

L. BERIL TOKTAY
Nancy J. and Lawrence P. Huang Associate Professor of Operations Management
College of Management
Georgia Institute of Technology

I. EARNED DEGREES

- June 1998 **Massachusetts Institute of Technology**, Cambridge, MA
PhD in Operations Research
Thesis: Analysis of a Production-Inventory System under a Stationary Demand Process and Forecast Updates
Advisor: Lawrence M. Wein
- June 1994 **Purdue University**, West Lafayette, IN
MS in Industrial Engineering
Thesis: Capacity Allocation with Integer Side Constraints: An Application to Semiconductor Manufacturing
Advisor: Reha Uzsoy
- July 1992 **Bogaziçi University**, Istanbul, Turkey
BS in Industrial Engineering
- July 1992 **Bogaziçi University**, Istanbul, Turkey
BS in Mathematics

II. EMPLOYMENT

- 8/07 – present **Georgia Institute of Technology**, Atlanta, GA
Nancy J. and Lawrence P. Huang Associate Professor of Operations Management
- 8/05 – 8/07 **Georgia Institute of Technology**, Atlanta, GA
Associate Professor, College of Management
- 03/04 – 12/04 **Georgia Institute of Technology**, Atlanta, GA
Visiting Associate Professor, Industrial and Systems Engineering (sabbatical leave)
- 9/02 – 8/05 **INSEAD**, Fontainebleau, France
Associate Professor, Technology and Operations Management Area
- 8/98 – 8/02 **INSEAD**, Fontainebleau, France
Assistant Professor, Technology and Operations Management Area
- 10/01 **University of British Columbia**, Vancouver, BC
Visiting Scholar, Operations and Logistics Division
- 8/96 – 5/98 **Massachusetts Institute of Technology**, Boston, MA
Resident Tutor, Random House Undergraduate Residence
- 5/96 – 8/96 **Hewlett Packard Laboratories**, Palo Alto, CA
Summer Intern, Decision Technologies Department
- 8/94 – 5/98 **Massachusetts Institute of Technology**, Boston, MA
Research and Teaching Assistant, Operations Research Center

8/92 – 5/94 **Purdue University**, West Lafayette, IN
Research and Teaching Assistant, Industrial Engineering

6/90 – 9/90 **Ciba Geigy Ltd**, Basel, Switzerland
Summer Intern, Operations

6/89 – 9/89 **Tariş Cotton Factory**, Izmir, Turkey
Summer Intern, Information Technology

III. TEACHING

A. INDIVIDUAL STUDENT GUIDANCE

Post-doctoral Fellows

- Se-Kyoung Oh (with M. Ferguson), 8/06 – 8/07
Research Area: Enterprise Strategies for Remanufacturing under Competition and Environmental Regulation
Funding: NSF - DMI Grant No. 0522557

Former Doctoral Students

- Nektarios Oraiopoulou (co-chair of dissertation committee), Georgia Tech, graduated 7/09
Thesis: Three Essays on the Role of Information Structures on New Product Development Strategies
Position: Assistant Professor, Judge School of Business, Cambridge University
- Tong Wang (committee member, co-author of job market paper), INSEAD, graduated 7/08
Thesis: Information and Flexibility in Supply Chain Management
Position: Assistant Professor, Business School, National University of Singapore
- Onur Boyabatlı (co-chair of dissertation committee), INSEAD, graduated 1/07
Thesis: Essays on the Interaction of Operational and Financial Decisions
Position: Assistant Professor of Operations Management, Singapore Management University
- Mümin Kurtuluş (chair of dissertation committee), INSEAD, graduated 6/05
Thesis: Supply Chain Collaboration Practices in the Consumer Goods Industry
Position: Assistant Professor of Operations, Owen Graduate School of Management, Vanderbilt University
- Laurens G. Debo (co-chair of dissertation committee), INSEAD, graduated 6/02
Thesis: Topics in Product Remanufacturing, Repair and Disposal
Position: Assistant Professor of Operations Management, Booth School of Business, University of Chicago
- Sezer Ülkü (co-chair of dissertation committee), INSEAD, graduated 6/02
Thesis: Risk ownership and time-to-market in contract manufacturing
Position: Assistant Professor of Operations Management, McDonough School of Business, Georgetown University

Research with Undergraduate Students

- Andrew Harris, Georgia Institute of Technology, Management, President's Undergraduate Research Award (PURA), Summer 2008
- Mark Keith Fernandez, Georgia Institute of Technology, Electrical Engineering with Minor in Management, President's Undergraduate Research Award (PURA), Summer 2006

Independent Study with Undergraduates

- Robert Hazelwood, Georgia Institute of Technology, College of Management, Summer 2008

- Chuck Kahng, Georgia Institute of Technology, College of Management, Summer 2006
- Parin Patel, Georgia Institute of Technology, College of Management, Summer 2006

B. OTHER TEACHING ACTIVITIES

Courses Taught at Georgia Tech *

MGT 7354 Dynamic Programming via Applications, PhD (new course)
 Spring 2007 (4.2/5.0)

MGT 8803 Business and The Environment, MBA (new course)
 Spring 2006 (4.9/5.0), Spring 2007 (3.8/5.0), Spring 2008 (4.5/5.0)

IL 6452A Sustainability in the Supply Chain, Executive Education (new course)
 May 2007 (4.6/5.0), July 2008 (4.2/5.0)

MGT 3501 Operations Management, Undergraduate
 Fall 2005 (4.0/5.0), Spring 2006 (4.6/5.0), Fall 2006 (4.0/5.0), Fall 2007 (3.6, 3.9/5.0), Fall 2008 (4.0, 4.2/5.0)

ISyE 3104 Supply Chain Management, Undergraduate
 Fall 2004 (4.9/5.0)

*Ratings are from item 10 in the CIOS survey – “The instructor was an effective teacher.”

Courses Taught at INSEAD

Supply Chain Management, MBA (new course)	twice a year 1999 - 2005
Supply Chain Management, PhD (new course)	once a year 1999 - 2005
Foundations of Operations, PhD	once a year 1998 - 2005
Stochastic Processes, PhD	once a year 1998 - 2005
Optimization, PhD	once a year 1998 - 1999
Workshop on OM-Economics Interface (new seminar)	1999
Algebra and Calculus for Business	1999, 2000
Supply chain management modules in executive education programs	2000 - 2005

Curriculum Development

1. Business and the Environment (MBA, Georgia Tech) (new course design)

This is a new course organized around a unique four-module structure (Fundamentals, Eco-Efficiency, Product Stewardship and Sustainability Strategies). It takes a holistic view of the interaction of businesses with the environment. It outlines reasons why businesses would want to care about environmental issues, introduces environmental assessment and management tools, and visits topics from various business functions. In addition to MBAs, students from Environmental Engineering, Mechanical Engineering, City and Regional Planning, and Public Policy enroll in this course, creating an interdisciplinary learning environment. Students learn from original research (IV.A.2, IV.B.3,4) and company-sponsored guided projects (Canvas Systems, International Sleep Products Association, Army Installation Management Agency, and Michelin). Faculty members from a variety of institutions have requested the syllabus and course material. A number of course sponsors are now collaborators on NSF-funded projects and took part in Georgia Tech industry-academic workshops I organized.

2. Dynamic Programming via Applications (PhD, Georgia Tech) (new course design)

Dynamic Programming provides a set of general methods for making sequential, interrelated decisions under uncertainty. The focus of this course is on discrete-time stochastic problems. Its objective is to provide a basic understanding of the theory of dynamic programming that is frequently used in the formal studies of management. The techniques are illustrated through concrete applications from Inventory Management, Production Planning, Revenue Management, New Product Development, etc.

3. Supply Chain Management (MBA and PhD, INSEAD) (new course design)

I developed and introduced these courses in 1999, and updated them over time to include such topics related to my research interests as supply chain collaboration and closed loop supply chains. I developed decision support tools and a teaching case for the MBA course. I designed the PhD course to introduce the students to seminal and recent research in the topic, and updated it with new material every year.

4. Algebra and Calculus for Business (MBA, INSEAD) (restructuring of existing course)

This restructured course now includes material and exercises that make it more relevant to the core courses in the MBA program.

5. Executive Education (INSEAD) (new module design)

The new modules on Collaborative Forecasting and Retail Process Excellence were taught in company specific and open enrollment programs.

Pedagogical Material Development

6. Mümin Kurtuluş and L.B. Toktay, “Supplier Rationalization at Barclays Retail Banking Services (A, B, C)” (case with teaching note).

This case study is comprised of three subcases – Print Procurement (A), The Partnership Approach (B), and Operationalizing and Growing the Partnership (C). It generates a discussion of different supply chain collaboration approaches in the retail sector and can be used to teach supply chain collaboration.

7. L.B. Toktay, Decision support tools for the Supply Chain Management elective.

This set of Excel spreadsheets are used with the HP Deskjet, Seagate Technologies and Hamptonshire Express cases to facilitate analysis and class preparation by MBA students.

8. L.B. Toktay and E. Yücesan, “Teaching Supply Chain Management with the Oracle Suite”

Developed in collaboration with Oracle, this module used the auction tool in Oracle for an in-class exercise supporting a half-day executive education module on reverse auctions in supply chains.

IV. SCHOLARLY ACCOMPLISHMENTS

A. PUBLISHED OR FORTHCOMING BOOKS AND PARTS OF BOOKS

1. Agrawal, V. and L.B. Toktay, “Interdisciplinarity in Closed-Loop Supply Chain Management Research,” forthcoming in *Closed Loop Supply Chains: New Directions to Improve the Sustainability of Business Practices*, Ferguson, M. and G. Souza (Eds), Taylor and Francis Publishing, 2009 (reviewed by the editors).

2. Kurtuluş, M. and L.B. Toktay, “Category Captainship Practices in the Retail Industry,” *Retail Supply Chain Management*, Agrawal N. and S. Smith (Eds.), Springer, 2008, 79 – 98 (refereed).

3. Toktay, L.B., L. Selhat and R. Anderson “Doing Well by Doing Good: Interface’s Vision of Being the First Industrial Company in the World to Attain Sustainability,” *Enterprise Transformation: Understanding and Enabling Fundamental Change*, W. Rouse (Ed.), Wiley, 2006, 465 - 493 (reviewed by the editor).

4. Toktay, L.B., van der Laan, E. and M. de Brito, “Managing Product Returns: The Role of Forecasting,” in *Quantitative Approaches to Reverse Logistics*, R. Dekker, K. Inderfurth, Luk Van Wassenhove and M. Fleischmann (Eds.), Springer Verlag, 2004 (refereed).

5. Toktay, L.B., “Forecasting Product Returns,” in *Business Aspects of Closed-Loop Supply Chains*, Guide, V. D., Jr., and L.N. Van Wassenhove (Eds.), Carnegie Mellon University Press, Pittsburgh, Pennsylvania, 2003 (reviewed by the editors).

B. REFEREED PUBLICATIONS

Published or Forthcoming Papers in Refereed Journals

1. Toktay, L.B. and D. Wei, "Internal Transfer Pricing for Remanufacturable Products," conditionally accepted for publication in *Production and Operations Management*.
2. Kurtuluş, M. and L.B. Toktay, "Category Captainship: Outsourcing Category Management," forthcoming in *Production and Operations Management* (This paper won the Wickham Skinner Award for the Best Unpublished Paper presented at the 2006 POMS conference).
3. Wang, T. and L.B. Toktay, "Inventory Management with Advance Information and Flexible Delivery," *Management Science*, 54:4 (2008), 716 - 732 (Tong Wang won the 2007 MSOM Student Paper Competition with this paper).
4. Debo, L.G., Toktay, L.B. and L.N. Van Wassenhove, "Queuing for Expert Services," *Management Science*, 54:8 (2008), 1497 - 1512.
5. Ülkü S., Toktay, L.B. and E. Yücesan, "Risk Ownership in Contract Manufacturing," *Manufacturing and Service Operations Management*, 9:3 (2007), 225 – 241.
6. Ferguson, M. and L.B. Toktay, "The Effect of Competition on Recovery Strategies," *Production and Operations Management*, special issue on Closed-Loop Supply Chains, 15:3 (2006), 351 – 368 (An earlier version of this paper won the Wickham Skinner Award for the Best Unpublished Paper presented at the 2005 POMS conference).
7. Debo, L.G., Toktay, L.B. and L.N. Van Wassenhove, "Joint Life-cycle Dynamics of New and Remanufactured Products," *Production and Operations Management*, special issue on Closed-Loop Supply Chains, 15:4 (2006), 498 – 413.
8. Debo, L.G., Toktay, L.B. and L.N. Van Wassenhove, "Market Segmentation and Production Technology Selection for Remanufacturable Products," *Management Science* 51:8 (2005), 1193 – 1205 (This paper was a finalist in the EURO/INFORMS 2003 Management Science Strategic Innovation Competition on *Market Coordination in Supply Chain Management*).
9. Ülkü S., Toktay, L.B. and E. Yücesan, "The Impact of Outsourcing on the Timing Decision for Entry into Uncertain Markets," *Production and Operations Management* special issue on Product Innovation, 14:3 (2005), 301 - 314.
10. Gallego, G. and L.B. Toktay, "All-or-Nothing Ordering under a Capacity Constraint," *Operations Research* 52:6 (2004), 1001-1002.
11. Toktay, L.B. and L.M. Wein, "Analysis of a Forecasting-Production-Inventory System with Stationary Demand," *Management Science* 47:9 (2001), 1268 – 1281 (An earlier version of this paper won the 1999 MSOM Student Paper Competition).
12. Toktay, L.B., Wein, L.M. and S.A. Zenios, "Inventory Management for Remanufacturable Products," *Management Science* 46:11 (2000), 1412 – 1426.
13. Toktay, L.B. and R. Uzsoy, "A Capacity Allocation Problem with Integer Side Constraints," *European Journal of Operational Research* 109 (1998), 170 – 182.

Papers Submitted to Refereed Journals

14. Agrawal, V., Ferguson, M., Thomas, V. and L.B. Toktay, "Is Leasing Greener Than Selling?", under first revision for *Management Science*.
15. Atasu, A., Toktay, L.B. and L.N. Van Wassenhove, "Matching Collection Strategy and Collection Channel Choices in Closed-Loop Supply Chains," under review in *M&SOM*.
16. Boyabatlı, O. and L.B. Toktay, "Stochastic Capacity Investment and Technology Choice in Imperfect Capital Markets," under first revision for *Management Science*.
17. Kurtuluş, M. and L.B. Toktay, "Investing in Forecast Collaboration," under third revision for *Management Science* (This paper was a finalist in the EURO/INFORMS 2003 Management Science Strategic Innovation Competition on Market Coordination in Supply Chain Management).
18. Oraiopoulos, N., Ferguson, M. and L.B. Toktay, "Relicensing Fees as a Secondary Market Strategy," under first revision for *Management Science*.
19. Subramanian, R., Ferguson, M. and L.B. Toktay, "Component Commonality Strategies under Remanufacturing," under revision for resubmission to *Production and Operations Management*.

Working Papers

20. Agrawal, V., Kavadias, S. and L.B. Toktay, "Design and Introduction of Conspicuous Durable Products."
21. Boyabatlı, O. and L.B. Toktay, "The Interaction of Technology Choice and Financial Risk Management: An Integrated Risk Management Perspective."
22. Denizel, M., Ferguson, M. and L.B. Toktay, "Multiple-Criteria Decision Models for Recipient Selection in Donations of Medical Supplies."
23. Oh, S-Y., Ferguson, M. and L.B. Toktay, "OEM Certification Programs for Remanufactured Products."

Publications in Refereed Conference Proceedings

24. Oraiopoulos, N., Ferguson, M. and L.B. Toktay, "Relicensing Fees as a Secondary Market Strategy," *Proceedings of the 14th Annual International EurOMA Conference*, Ankara, Turkey, June 2007.
25. Boyabatlı, O. and L.B. Toktay, "The Interaction of Operational and Financial Decisions," *Proceedings of the 2006 MSOM Conference*, Atlanta, GA, June 2006.
26. Debo, L.G., Toktay, L.B. and L.N. Van Wassenhove, "Joint Life-cycle Dynamics of New and Remanufactured Products," *Proceedings of the 2006 MSOM Conference*, Atlanta, GA, June 2006.
27. Kurtuluş, M. and L.B. Toktay, "Retail Assortment under Category Captainship," *Proceedings of the 2006 MSOM Conference*, Atlanta, GA, June 2006.
28. Ferguson, M. and L.B. Toktay, "The Effect of Competition on Recovery Strategies," *Proceedings of the 2006 Multiechelon Conference*, Atlanta, GA, June 2006.
29. Boyabatlı, O. and L.B. Toktay, "Operational Hedging: A Mathematical Framework," *Proceedings of the 11th Annual International EurOMA Conference*, Fontainebleau, France, June 2004, 74 – 84.

30. Kurtuluş, M. and L.B. Toktay, "Category Management and Category Adviser Arrangement: Consumer Impact," *Proceedings of the 11th Annual International EurOMA Conference*, Fontainebleau, FRANCE, June 2004, 363 – 372.
31. Toktay, L.B. and D. Wei, "Cost Allocation in Manufacturing-Remanufacturing Operations," *Proceedings of the 11th Annual International EurOMA Conference*, Fontainebleau, France, June 2004, 599 – 608.

C. OTHER PUBLICATIONS

32. Kurtuluş, M. and L.B. Toktay, "Category Captainship: Who Wins, Who Loses?" *Efficient Consumer Response Journal*, Vol. 4, No. 2, Winter 2004 (We were invited to write this article after an earlier version by PhD student M. Kurtuluş won the Gold Prize in the Fifth ECR Europe Student Competition of the *ECR Journal*.)
33. Toktay, L.B. "The Store: The Last Link in the Supply Chain," *Dergi L*, September 2004.
34. Debo, L.G., Toktay, L.B. and L.N. Wassenhove, "Durability Selection in a Remanufacturing Environment," *Proceedings of the MSOM 2000 Conference*.
35. Toktay, L.B., "Analysis of a Production-Inventory System with Stationary Demand and Dynamic Forecast Updates," Extended Abstracts of 1999 Winners, MSOM Society Student Paper Competition, *Manufacturing and Service Operations Management*, 2:2 (2000), 108-109.
36. Toktay, L.B. and L.M. Wein, "Inventory Management for Remanufacturable Products," *Proceedings of the 1996 MSOM Conference*.

D. PRESENTATIONS

Conference and Workshop Presentations (invited or sponsored sessions)

1. INFORMS Conference, San Diego, CA, October 2008.
 - Component Commonality under Product Remanufacturing
 - Design and Introduction of Conspicuous Products*
 - Is Leasing Green?*
2. MSOM Conference, Boston, MA, June 2009.
 - Is Leasing Green? The Environmental Impact of Product Recovery, Remarketing and Disposal under Leasing and Selling
 - Designing Products for Physical Obsolescence: The Effect of Snobs*
3. POMS Conference, Orlando, FL, May 2009.
 - To Sell or To Provide: A Comparison of Selling and Membership*
 - Is Leasing Green? The Environmental Impact of Product Recovery, Remarketing and Disposal under Leasing and Selling*
 - Designing Products for Physical Obsolescence: The Effect of Snobs
4. INFORMS Conference, Washington DC, October 2008.
 - Leasing & Selling: The Environmental Implications of Product Recovery & Marketing Strategies*
5. MSOM Supply Chain Management SIG Conference, Washington, DC, June 2008.
 - Relicensing as a Secondary Market Strategy*

6. INFORMS Conference, Seattle, October 2007.
 - Relicensing as a Secondary Market Strategy*
 - Capacity Investment in Imperfect Capital Markets*
 - Component Commonality Under Product Remanufacturing
 - Inventory Management with Advance Demand Information and Flexible Delivery*
 - Matching Collection Channel with Collection Strategy in Reverse Supply Chains
 - Evaluating the Environmental Performance of Product Leasing*
 - The Interaction of Technology Choice and Financial Risk Management*
7. Closed-Loop Supply Chain Workshop, Thessaloniki, Greece, October 2007.
 - The Georgia Tech Sustainable Value Chains Initiative
8. EUROMA Conference, Ankara, Turkey, June 2007.
 - Relicensing Fees as a Secondary Market Strategy*
9. POMS Conference, Boston, May 2007.
 - Teaching about Business and the Environment
 - Relicensing Fees as a Secondary Market Strategy*
 - OEM Certification Strategies in Secondary Markets*
10. INFORMS Annual Meeting, Pittsburgh, November 2006.
 - OEM Strategies in Secondary Markets
 - The Interaction of Technology Choice and Financial Risk Management*
11. DMI Grantees Conference, St. Louis, July 2006.
 - Enterprise Remanufacturing Strategies under Competition and Regulation (poster)
12. Environmentally Benign Design and Manufacturing Workshop, NSF, Washington DC, June 2006.
 - Enterprise Remanufacturing Strategies under Competition and Regulation (poster)
13. INFORMS International Conference, Hong Kong, June 2006.
 - Optimality of (s,S) Policies in Inventory Systems with Advance Demand Information and Flexible Delivery*
 - The Interaction of Technology Choice and Financial Risk Management*
14. MSOM Conference, Atlanta, June 2006.
 - Life-Cycle Dynamics for Portfolios with Remanufactured Products
 - Retail Assortment Planning under Category Captainship*
 - The Interaction of Operational and Financial Decisions*
15. Multi-Echelon Conference, Atlanta, June 2006.
 - The Effect of Competition on Recovery Strategies
16. Risk Management Conference (by invitation), University of Michigan, June 2006.
 - The Interaction of Technology Choice and Financial Risk Management* (poster)
17. POMS Conference, Boston, May 2006.
 - The Effect of Competition on Recovery Strategies
 - Category Captainship: Outsourcing Retail Category Management*
18. INFORMS Annual Meeting, San Francisco, November 2005.
 - Life-Cycle Dynamics for Portfolios with Remanufactured Products
 - Retail Assortment Planning under Category Captainship*

- The Interaction of Resource Flexibility and Financial Hedging under Costly External Financing*
 - The Interaction of Technology Choice and External Financing Costs*
19. Closed-Loop Supply Chain Workshop, Vanderbilt University, October 2005.
 - Teaching about Sustainable Operations
 20. MSOM Conference, Chicago, June 2005.
 - The Interaction of Technology Choice and Financial Risk Management under Costly External Financing*
 21. BCTIM Risk Management Conference (by invitation), Olin School of Business, June 2005.
 - The Interaction of Technology Choice and Financial Risk Management under Costly External Financing*
 22. Euroma, Fontainebleau, France, June 2004.
 - Internal Transfer Pricing for Remanufacturable Products
 - Category Management Collaboration*
 - Operational Hedging: A Mathematical Framework*
 23. NSF Supply Chain Management Workshop, Gainesville, FL, February 2004.
 - Internal Transfer Pricing for Remanufacturable Products
 24. INFORMS Annual Meeting, Atlanta, GA, October 2003.
 - Internal Transfer Pricing for Remanufacturable Products
 - Strategic Behavior in Queues with Expert Servers
 25. MSOM Conference, Los Angeles, CA, June 2003.
 - Investing in Forecast Quality
 - Strategic Behavior in Queues with Expert Servers*
 26. INFORMS Annual Meeting, San Jose, CA, November 2002.
 - Investing in Forecast Quality
 - The Impact of Outsourcing on the Timing of Entry under Evolving Demand Information*
 27. INFORMS Annual Meeting, Miami Beach, FL, November 2001.
 - Asymmetric Demand Information in Supply Chains
 - Expanding a Product Line with Remanufacturable Products *
 - Risk Ownership in Contract Manufacturing *
 28. 4th REVLOG Summer Workshop, Costa da Caparica, Portugal, September 2001.
 - Forecasting Product Returns: A Broader View
 29. Thought Leaders Roundtable in Supply Chain Management, INSEAD, France, August 2001.
 - Collaborative Forecasting: Issues and Models
 - Market Segmentation and Production Technology Selection for Remanufacturable Products*
 30. EURO 2001, Rotterdam, NL, July 2001.
 - Asymmetric Demand Information in Supply Chains
 31. CIMSO Supply Chain Management Forum, INSEAD, November 2000.
 - Benefits of Assessing Return Flow Parameters in the Inventory Management of Remanufacturable Products

32. INFORMS Annual Meeting, San Antonio, TX, November 2000.
 - Asymmetric Demand Information in Supply Chains
 - Durability Selection of Components in a Remanufacturable Product*
33. 3rd REVLOG Summer Workshop, Wittenberg, Germany, August 2000.
 - Inventory Management of Remanufacturable Products
 - Durability Selection of Components in a Remanufacturable Product*
34. INFORMS Annual Meeting, Salt Lake City, UT, May 2000.
 - All-or-Nothing Ordering under a Capacity Constraint
35. INFORMS Annual Meeting, Cincinnati, OH, May 1999.
 - Analysis of a Production - Inventory System under a Stationary Demand Process and Forecast Updates
36. INFORMS Annual Meeting, Dallas, TX, 1997.
 - Heavy Traffic Analysis of Production - Inventory Systems with Complex Demand and Forecasting Processes
37. MSOM Conference, Hanover, NH, 1996.
 - Inventory Management of Remanufacturable Products
38. ORSA/TIMS Annual Meeting, Boston, MA, 1994
 - A Capacity Allocation Problem with Integer Side Constraints

* denotes presentations by one of my PhD students

Invited Seminars

1. Harvard Business School, Harvard University, December 18, 2008.
2. Darden Business School, University of Virginia, November 17, 2008.
3. Johnson Business School, Cornell University, April 4, 2008.
4. Industrial Engineering and Operations Research, University of Michigan, February 22, 2006.
5. Olin School of Business, Washington University, November 18, 2004.
6. Krannert School of Management, Purdue University, November 11, 2004.
7. Robert H. Smith School of Business, University of Maryland, September 17, 2004.
8. Owen Graduate School of Management, Vanderbilt University, April 2, 2004.
9. Kenan-Flagler Business School, University of North Carolina, November 7, 2003.
10. School of Industrial and Systems Engineering, Georgia Institute of Technology, November 27, 2001.
11. Dupree College of Management, Georgia Institute of Technology, November 16, 2001.
12. Operations and Logistics Division, University of British Columbia, October 1, 2001.
13. Technical University of Eindhoven, Eindhoven, NL, April 14, 2001.
14. School of Industrial and Systems Engineering, Georgia Institute of Technology, April 1999.
15. Laboratoire d'Informatique de Paris 6, Université Pierre et Marie Curie, Paris, March 1999.

V. SERVICE

A. PROFESSIONAL CONTRIBUTIONS

Editorial Positions

- Senior Editor, *Production and Operations Management* (August 2009 – present)
- Associate Editor, *Operations Research* (January 2009 – present)

- Associate Editor, *Manufacturing and Service Operations Management* (January 2007 – present)
- Associate Editor, *Naval Research Logistics* (October 2007 – present)
- Editorial Review Board, *Production and Operations Management* (2004 – present)
- Editorial Board, *Manufacturing and Service Operations Management* (2004 – 2006)
- Guest Associate Editor, *Management Science* (2005, 2007).

Service in Professional Organizations

- *Secretary/Treasurer*, MSOM Society, (July 2007 – June 2009)
- *Member*, INFORMS Ad-Hoc Committee on Diversity (July 2006 – January 2007)
- *Judge*, MSOM Student Paper Competition (2004, 2005, 2007), JFIG Paper Competition (2006), POMS Sustainable Supply Chains Best Paper Competition (2007)
- *President*, Institute for Operations Research and Management Science MIT Student Chapter, 1995-96

Conference/Workshop/Session Organization

Conference Chair/Co-Chair

- *Co-Chair* – “8th International Workshop on Closed Loop Supply Chains,” Georgia Tech, October 9 - 11, 2008.

The theme of this academic conference was Interdisciplinarity in Closed-Loop Supply Chain Research. It featured a poster session, presentations on Industrial Ecology, industry guest speakers from the Army Installation Management Agency and Interface, and a site visit to Medshare. Breakout groups facilitated by Georgia Tech faculty brainstormed research directions and solutions inspired by the business cases presented.

- *Chair* – “Inter-Industry Synergy Workshop,” Georgia Tech, September 5, 2008.

The goal of this NSF-funded workshop is to bring local businesses and policy makers in the state of Georgia together to find ways to improve landfill diversion rates for renovation waste from buildings.

- *Co-Chair* - MSOM Supply Chain Management Special Interest Group Conference on “Sustainable and Humanitarian Applications of Supply Chains,” Washington, DC. June 7, 2008.

The first conference of the SCM SIG featured a blend of traditional supply chain papers as well as papers on sustainable operations and humanitarian logistics.

- *Chair* - ECLIPS Workshop on “Product Re-X: Recovery, Recycling, Remanufacturing, Reuse. Innovations in Business Models, Product Design and Economic Development,” Georgia Tech, June 21, 2006.

This integrative workshop, funded by Georgia Tech, NSF, Delta and the National Association of Environmental Managers, showcased the entire breadth of the research expertise in the ECLIPS Focused Research Program (see Section B below) via a research poster session and eight industry/academic panels in two parallel tracks, moderated primarily by ECLIPS faculty. It attracted approximately 100 participants from industry, public entities, academia and NGOs. More importantly, it generated expressions of research collaboration interest – backed up by site visit offers – from IBM Asset Recovery Services, Cummins Engine, and Jabil Circuit, among others.

- *Co-chair* - ECLIPS Workshop on “Electronics Recycling: Today and Tomorrow,” Georgia Tech, December 9, 2005 (with N. G. Leigh).

This focused workshop brought together approximately 45 participants from private recyclers and government agencies to discuss ways to divert electronic waste from landfills, in the US and internationally. It included a series of presentations by Georgia Tech faculty about their research on modeling e-waste flows in urban centers and the economic development opportunities in recycling e-waste, as well as an introduction of SISFUR and ECLIPS (see section B below).

- *Co-chair* - Thought Leaders Roundtable in Supply Chain Management, INSEAD, August 2001 (with L.N. Van Wassenhove).

This is an annual two-day academic workshop that brings together approximately forty leading international faculty engaged in Supply Chain Management research. I have been an invited participant of this workshop since 2001.

- *Organizer* - CIMSO Supply Chain Forum on Contract Manufacturing, INSEAD, June 2001.
Managers from six original equipment manufacturers and contract manufacturers discussed the current status of outsourcing activities and strategy in this one-day workshop open to practitioners and the INSEAD community. The discussion in this workshop motivated paper IV.B.1.

Cluster Chair

- *Cluster Chair* – Closed-Loop Supply Chains, INFORMS, Washington, DC, October 2008.
- *Cluster Chair* – Reverse Supply Chains, INFORMS, Denver, CO, October 2004.
- *Cluster Co-Chair* – Reverse Supply Chains, INFORMS, Atlanta, GA, October 2003.

Session Chair

- *Sponsored Session Chair* – *Closed-Loop Supply Chains*, INFORMS Annual Meeting, Seattle, November 2007.
- *Invited Session Chair* – Teaching about Sustainable Operations, POMS Conference, Dallas, TX, May 2007.
- *Invited Session Chair* – The Impact of Regulation in Closed-Loop Supply Chains, INFORMS Annual Meeting, Pittsburgh, PA, November 2006.
- *Invited Session Chair* – OM/Finance Interface, INFORMS Annual Meeting, Pittsburgh, PA, November 2006.
- *Invited Session Chair* – Closed-Loop Supply Chains, INFORMS Annual Meeting, San Francisco, CA, November 2005.
- *Invited Session Chair* – Return Flows: Management, Network Design, Forecasting Value, INFORMS Annual Meeting, Denver, CO, October 2004.
- *Panel Coordinator* – Teaching Sustainable Operations, Closed-Loop Supply Chains Workshop, Vanderbilt University, October 2005.
- *Invited Session Chair* – Supply Chain Demand Management, INFORMS Annual Meeting, Atlanta, GA, October 2003.
- *Session Coordinator* – Carnegie Bosch Institute Closed-Loop Supply Chains Workshop, Penn State, October 2003.
- *Sponsored Session Chair* – Product Variety and Demand Substitution, INFORMS, Miami Beach, FL, Nov. 2001.

Referee for Technical Journals

- *Management Science*
- *Operations Research*
- *Manufacturing and Service Operations Management*
- *Production and Operations Management*
- *IIE Transactions*
- *European Journal of Operational Research*
- *International Journal of Production Research*
- *Naval Research Logistics*

Reviewer for Publishers

- Handbook of Production Planning, *Kluwer International Series in Operation Research and Management Science, Advancing the State-of-the-Art Subseries*, Kempf, K., P. Keskinocak, and R. Uzsoy, Editors.

Memberships

- Member, INFORMS
- Member, POMS
- Member, MSOM
- Member, Tau Beta Pi Engineering Honor Society
- Member, Omega Rho International Operations Research Honor Society

B. CAMPUS CONTRIBUTIONS

Research Programs

- Coordinator, Georgia Tech Focused Research Program on Expanding Closed Loops in Production Systems (ECLIPS), August 2005 – present.

Focused Research Program (FRP) Grants are competitive internal seed funds for initiating interdisciplinary research centers at Georgia Tech (5 out of ~25 funded each year for one year). I established and am currently the Coordinator of the Expanding Closed Loops in Production Systems (ECLIPS) FRP awarded in 08/05. The program includes Drs. Ferguson (MGT), Subramanian (MGT), Bras (ME), Ammons (ISyE), McGinnis (ISyE), Thomas (ISyE/PP), Realf (ChBE) and Leigh (ARCH), interested in different facets of closing the materials loop in society through remanufacturing, recycling and reuse. These faculty members generated \$2.6M of new NSF funding in the 2005 – 2006 academic year (including the \$610K on which I am PI or co-PI). The two ECLIPS workshops (see above) initiated collaborations with companies such as IBM, Canvas Systems, Jabil Circuit, and Cummins Engine, and with the Georgia Tech Enterprise Innovation Institute whose role is to connect companies to campus research resources. The goal of our group is to become an internationally renowned interdisciplinary center of research and teaching excellence in Sustainable Operations, Design and Economic Development.

University and College Committees

- PhD Committee, College of Management, Georgia Institute of Technology, August 2007 – present
- Ethics Chair Search Committee, Georgia Institute of Technology, January 2007 – February 2009
- ISS Director Search Committee, Georgia Institute of Technology, October 2007 – June 2008
- PhD Task Force, College of Management, Georgia Institute of Technology, August 2007 – June 2008
- Provost's Task Force on Interdisciplinarity, Georgia Institute of Technology, May 2007 – Dec 2007
- MBA Committee, College of Management, Georgia Institute of Technology, August 2006 – July 2007
- Dean Search Committee, College of Management, Georgia Institute of Technology, August 2005 – February 2006
- Research and Development Committee, INSEAD, September 2000 – August 2003
- PhD Committee, INSEAD, September 2001 – August 2003

Doctoral Dissertation Committees

- Vishal Agrawal (co-chair), Georgia Institute of Technology, College of Management, 5/10 (exp)
- Nektarios Oraopoulos (co-chair), Georgia Institute of Technology, College of Management, 7/09
- Tong Wang, INSEAD, Decision Sciences, 6/08
- Erik Lystad, Georgia Institute of Technology, College of Management, 9/06

- Raul Chao, Georgia Institute of Technology, College of Management, 6/07
- Ulaş Cakmak, Georgia Institute of Technology, Industrial and Systems Engineering.
- Lorin Hitt, Georgia Institute of Technology, Industrial and Systems Engineering, 7/07
- Yufeng Yao, Georgia Institute of Technology, Industrial and Systems Engineering, 6/07
- Matt Drake, Georgia Institute of Technology, Industrial and Systems Engineering, 9/06
- Chengxin Qu, INSEAD, Technology Management, graduated 7/05
- Deniz Özdemir, INSEAD, Technology Management, graduated 7/04

Master's Dissertation Committees

- Sophie Govetto, Georgia Institute of Technology, Mechanical Engineering, 12/07.
- Michael C. Muir, Georgia Institute of Technology, Mechanical Engineering, 8/06.

PhD Minor Advisor

- Raymond White, Georgia Institute of Technology, City and Regional Planning, minor in "Environmental Management."

Department/College Activities

- PhD Coordinator, Production and Operations Management group, Georgia Institute of Technology, August 2007 – present.
- Panelist, "Sustainability Leadership," Techno-Business Forum on Enterprise Transformation, The Center for Paper Business and Industry Studies, May 2008.
- Speaker, "Sustainability Education at Georgia Tech," Parent Weekend, Georgia Institute of Technology, September 2008.
- Speaker, "My Journey in the Scholarship of Sustainability," Atlanta Women for Change, February 2008.
- Panelist, "An Inconvenient Truth," April 2007.
- Speaker in College of Management internal seminar series, March 2006, October 2007.
- Speaker at Net Impact Chapter meeting, December 2005
- PhD Coordinator, Production and Operations Management group, INSEAD, 2001 – 2003
- Academic recruiting coordinator for Production and Operations Management, INSEAD, 1999 – 2001
- PhD Qualifying Examination Committee, INSEAD, 1998 – 2005
- Seminar series coordinator, INSEAD, 1999 – 2000

VI. GRANTS AND CONTRACTS

A. AS PRINCIPAL OR CO-PRINCIPAL INVESTIGATOR

1. NSF Grant Application (DMI, \$412K, pending), "Designing and Operating Economically and Environmentally Efficient Electronics Waste Collection and Recycling Networks," L.B. Toktay (PI), A. Atasu (co-PI), O. Ergun (co-PI).
2. NSF Grant (Award Number DMI - 0522557, \$300,000) "Enterprise Strategies for Remanufacturing in the Presence of Competition and Legislation," L.B. Toktay (PI), M. Ferguson (co-PI), B. Bras (co-PI), 8/05-7/08.
3. NSF Grant (Award Number DMI - 0620763, \$300,000) "Decision Support for Improved Financial and Environmental Performance of Product Leasing," M. Ferguson (PI), L. B. Toktay (co-PI), B. Bras (co-PI) 8/06-7/09.

4. NSF Grant (Award Number DMI - 0631954, \$10,000) “Workshop: Product Re-X: Recycling, Reuse and Remanufacturing. Innovations in Business Models, Product Design and Economic Development,” B. Toktay (PI), 6/06 – 5/07.
5. NSF Grant (Award Number DMI - 0631954, \$55,689) “Workshop: Recovered Materials: Inter-industry Synergy Workshop,” B. Toktay (PI), 10/06 – 9/07.
6. Georgia Institute of Technology, “Expanding Closed Loops in Production Systems,” L. B. Toktay (coordinator), J. Ammons, B. Bras, M. Ferguson, B. Hill, N. G. Leigh, M. Realf, \$30,000 Focused Research Program funding (8/05 – 8/06) and \$15,000 Institute for Sustainable Technology and Development funding (8/06 – 8/07).
7. Sponsorships totaling \$1500 from Delta Airlines and the National Association of Environmental Engineers for the ECLIPS Product Re-X Workshop (June 21, 2006).
8. INSEAD R&D Grant No. 2520-160R, €11,400, 1/05 - 3/05, “Capacity Investment and Financial Hedging.”
9. INSEAD R&D Grant No. 2520-144R, €11,400, 8/04 - 10/04, “Assortment Planning: The Effectiveness of Category Advisor Arrangements.”
10. INSEAD R&D Grant No. 2520-036 PRD, €11,400, 11/03 -1/04, “Supply Chain Collaboration at Barclay’s.”
11. INSEAD R&D Grant No. 2520-012PRD, €5,700, 4/03 -5/03, “Decision Support for Supply Chain Management.”
12. INSEAD-PwC High Performance Supply Chains Initiative (€60,000), 9/02-8/04.
 - a. Supply Chain Collaboration: Forecast Collaboration in FMCG Supply Chains: A benchmarking study
 - b. Supply Chain Collaboration: Outsourcing (with E. Yücesan)

VII. HONORS AND AWARDS

1. 2008 Meritorious MSOM Service Award (awarded for contributions to the *Manufacturing and Service Operations Management* Journal).
2. First prize (out of 58 submissions) was awarded to PhD advisee Tong Wang in the 2007 MSOM student paper competition for the paper titled “Inventory Management with Advance Demand Information and Flexible Delivery.”
3. First prize in the Wickham Skinner Competition for the best unpublished paper award presented at the 2006 POMS conference for “Category Captainship: Outsourcing Retail Category Management.”
4. First prize in the Wickham Skinner Competition for the best unpublished paper presented at the 2005 POMS conference for “The Effect of Competition in Recovery Strategies.”
5. Finalist, Euro/INFORMS 2003 Management Science Strategic Innovation Prize on *Market Coordination in Supply Chain Management* with “Market Segmentation and Production Technology Selection for Remanufacturable Products.”
6. Finalist, Euro/INFORMS 2003 Management Science Strategic Innovation Prize on *Market Coordination in Supply Chain Management* with “Investing in Forecast Collaboration.”

7. First prize in the 1999 MSOM student paper competition for the paper titled “Analysis of a Production-Inventory system with Stationary Demand and Dynamic Forecast Updates.”
8. Participant, INFORMS Doctoral Colloquium, October 1999.
9. Eta Kappa Nu “Best TA You’ve Ever Had” list, MIT, 1997.
10. Koç Foundation Outstanding Achievement Scholarship, 1988 – 1992.
11. İş Bankası Award for top 64 students (out of approximately 300,000) in the Turkish National University Entrance Examination, 1988 (rank: 31).