings Published as Commercial Books

- Risk Measurement: Mean Absolute Deviation versus Gini's Mean Difference. In *Decision Theory and Optimization in Theory and Practice*, G. Wanka (ed.), pp. 33–51. Shaker Verlag, Aachen, 2000.

- Stochastic Dominance Relation and Linear Risk Measures. In *Financial Modelling — Proceedings of the 23rd Meeting of the EURO Working Group on Financial Modelling*, A.M.J. Skulimowski (ed.), pp. 191–212. Progress & Business Publishers, Kraków, 1999.

- Reference Distribution — An Interactive Approach to Multiple Homogeneous and Anonymous Criteria. In *Multiple Criteria Decision Making — Proceedings of the XIIth International Conference*, G. Fandel and T. Gal (eds.), Lecture Notes in Economics and Mathematical Systems 448, pp. 156–165. Springer Verlag, Berlin, 1997.

- Preemptive Reference Point Method. In *Multicriteria Analysis — Proceedings of the XIth International Conference on MCDM*, J. Climaco (ed.), pp. 156–167. Springer Verlag, Berlin, 1997.

- DINAS Dynamic Interactive Network Analysis System: A Tutorial Example. In *User–Oriented Methodology and Techniques of Decision Analysis and Support — Proceedings of the IIASA International Workshop*, J. Wessels and A.P. Wierzbicki (eds.), Lecture Notes in Economics and Mathematical Systems 397, pp. 209–222. Springer Verlag, New York, 1993. (with K. Studziński & K. Zorychta).

- EDINET — A Network Editor for Transshipment Problems with Facility Location. In *Computer Science & Operations Research: New Developments in Their Interfaces*, O.Balci, R. Sharda and S.A.Zenios (eds.), pp. 197–212. Pergamon Press, Oxford, 1992. (with K. Studziński & K. Zorychta).

- On Solving Multiobjective Linear Programs via Minimax Scalarizing Function. In *Multiple Criteria Decision Making — Proceedings of the IXth International Conference: Theory and Applications in Business, Industry and Government*, A. Goicoechea, L. Duckstein and S. Zionts (eds.), pp. 311–325. Springer Verlag, Berlin, 1992. (with K. Zorychta & J.M. Chaudri).

- DINAS — Computer–Assisted System for Multi–Criteria Transportation and Location Analyses. In *Advances in Computing and Information — Proceedings of the International Conference on Computing and Information ICCI'90*, S.G. Akl, F. Fiala and W.W. Koczkodaj (eds.), Lecture Notes in Computer Science 468, pp. 216–224. Springer Verlag, New York, 1991. (with K. Studziński & K. Zorychta).

- The Analysis of Liquid Milk Supply to Urban Agglomeration by Bicriterion Linear Transportation Model with the MPSX/370 Package. In *Improving Decision Making in Organizations — Proceedings of the VIIIth International Conference on Multiple Criteria Decision Making*, A.G. Lockett and G. Islei (eds.), Lecture Notes in Economics and Mathematical Systems 335, pp. 203–211. Springer Verlag, New York, 1989. (with W. Szymanowski).

- On Health Care Districts Planning by Multiobjective Analysis with the MPSX/370 Package. In *Improving Decision Making in Organizations — Proceedings of the VIIIth International Conference on Multiple Criteria Decision Making*, A.G. Lockett and G. Islei (eds.), Lecture Notes in Economics and Mathematical Systems 335, pp. 314–324. Springer Verlag, New York, 1989. (with J. Malczewski).

- Dynamic Interactive Network Analysis System. In *Improving Decision Making in Organizations — Proceedings of the VIIIth International Conference on Multiple Criteria Decision Making*, A.G. Lockett and G. Islei (eds.), Lecture Notes in Economics and Mathematical Systems 335, pp. 444–453. Springer Verlag, New York, 1989. (with K. Studziński & K. Zorychta).

- Methodological Background of the Dynamic Interactive Network Analysis System (DINAS). In *Methodology and Software for Interactive Decision Support — Proceedings of the International IIASA Workshop*, A. Lewandowski and I. Stanchev (eds.), Lecture Notes in Economics and Mathematical Systems 337, pp. 195–201. Springer Verlag, New York, 1989. (with K. Studziński & K. Zorychta).

Peer–reviewed Papers in Proceedings

- Equity and Risk Factors in Aspiration–Based Approaches. In *Proceedings of the International Workshop on Social Security Reform*, R.Kulikowski, G.J.MacDonald (eds.), Warsaw, Poland, 1998. pp. 61–62.
- Multiple Criteria Linear Programming Model for Portfolio Selection. In *International Conference on Transition to Advanced Market Institutions and Economies: Systems and Operations Research Challenges*, R.Kulikowski, Z.Nahorski, J.W.Owsiński (eds.). Warsaw, Poland, 1997. pp. 302–305.
- A Goal Programming Model of the Reference Point Method. In *Preprints of the IFAC/IFORS/-IIASA/TIMS Workshop on Support Systems for Decision and Negotiation Processes*. Warsaw, Poland, 1992. pp. 433–440.
- A Unified Implementation of Various Multiple Objective LP Techniques. In *Proceedings of the 27th Annual Meeting Southeastern Chapter of The Institute of Management Sciences*. Myrtle Beach, South Carolina, USA, 1991. pp. 342–344. (with S. Lahoda).
- Aspiration/Reservation Decision Support – A Step Beyond Goal Programming. In *Proceedings of the Third Annual Meeting the International Academy of Management and Marketing*. Detroit, Michigan, USA, 1991. pp. 655–663.
- Interactive Multiple Criteria Linear and Discrete Optimization as a Kernel of Decision Support Systems. In *Proceedings of the 1991 Annual Meeting SE Decision Sciences Institute*. Arlington, Virginia, USA, 1991. pp. 101–103.
- DINAS – Computer–Assisted System for Multi–Criteria Transportation and Location Analyses. In *Proceedings of the International Conference on Computing and Information ICCI'90*. Niagara Falls, Canada, 1990. pp. 221–224. (with K. Studziński & K. Zorychta).
- An Interactive Approach to Multiobjective Transshipment Problems with Facility Location. In *Internationale Tagung: Mathematische Optimierung — Theorie und Anwendungen*, Eisenach, Germany, 1987. pp. 106–109.
- Models for the Foodstuff Distribution Organization Channels for Large Urban Agglomerations. In *Preprints of 5th IFAC/IFIP/IFORS International Conference on Control in Transportation Systems*. Vienna, Austria, 1986. pp. 73–82. (with W. Szymanowski).

Working Papers and Others

- Conditional Value at Risk and Related Linear Programming Models for Portfolio Optimization, Warsaw University of Technology, Institute of Control & Computation Engineering, 2003, Report 03–02. (with R. Mansini & M.G. Speranza).

- On Extending the LP Computable Risk Measures to Account Downside Risk, Warsaw University of Technology, Institute of Control & Computation Engineering, 2003, Report 03–01. (with A. Krzemienowski).
- Equitable Aggregations and Multiple Criteria Analysis, Warsaw University of Technology, Institute of Control & Computation Engineering, 2002, Report 02–06. (with M.M. Kostreva & A. Wierzbicki).
- LP Solvable Models for Portfolio Optimization: A Classification and Computational Comparison, Warsaw University of Technology, Institute of Control & Computation Engineering, 2001, Report 01–25. (with R. Mansini & M.G. Speranza).
- On Solving Linear Programs with the Ordered Weighted Averaging Objective, Warsaw University of Technology, Institute of Control & Computation Engineering, 2001, Report 01–02. (with T. Śliwiński).
- Dual Stochastic Dominance and Quantile Risk Measures, Warsaw University of Technology, Institute of Control & Computation Engineering, 2001, Report 01–01. (with A. Ruszczyński).
- Dual Stochastic Dominance and Related Mean–Risk Models, RUTCOR, Rutgers University, Piscataway NJ, 2001, Research Report RRR 10–01. (with A. Ruszczyński).
- Conditional Center: A Parametric Solution Concept for Location Problems, Warsaw University of Technology, Institute of Control & Computation Engineering, 2000, Report 00–25. (with M. Zawadzki).
- Stochastic Dominance and LP Solvable Models for Portfolio Optimization, Warsaw University of Technology, Institute of Control & Computation Engineering, 2000, Report 00–24.
- Extending the MAD Portfolio Optimization Model to Incorporate Downside Risk Aversion (Revised), University of Ottawa, Faculty of Administration, 2000, Discussion Paper WP–00–49. (with W. Michalowski).
- Inequality Measures and Equitable Approaches to Location Problems, Warsaw University, Institute of Informatics, Warsaw, 1999, Technical Report TR 99–02 (257).
- Extending the MAD Portfolio Optimization Model to Incorporate Downside Risk Aversion, IIASA, Laxenburg, 1998, Interim Report IR–98–041. (with W. Michalowski).
- On Stochastic Dominance and Mean–Semideviation Models (Revised), RUTCOR, Rutgers University, Piscataway NJ, 1998, Research Report RRR 7–98. (with A. Ruszczyński).
- On the Distribution Approach to Location Problems, Warsaw University, Institute of Informatics, Warsaw, 1997, Technical Report TR 97–09 (246).
- On Stochastic Dominance and Mean–Semideviation Models, IIASA, Laxenburg, 1997, Interim Report IR–97–043. (with A. Ruszczyński).
- Multiple Criteria Linear Programming Model for Portfolio Selection, Warsaw University, Institute of Informatics, Warsaw, 1997, Technical Report TR 97–06 (243).
- From Stochastic Dominance to Mean–Risk Models: Semideviations as Risk Measures (Revised), IIASA, Laxenburg, 1997, Interim Report IR–97–027. (with A. Ruszczyński).

- From Stochastic Dominance to Mean–Risk Models: Semideviations as Risk Measures, Warsaw University, Institute of Informatics, Warsaw, 1997, Technical Report TR 97–05 (242). (with A. Ruszczyński).
- Modular Optimizer for Mixed Integer Programming — MOMIP version 2.3. IIASA, Laxenburg, 1996, Working Paper WP–96–106. (with K. Zorychta).
- Equitable Multiple Criteria Programming, Warsaw University, Institute of Informatics, Warsaw, 1996, Technical Report TR 96–02 (223).
- On the Lexicographic Minimax Approach to Location Problems, Warsaw University, Institute of Informatics, Warsaw, 1995, Technical Report TR 95–14 (214).
- On Cent–Dians of General Networks, Université Libre de Bruxelles, Institut de Statistique, Mathématiques de la Gestion, Brussels, 1994, Discussion Paper IS–MG 94/23.
- On the Lexicographic Minimax Approach to Location–Allocation Problems, Université Libre de Bruxelles, Institut de Statistique, Mathématiques de la Gestion, Brussels, 1994, Discussion Paper IS–MG 94/22.
- Preemptive Reference Point Method, Université Libre de Bruxelles, Institut de Statistique, Mathématiques de la Gestion, Brussels, 1994, Discussion Paper IS–MG 94/20.
- Location Problems from the Multiple Criteria Perspective: Efficient Solutions, Université Libre de Bruxelles, Institut de Statistique, Mathématiques de la Gestion, Brussels, 1994, Discussion Paper IS–MG 94/19.
- Modular Optimizer for Mixed Integer Programming — MOMIP version 2.1. IIASA, Laxenburg, 1994, Working Paper WP–94–035. (with K. Zorychta).
- Modular Optimizer for Mixed Integer Programming — MOMIP version 1.1. IIASA, Laxenburg, 1993, Working Paper WP–93–055. (with K. Zorychta).
- DINAS — Dynamic Interactive Network Analysis System v.3.0. IIASA, Laxenburg, 1991, Collaborative Paper CP–91–012. (with K. Studziński & K. Zorychta).
- Dynamic Interactive Network Analysis System — DINAS (Version 3.0, 1990) User's Manual. In *Contributions to Methodology and Techniques of Decision Analysis (First Stage)*, A. Ruszczyński, T. Rogowski and A.P. Wierzbicki (eds.), IIASA, Laxenburg, 1990, Collaborative Paper CP–90–008, pp. 203–306. (with K. Studziński & K. Zorychta).
- Dynamic Interactive Network Analysis System — DINAS version 2.1 (1988): User's Manual. IIASA, Laxenburg, 1988, Working Paper WP–88–114. (with K. Studziński & K. Zorychta).
- A Generalized Reference Point Approach to Multiobjective Transshipment Problem with Facility Location. In *Theory, Software and Testing Examples in Decision Support Systems*, A.Lewandowski and A.Wierzbicki (eds.), IIASA, Laxenburg, 1988, Working Paper WP–88–071, pp. 185–199. (with K. Studziński & K. Zorychta).
- Solving Multiobjective Distribution — Location Problems with the DINAS System, In *Theory, Software and Testing Examples in Decision Support Systems*, A.Lewandowski and A.Wierzbicki (eds.), IIASA, Laxenburg, 1988, Working Paper WP–88–071, pp. 200–219. (with K. Studziński & K. Zorychta).

- A Solver for the Multiobjective Transshipment Problem with Facility Location. Warsaw University, I.Inf. UW Reports, 169, 1988. (with K. Studziński & K. Zorychta).

- A Solver for the Transshipment Problem with Facility Location. In *Theory, Software and Testing Examples for Decision Support Systems*, A.Lewandowski and A.Wierzbicki (eds.), IIASA, Laxenburg, 1987, Working Paper WP–87–26, pp. 125–145. (with K. Studziński & K. Zorychta).

- On Feasibility Tolerances in the Simplex Method. Warsaw University, I.Inf. UW Reports, 153, 1986.

- A Symmetric Duality Concept for Linear Goal Programming. Warsaw University, I.Inf. UW Reports, 146, 1985.