

## Organizer and Moderator Profiles

### Organizer

**Beril Toktay** is an Associate Professor of Operations Management at the College of Management at Georgia Tech with specialization in Supply Chain Management. Her research focuses on two topics within this area. The first is the management of closed-loop supply chains, which are supply chains in which value is recovered from used products via recycling, remanufacturing or repair operations. The second is the management of information and risk in supply chains, which focuses on forecasting, forecast collaboration, and integrated operational and financial risk management in supply chains. She was formerly Associate Professor of Operations Management at INSEAD. Professor Toktay is the Coordinator of the Georgia Tech Focused Research Program on Closed-Loop Production Systems, an interdisciplinary group of faculty from Engineering and Public Policy who are interested in sustainable manufacturing. Some of her research on closed-loop supply chains received funding from the National Science Foundation and won the Wickham Skinner Best Paper award from POMS in 2005. Professor Toktay's research has received other distinctions such as first prize in the 1999 MSOM student paper competition, and finalist in the EURO 2003 paper competition. Professor Toktay has taught Supply Chain Management courses at the PhD, MBA, and Executive Education levels, as well as Operations Management and Operations Research courses at the PhD level. She has developed cases and pedagogical material for MBA and Executive Education audiences. Most recently, she introduced an MBA course on Business and the Environment.

### Panel Moderators

**Joe Blackburn** is Senior Associate Dean and James A. Speyer Professor of Production Management at the Owen Graduate School of Management at Vanderbilt University. His research and teaching in operations management focus on time-based competition and how organizations can develop processes that provide faster response to customers, using speed as a competitive advantage. He is an authority on accelerating new-product development and streamlining manufacturing operations, and is the author of *Time-Based Competition: The Next Battleground in American Manufacturing*. He has recently applied these principles to develop design strategies for reverse supply chains.

**Bert Bras** is a Professor in the George W. Woodruff School of Mechanical Engineering at Georgia Tech and Woodruff Faculty Fellow. His research focuses on environmentally conscious design and manufacturing, design for de- and remanufacture, life-cycle assessment, industrial ecology, sustainable development, and robust design. His primary research question is how to reduce the environmental impact of companies while increasing their competitiveness. The increasing awareness of environmental issues has challenged engineers to create more environmentally benign products and processes. For example, European take-back mandates and voluntary agreements have forced manufacturers who operate globally to take back their products after use and

demanufacture them for recycling. One specific research thrust focuses on the development of innovative, low-cost, customizable, open technologies and equipment for the de- and remanufacturing industry, as well as new design assessment and decision support tools for enhancing the de- and remanufacturability of products. He has received funding and donations for his research from the National Science Foundation, the Georgia Research Alliance, the Center for Sustainable Technology, the Manufacturing Research Center's Industrial Advisory Board (AT&T, Motorola, and Ford Electronics), the Army Environmental Policy Institute, and the Chrysler Corporation.

**Mark Ferguson** is an Assistant Professor of Operations Management at the College of Management at Georgia Tech. He received his Ph.D. in operations management from Duke University in 2001, his M.S. in Industrial Engineering from Georgia Tech in 1994, and his B.S. in Mechanical Engineering from Virginia Tech in 1991. Prior to pursuing his doctoral degree, he spent over five years working as an engineer in the electronics industry where he lead efforts to eliminate the use of CFCs in the cleaning of printed circuit boards. Because of his efforts, the IBM Charlotte plant was also able to save over 2 million gallons of water usage a year by changing to a different formulation of soldering flux. His primary research interests are in supply chain management and price and revenue management, including remanufacturing, reverse logistics, the pricing of remanufactured products, and the closed-loop supply chain design. His research has been published in such journals as *Naval Research Logistics*, *Journal of Operations Management*, *Manufacturing & Service Operations Management*, and *Production and Operations Management*. He regularly works with such companies as HP, Pitney Bowes, and Home Depot. He teaches the core MBA Operations Management class and an MBA elective on Price Optimization and Revenue Management. Some of his research on closed-loop supply chains received funding from the National Science Foundation and won the Wickham Skinner Best Paper award from POMS in 2005.

**Nancey Green Leigh** is a Professor in the City and Regional Planning Program of the College of Architecture at Georgia Tech. She specializes in economic development planning, and is the co-author of the book *Economic Revitalization: Cases and Strategies for City and Suburb*. She has been focusing on Sustainable Industrial Systems For Urban Revitalization (SISFUR) for several years and is the PI on a multidisciplinary NSF grant on this topic that is developing material flow models for urban regions. Specific recycling and reuse areas that she has studied include carpet, computers, and building construction materials.

**Bob Peoples** is the Director of Sustainability for the Carpet & Rug Institute, Executive Director of The Carpet America Recovery Effort (CARE) and President of the Environmental Impact Group. In these roles Bob serves to integrate a wide variety of initiatives that deal with sustainability on a national level. His efforts span new business development working with entrepreneurs, and the development of a unified national carpet standard. Prior to joining CRI, Dr. Peoples served as Director of Carpet Sustainability and Market Development at Solutia Inc. where he was actively involved in carpet recycle, technology licensing, and carpet related health and indoor air quality issues. Dr. Peoples serves on several local and national boards including Carpet America

Recovery Effort (CARE) Board of Directors (Executive Director), The Institute for Market Transformation to Sustainability (Member), National Recycling Coalition (Member), American Chemical Society, Clinical Investigations Review Board, Sacred Heart Hospital and Board of Governors, Pensacola Junior College.

**Matthew Realf** is an Associate Professor in the School of Chemical and Biomolecular Engineering at Georgia Tech and Program Director in at the National Science Foundation. His broad research interests are in the areas of process design, simulation, scheduling and control. He has specific interests that include the design and operation of processes that minimize waste production by recovery of useful products from waste streams, and the simultaneous scheduling and control of batch processes. His overall research goal is to automate the entire design process: the design or selection of molecules for desired product properties, the synthesis of reaction pathways and separation operations, and the design and selection of processing equipment, combining fundamental chemical engineering science with an understanding of the methods of design.

**Ravi Subramanian** is an Assistant Professor in the College of Management at Georgia Tech. His research focuses on the interface between operations and the environment with an emphasis on strategic managerial responses to recent market-based and goal-oriented environmental policies. A paper based on his dissertation research won the second prize at the INFORMS MSOM 2004 student paper competition. He has presented his work at invited, sponsored, and contributed sessions at national and international meetings of INFORMS, MSOM, and CORS. He has business experience in production planning and ERP implementation.

**Valerie Thomas** is the Anderson Interface Associate Professor in the School of Industrial and Systems Engineering at Georgia Tech, with a joint appointment in the School of Public Policy, and an adjunct appointment in the School of Earth and Atmospheric Sciences. Her research is in Industrial Ecology, with emphasis on the environmental impacts of materials and products. Current research includes gasoline oxygenates, the future of air transportation, environmental implications of second-hand markets, and use of electronics for lifecycle tracking of products and wastes. Thomas has a Ph.D. in theoretical physics from Cornell University and a B.A. in physics from Swarthmore College. She is a Member of the US EPA Science Advisory Board, a Member of the Physics Policy Committee of the American Physical Society, and is Chair of the 2006 Gordon Research Conference on Industrial Ecology, which will be held at Queens College, Oxford UK, from August 6-11, 2006. In 2004-2005 she was the American Physical Society Congressional Science Fellow, during which time she worked in the legislative office of Representative Rush Holt on science policy issues including energy policy legislation and legislation to re-establish a technology assessment capacity in the U.S. Congress. She also managed the Congressional R&D Caucus and the Congressional Biomedical Research Caucus for Rep. Holt. From 1989 to 2004, Thomas was a Research Scientist and Lecturer at Princeton University. From 1987 to 1999 she was a Research Fellow in the Department of Engineering and Public Policy at Carnegie Mellon University.