OFFICE ADDRESS

Faculty of Industrial Engineering and Management
Technion - Israel Institute of Technology
Technion City, Haifa 32000, ISRAEL.

Tel:	972-4-829-4502 (Office)
	972-4-825-4347 (Home)
Fax:	972-4-823-5194
E-Mail:	rothblum@ie.technion.ac.il

PERSONAL

Birth Date:	March 16, 1947
Family Status:	Married, three children
Citizenship:	U.S. and Israel

EDUCATION

Ph.D.	in Operations Research, 1974, Stanford University, Stanford, CA. Thesis submitted: "Multiplicative Markov Decision Chains", under the supervision of Professor A.F. Veinott, Jr.
M.Sc.	in Mathematics, 1971, Summa Cum Laude, Tel Aviv University, Tel Aviv, Israel. Thesis submitted: "Values of Games with a Continuum of Players", under the supervision of Professor R.J. Aumann.
B.Sc.	in Applied Mathematics, 1969, Magna Cum Laude, Tel Aviv University, Tel Aviv, Israel.

PROFESSIONAL HISTORY

1984 - present	Technion - Israel Institute of Technology, Haifa, Israel (Professor in the Faculty of Industrial Engineering and Management 1984-present, The Alexander Goldberg Chair in Management Science 1992-present, Associate Dean of the Faculty of Industrial Engineering and Management 1986-1989, Dean of the Faculty of Industrial Engineering and Management 1992-1995, Deputy Provost 1998-2000, Executive Vice President for Academic Affairs 2000- 2002).
2005,2009	Department of Industrial Engineering and Operations Research, Columbia University, New York, NY (Visiting Professor) .
1976 - 1980, 1982 - 1999 (summers)	Department of Operations Research, Stanford University, Stanford, CA (Research Associate/ Visiting Associate Professor/Visiting Professor).
1988 - 1999 2009	RUTCOR - Rutgers Center for Operations Research, Rutgers University, New Brunswick, NJ (Professor II 1991-1993, Visiting Professor 1988-1991,1993-1999 & 2009).
1975 - 1984	School of Organization and Management, Yale University, New Haven, CT (Associate Professor 1978-1984, Assistant Professor 1975-1978).
1988 - 1995	AT&T Bell Laboratories, Murray Hill, NJ (Consultant).
1987 - 1988 (summers)	State University of New York at Stony Brook (Visiting Professor).
1974 - 1975	Courant Institute of Mathematical Sciences, New York University, NY (Postdoctoral Fellow and Adjunct Assistant Professor of Computer Sciences).
1974 (summer)	Rand Corporation, Santa Monica, CA (Consultant).

RESEARCH INTERESTS: Operations research, optimization, linear models, game theory and applied probability.

PROFESSIONAL ACTIVITIES

- *Mathematics of Operations Research* (Editor in Chief 2009-2012, Associate Editor 1979-2008).
- *Linear Algebra and Its Applications* (Associate Editor 1982-2004, Senior Editor 2005-2012, Co-Editor of special issue honoring Alan Hoffman 1987-1988).
- *Series on applied mathematics*, World Scientific, (Co-editor 2006-present).
- *Journal on Combinatorial Optimization* (Editorial Board 2005-present).
- President of ORSIS – The Operations Research Society of Israel (2006-2008)
- The von Neumann Prize Committee of *INFORMS* (2004-2006, chairperson in 2006)
- The Publication Committee of *INFORMS* (2004-2005)
- *Operations Research* (Associate Editor 1996-1999).
- *SIAM Journal on Matrix Analysis and Applications* (Associate Editor 1988-1993).
- *SIAM Journal on Algebraic and Discrete Methods* (Associate Editor 1983 -1987).
- *Letters in Linear Algebra and Its Application* (Associate Editor 1980- 1981).

GRANTS

2010 - 2014: Israel Science Foundation 901/10, "Nonlinear discrete optimization," principal investigator (jointly with S. Onn). First year budget $50,000.

2010 – 2013: FP7 SEC-2009-1- 242497, "Resilient Infrastructure and Building Security" (RIBS), principal investigator (jointly with A. Marmur and B. Golany). Total budget: 455,000 Euro.

2008 - 2010: Israel Ministry of Industry, Trade and Labor "Optimal area survey by a system of mobile sensors", principal investigator (jointly with B. Golany and K. Kogan). Total budget 550,000INS.

2008 - 2010 "Daniel Rose Technion-Yale Initiative in Homeland Security and Counterterrorism: New Tools for Decision Making and Policy Analysis"**,** principal investigator (jointly with B. Golany, E. Kaplan and A. Marmur). Total budget: $1,240,000.

2006 - 2010: Israel Science Foundation 669/06, "Convex combinatorial optimization," principal investigator (jointly with S. Onn). Total budget $180,000.

2004 - 2007: Israel Ministry of Commerce and Industry - Participation in Avnet Consortium, principal investigator (jointly with B. Golany). Total budget $120,000.

2004 - 2006: Israel Ministry of Industry, Trade and Labor "Methodology for optimal route selection of a formation of a number of aircrafts", principal investigator (jointly with A. Ben-Tal, B. Golany and A. Nemirovski). Total budget $60,000.

2003 - 2006: Israel Science Foundation Grant 39/03-15.2, "Optimization over partitions: concave objectives, combinatorial properties and matroidal restrictions," principal investigator (jointly with S. Onn). Total budget $90,000.

1998 - 2001: Israel Science Foundation Grant 301/98-15.2, "Partitions: Optimization & Structure," principal investigator (jointly with S. Onn). Total budget $109,710.

1998 - 2005: Minerava Center "Optimization", principal investigator (jointly with A. Ben-Tal, U. Kirsh, A. Nemirovski and U. Shamir). Standing fund of 2,000,000 DM.

1991 - 1997: ONR Grant N00014-92-J1142, "On the optimality of clustering," principal investigator. Total amount of grant $523,714.

1991 - 1995: U.S.-Israel Binational Science Foundation Grant 90-00434, "Combinatorial, spectral matrix theory, matrix scaling and related topics," principal investigator (in cooperation with D. Hershkowitz and H.S. Schneider). Total amount of grant $37,500.

1988 - 1989: U.S.-Israel Binational Science Foundation Grant 87-00194, "Non- negative matrices, matrix scalings and related topics," principal investigator (in cooperation with H.S. Schneider). Total amount of grant $8,500.

1986 - 1989: U.S.-Israel Binational Science Foundation Grant 85-00295, "invariant algorithms for solving problems over ordered fields," principal investigator (in cooperation with B.C. Eaves). Total amount of grant $32,000.

1983 - 1987: NSF Grant ECS 83-10213, "Dynamic programming and its uses," principal investigator (jointly with E.V. Denardo). Total amount of grant $193,000.

1978 - 1982: NSF Grant ECS 78-25182, "Dynamic programming and its uses," principal investigator (jointly with E.V. Denardo). Total amount of grant $160,559. 1976 - 1978: NSF Grant ENG 76-15599, "Structure and computation of optimal policies in sequential decision processes," principal investigator (jointly with E.V. Denardo and M.J. Sobel). Total amount of grant $95,000.

PROFESSIONAL MEMBERSHIP

- The Institute for Operations Research and Management Science
- Mathematical Programming
- Econometric Society
- International Linear Algebra Society

HONORS

- ORSIS Prize for Excellence in Research in OR (Cited Paper – Convex Combinatorial Optimization), 2005.
- INFORMS Fellow Award, 2003.
- Operations Research Meritorious Service Award, 1999.
- Operations Research Meritorious Service Award, 1997.
- New England Academic Excellence Award, 1989.
- Junior Faculty Research Fellowship awarded by Yale College, 1978-1979.
- Sidney and Beatrice Wolberg Chair for Visiting Professor, Technion, Haifa, Israel, 1978-1979.
- Honorable mention, ORSA student paper competition, 1975.
- IBM Postdoctoral Fellowship, 1975. (Offer was declined).
- Postdoctoral Fellowship, Courant Institute of Mathematical Sciences, New York University, NY, 1974-1975.
- Fulbright Fellowship for graduate studies, 1971-1974.

GRADUATE STUDENTS AND POST-DOCTORATE SUPERVISION

Post-Doc:

- Dr. Pelin Gulsah Canbolat - 2010. Topic: "Sequential decision making/dynamic programming: theory & computation".
- Dr. Evgeney Kagan -2009-2010. Topic: "Optimal area survey by a system of mobile sensors." (co-supervisor B. Golany)
- Dr. Noam Goldberg - 2009-2010. "Optimization and analysis of resource allocation for counter-terrorism activities" (co-supervisor B. Golany).
- Dr. Nir Halman - 2004-2005. Topic: "Global versus local properties of partitions" (co-supervisor S. Onn).

Ph.D.:

- Yael Deutch – Research topic, "Allocation problems in a competitive environment".
- Yossi Blum - 1995, thesis submitted: "On the stable matching problem".
- Hernan Abeledo - 1992, thesis submitted: "The stable matching problem".
- Moshe Haviv - 1983, thesis submitted: "Approximations in Markov chains and Markov decision models" (co-advisor L. van der Heyden).

Master:

- Nitsan Perach – expected 2010, thesis "The Stable Matching Model With an Entrance Criterion".
- Inbal Mund – 2010, thesis submitted, "Allocating resources to R&D projects in a competitive environment" (co-advisor B. Golany).
- Yael Deutch –2009, thesis submitted "On the stable roommate problem".
- Elisheva Shamesh – 2009, thesis submitted "Risk aversion and bargaining".
- Nirit Rosenstein – 2008, thesis submitted "Urban renewal through clearance and redevelopment: a multi-agent system analysis" (Co-advisor D. Gat).
- Sergey Kuniavsky – 2006, thesis submitted "Coalitional Congestion Games" (Co-advisor R. Smorodinsky).
- Yoav Tangir - 2004, thesis submitted "Partition Bargaining Games".
- Gila Horesh - 2003 (ME), thesis submitted: "Voting Systems".
- Gil Bahir - 1998, thesis submitted: "Quality control in military laundry services".
- Isaac Mizrachi - 1994, thesis submitted: "A multi-period location problem in a global environment" (secondary advisor, primary advisor - M. Rosenblatt).
- Orna Gross - 1989, thesis submitted: "Bounds on eigenvalues of nonnegative matrices".
- Ofrit Shani - 1989, thesis submitted: "On market share distribution under random growth" (primary advisor, secondary advisor - H. Kaspi).
- David Rozenfeld - 1988, thesis submitted: "Linear programming problems with two and three variables".
- Shmuel Bar-On - 1986, thesis submitted: "Asymptotic behavior of market shares in a stochastic growth model".