Dr. Paul M. A. Baker is the Associate Director of the Center for 21st Century Universities and former Director of Research at the Center for Advanced Communications Policy (CACP) at the Georgia Institute of Technology. He formerly served as the Project Director of Policy Initiatives for the Rehabilitation Engineering Research Center (RERC) on Workplace Accommodations. Baker holds a courtesy appointment in the School of Public Policy and is on the faculty of the Institute for People and Technology and the GVU Center at Georgia Tech. He is also an Adjunct Professor with the Centre for Disability Law & Policy at the National University of Ireland, Galway. Additionally, he serves on the editorial boards of a number of journals. Baker's research involves communication and social media policy, educational technology, institutional change, online communities, e-accessibility, and disability policy.

Dr. Sujit Banerjee is a Professor of Chemical and Biomolecular Engineering at Georgia Tech. His research interests are in the areas of environmental engineering and in the development and application of industrial polymers. A major objective is the commercialization of laboratory findings. A present focus is on the conversion of cellulosic materials to glucose for ethanol production using polymers to enhance the enzymatic step. The fundamental aspect of the work involves study of the interaction between enzyme and polymer using atomic force microscopy among other means. Pilot scale runs are also made for commercial evaluation. The behavior of industrial polymers such as cationic polyacrylamides used for sludge dewatering, mineral flotation, fiber flocculation, and other applications are modified using cyclodextrin-related additives. Several of these modifiers are now in commercial use. Laboratory experiments are done with high speed photography and particle size and charge measurements. Full-scale measurements are also made in the field and real-time data collected and analyzed.

Dr. Banerjee is also involved in pulp and paper research, particularly in paper recycling and in the development of new pulping catalysts.
Dr. Ron Brown is President and Executive Director of the Agenda 2020 Technology Alliance, which identifies technology needs of the forest products industry and facilitates collaborative R&D programs to address those needs.

Mr. Brown has more than 30 years of experience in technical management in the paper industry. He held leadership positions in research, engineering, and manufacturing with MeadWestvaco Corporation. He has served as a member of the TAPPI Board of Directors and as President of the Miami University Paper Science and Engineering Foundation. He earned a B.S. from North Carolina State University and M.S. and Ph.D. from the Institute of Paper Chemistry, which is now IPST at Georgia Tech. Currently he is serving on the Secretary of Agriculture’s USDA Forestry Research Advisory Council.

Since joining Agenda 2020 in 2008, Mr. Brown has worked with companies, government agencies, and research institutions to advance the development of new technologies for the forest products industry. He led the preparation of the 2010 Forest Products Industry Technology Roadmap.

In addition to serving as Georgia Tech’s Executive Vice President for Research, Dr. Stephen E. Cross is a professor in the H. Milton Stewart School of Industrial and Systems Engineering and an adjunct professor in the College of Computing and the Ernest J. Scheller College of Business. He served as a Vice President and Director of the Georgia Tech Research Institute from 2003 to 2010. Previously, Cross was at Carnegie Mellon University as a research faculty member in computer science and Director and CEO of the Software Engineering Institute. Earlier, he was a program manager at the Defense Advanced Research Projects Agency and a faculty member at the Air Force Institute of Technology. A retired military officer, he received the Air Force Research Award in 1986 and the Federal 100 Award in 1992.

Cross is a member of the Defense Science Board. A past member of the Air Force Scientific Advisory Board, he has supported studies by the National Research Council, testified to Congress, and served as a consultant to government and industry. He has published widely on artificial intelligence, software engineering, and technology transition. Cross is a fellow of the Institute of Electrical and Electronic Engineers (IEEE) and a former editor-in-chief of IEEE Intelligent Systems. He is currently an associate editor of the online Journal of Information, Knowledge, and Systems Management. He received his BSEE from the University of Cincinnati, his MSEE from the Air Force Institute of Technology, and his PhD from the University of Illinois at Urbana-Champaign.
Dr. Soumen Ghosh is a professor of Operations Management in the Scheller College of Business at Georgia Tech. He also served as the Director of the Center for Quality and Change Leadership for eight years. He received his PhD in Business Administration with specialization in Operations Management and MS in Industrial & Systems Engineering from The Ohio State University. He holds a BS in Mechanical Engineering from Birla Institute of Technology (India).

His research and teaching interests are in the areas of global operations strategy, supply chain strategy, operations strategy, product development and supply chain interface, quality management, and manufacturing planning and control. Professor Ghosh worked as a production engineer with Tata Industries, and has provided consulting and training services to several organizations on quality, operations, and supply chain improvement. He has also served on the Board of Examiners of the Georgia Oglethorpe Quality Award.

Professor Ghosh is a member of the Decision Sciences Institute (having served as Vice President for two separate terms), the Institute for Operations Research and Management Sciences, and the Production and Operations Management Society. He is a former Associate Editor for Decision Sciences and the Journal of Operations Management, and also serves/served on the Editorial Review Boards of Production and Operations Management, IEEE Transactions on Engineering Management, and the Quality Management Journal.

Jennifer Jarratt, Principal at Leading Futurists, LLC, has been working since 1984 on wide-ranging futures activities. She is a recognized leading thinker and author among futurists on human resources and social/demographic change.

Ms. Jarratt consults with organizations and groups on key factors shaping their future. She leads seminars and courses on thinking like a futurist, scenario building, and practical tools for working with the future. Some recent keynote speeches by Jennifer include a presentation at the Smithsonian Museums for the New Millennium international symposium and at the First Annual Texas Coastal Issues Conference.

Ms. Jarratt is past board chair and a founding member of the Association of Professional Futurists. She was a public representative on the board of the International Association for Financial Planning, now the Financial Planning Association, from 1996-1999. She was an adjunct faculty member of the University of Maryland-University College program in distance learning, and was a visiting instructor in Studies of the Future, University of Houston-Clear Lake, 1990-91. In her earlier career as a journalist in the U.S. and Britain, Ms. Jarratt shared in a Pulitzer Prize.

Ronald L. Johnson
404-894-2331
ron.johnson@gatech.edu

Ronald L. Johnson is a Professor of the Practice in Industry and Systems Engineering (ISyE) and the Managing Director of the Tennenbaum Institute (TI) at Georgia Tech. As a Professor of the Practice in ISyE, Johnson uses his substantial experience and extensive background to assist the School in identifying teaching and research opportunities that support the public interest and societal needs. He teaches courses, advises students, and works with faculty on projects and research.

In Johnson’s role as Tennenbaum Institute Managing Director and member of Georgia Tech’s Institute for People and Technology (IPaT) leadership team, he provides overall administrative oversight for TI. He also engages and expands relationships with industry and government partners to provide knowledge and skills for enterprise transformation, engages in research and economic development, and coordinates with other Georgia Tech Interdisciplinary Research Institutes and their staff. TI, the first multi-disciplinary center of its kind, uniting academic, government and corporate experts to create industry-shaping business models to deal with real, large-scale enterprise transformation, is an integral part of IPaT.

Johnson received his bachelor’s degree from the United States Military Academy at West Point, and his master’s in operations research from ISyE in 1985. Johnson served as the National Basketball Association’s (NBA) first Senior Vice President of Referee Operations from July 2008 until July 2012. In this role, he was responsible for all aspects of the NBA’s officiating program. Prior to his work with the NBA, Johnson had an illustrious 32-year career in the U.S. Army, where he held the title of deputy commanding general and deputy chief of engineers, the second highest-ranking senior engineer staff officer for the U.S. Army Corps of Engineers (USACE).

Johnson serves on the Executive Advisory Council of Mission: Readiness, the National Workforce Solutions Advisory Board, and is a Trustee on the Georgia Tech Foundation. He is a past member of the Georgia Tech President’s Advisory Board. Johnson serves on the Board of Directors of Leave No Veteran Behind and is an Advisor to the Rushman-Micah Foundation, both 501 (c)(3) nonprofits.
Dr. Satish Kumar, Professor of Materials Science and Engineering at Georgia Tech, received his Ph.D. degree in 1979 from the Indian Institute of Technology, New Delhi, India in the area of Polymer and Fiber Science. He obtained his post-doctoral experience in the Polymer Science and Engineering department at the University of Massachusetts (1979-82). For the year 1982-83, he was a visiting scientist at the Atomic Energy Commission of France, C. E. N. G., Grenoble, France. During 1984-89 he was associated with the Polymer Branch, Air Force Materials Laboratory, Wright Patterson Air Force Base, Dayton, Ohio on contract through Universal Energy Systems and the University of Dayton Research Institute. He joined the faculty of the School of Polymer, Textile and Fiber Engineering at Georgia Tech in 1989.

Dr. Kumar’s research is in the areas of high performance materials, bio materials, energy storage, nano materials, functional electronics, optical materials, as well as fibers and composites. Polymer/carbon nano tube composite as well as polymeric nano composites with other nano materials are areas of special emphasis as are polymer crystallization in the presence of carbon nanotubes, carbon nanotube based carbon fibers, electro-chemical supercapacitors, bio-medical applications of polymers, fibers, nano fibers, and nano composites and nano composites with thermal and electrical conductivity.

Dr. Tim Lieuwen, executive director of the Strategic Energy Institute and Professor of Aerospace Engineering at Georgia Tech, is active in both instruction and research programs. His interests lie in the areas of acoustics, fluid mechanics, combustion, and signal processing. He is responsible for teaching several courses in the areas of fluid mechanics, aeroacoustics and combustion.

His research activities involve both theoretical and experimental work in combustion, flame-acoustic wave interactions, combustion noise, and development of ultrasonic diagnostic techniques. Combustion and acoustics focused research in the fields of energy and the environment include: combustion of alternative and coal-derived fuels; dynamical combustion phenomena including flashback, blowoff, and combustion instabilities; and acoustics in inhomogenous media and thermoacoustics.

Dr. Lieuwen received his B.S. in Engineering from Calvin College, and his M.S. and Ph.D. from Georgia Institute of Technology.
John Mahaffie, Principal at Leading Futurists, LLC, has been a speaker and consultant on the future since 1987. He has authored over 3 dozen futures studies for corporations, government agencies, and nonprofit groups. He is an author and speaker on the future of science and technology, the environment, transportation and infrastructure, health and medicine, work and worklife, telecommunications, and other futures topics.

He gives courses and workshops on futures topics and techniques for corporations, government agencies, and trade and professional associations. Mr. Mahaffie’s recent projects have included workshops on scenario development, studies on telecommunications, and research and presentations on the future of libraries.


Norman Marsolan is Director of the Institute of Paper Science and Technology (IPST) and Professor of Chemical and Biomolecular Engineering at Georgia Tech. As director, Dr. Marsolan is responsible for engaging the research capacity of Georgia Tech in the service of IPST member companies and the industry. After twenty years of service, Dr. Marsolan retired from International Paper Company in 2008, where he last served as director of research & development. He held assignments as mill manager and as director of technology manufacturing solutions responsible for the worldwide support of pulp and paper manufacturing. Dr. Marsolan is the immediate past chair of the Technical Association of the Pulp and Paper Industry (TAPPI). He is an affiliate member of the forest products industry’s Agenda 2020 Technology Alliance and a TAPPI Fellow.
Kenneth Matthews
770-321-4166
ken.matthews@akzonobel.com

Ken Matthews is Community of Practice Leader, Renewable Raw Materials - Research, Development & Innovation at AkzoNobel Chemicals. He is a professional paper chemist who started working in a mill in the early eighties. He joined Eka Chemicals in 1994 in technical sales, and after five years in the South of England, moved to Seoul, South Korea, as the Technical Manager for a newly established Eka Chemicals business. He returned to the UK to head up the sales efforts and support the integration into a European-focused business. In 2007, he joined the North America technical marketing group before taking the role as Business Development Manager, responsible for new technology opportunities as well as technology scouting. Through his involvement with the nascent Bio-Refinery movement, he took on a corporate R&D role for the parent company, AkzoNobel, heading up the Community of Practice for Renewable Raw Materials. He rejoined Eka Chemicals (now AkzoNobel Pulp and Performance Chemicals) in 2013 to lead the marketing team in North America.

Don McConnell
404-407-6199
donald.mcconnell@gtri.gatech.edu

Don McConnell serves as Georgia Tech’s Executive Director of Industry Strategy and Commercialization in the office of Dr. Steve Cross, the Georgia Tech Executive Vice President for Research, and as an Associate Director for Industrial Research and Commercialization at the Georgia Tech Research Institute. He joined Georgia Tech in October, 2012 having served as a consultant to GTI and GTRI over the last 18 months focused on enhancing and expanding the scope and economic impact of research for industry.

Prior to joining Georgia Tech, McConnell served as a senior executive and corporate officer of the Battelle Memorial Institute, the leading independent research and development organization with annual research revenues of $6.5 billion. His career spanned the full spectrum of research, development and deployment of innovations for government and industry. He established Battelle’s energy, medical product, automotive and consumer products businesses, returning over $4 million in net earnings annually to Battelle’s research and charitable purposes.

He also served as the Chair of the Battelle’s venture fund, Battelle Innovation Partners, serving as a Board member of several Battelle spin-out ventures. Most notably, he led Battelle’s successful efforts to monetize Battelle’s joint venture with Mitsubishi and Nippon Telephone and Telegraph, Photonic Integration Research Inc. (PIRI), a manufacturer of photonic multiplexing and splitters. PIRI was sold for cash and stock valued at $2.2 billion.
Sandeep Mora
sxm3645@gatech.edu

Sandeep Mora is a Ph.D. student and graduate research assistant, working under the direction of Dr. Sujit Banerjee. It was recently shown by John Reye that cationic polymers can significantly accelerate both cellulose mediated hydrolysis of bleached paper fiber and the amylase catalyzed hydrolysis of corn starch. Further studies will be conducted to explore the effect of polymers on corn starch and cellulose hydrolysis. Different kinds of cationic polymers will be used in the current project and their mechanisms will be studied. Sandeep’s expected graduation date is December 2013.

Sten Nilsson
+46 (225) 381 02
stenbnilsson@gmail.com

Dr. Sten Nilsson was Leader of the Institute of Forest Products Industry Market Studies and Professor in Economic Planning at the Swedish University of Agricultural Sciences. During 1983-84, Professor Nilsson was appointed by the Canadian Government to set up new strategies for the forest sector in Canada. In 1985, he headed two commissions for the Swedish government concerning intensified research in the forest sector in Sweden.

Professor Nilsson joined the International Institute for Applied Systems Analysis (IIASA) in January 1986, becoming Leader of the Forestry Program in 1990. Between 1998 and 2002 he was Counselor to the Director, and was appointed Deputy Director from July 2002 to May 2008. From May to December of 2008, he was Acting Director of IIASA. He currently holds a visiting affiliation with IIASA and can be reached at IIASA nilsson@iiasa.ac.at or at stenbnilsson@gmail.com.

A native of Sweden, Professor Nilsson has had a distinguished academic career in forest sector analysis with emphasis on policy analysis. He received his MSc in forestry from the Royal College of Forestry in Stockholm in 1971 and his PhD in economic planning from the same college in 1975. In 1976, he became Professor in economic planning at the Swedish University of Agricultural Sciences. He is a working member of the Royal Swedish Academy of Agriculture and Forestry as well as of the UN Scientific Committee of Academia Istropolitana Nova, Slovakia; an Academician of the International Academy of Informatics, Russia; and more recently, Foreign Member of the Lithuanian Academy of Sciences.

Professor Nilsson has authored and co-authored over 350 scientific publications. He has held a number of consultancies in organizations such as The World Bank, FAO, OECD, European Commission, and SIDA.
Dr. Arthur Ragauskas, Professor of Chemistry and Biochemistry at Georgia Tech, held the first Fulbright Chair in Alternative Energy and is a Fellow of the International Academy of Wood Science and TAPPI. His research program at Georgia Institute of Technology is seeking to understand and exploit innovative sustainable bioresources. This multifaceted program is targeted to develop new and improved applications for nature's premiere renewable biopolymers for biomaterials, biofuels, biopower, and bio-based chemicals. His research program is sponsored by NSF, USDA, DOE, GA Traditional Industry Program, a consortium of industry partners, and several fellowship programs. His Fulbright-sponsored activities at Chalmers University of Technology, Sweden were focused on the forest biorefinery and new biofuel conversion technologies for lignocellulosics.

Qining Sun
qsun32@gatech.edu

Qining Sun is a Ph.D. student and PSE fellow in the School of Chemistry and Biochemistry at Georgia Tech working under Dr. Arthur Ragauskas. His research project is about the analysis of chemical structures of celluloses and hemicelluloses, and focuses on the isolation and novel nanocomposite film prepared from Glucomannan. His expected graduation date is December 2014.

Beril Toktay
404-385-0104
beril.toktay@scheller.gatech.edu

Dr. Beril Toktay is Professor of Operations Management and the Brady Family Chairholder at Georgia Tech. Her primary research area is sustainable operations. She is also interested in the management of information and risk in supply chains. Professor Toktay's research has been funded by several National Science Foundation grants and has received distinctions such as the 2010 Brady Family Award for Faculty Research Excellence, first prize in the 2005 and 2006 Production and Operations Management Society (POMS) Wickham Skinner best unpublished paper competitions, and finalist in the EURO 2003 paper competition.

Professor Toktay served as the Coordinator of the Georgia Tech Focused Research Program on Closed-Loop Production Systems, an interdisciplinary group of faculty from Management, Engineering and Public Policy interested in sustainable manufacturing. She was formerly Associate Professor of Operations Management at INSEAD. She currently serves as the President of the Manufacturing & Service
Operations Society and the VP of Finance of the POM Society. At Georgia Tech, she serves as the Scheller College of Business ADVANCE Professor, a role that is focused on supporting the advancement of women in academia.

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 currently teaches Business Strategies for Sustainability in MBA and executive education programs.

Tyrone Wells
twells7@gatech.edu

Tyrone Wells is a Ph.D. student and PSE fellow in the School of Chemistry and Biochemistry at Georgia Tech working under Dr. Arthur Ragauskas. His work consists of the microbial upgrading of pyrolysis oils and biomass to lipids using oleaginous strains of bacteria. His expected graduation date is December 2013. Tyrone has received a grant from the Gunnar Nicholson Fellowship Program and IPST to study for a year at Chalmers University of Technology in Sweden, working with Professor Hans Thielander at the Department of Chemical and Biological Engineering to investigate means of optimizing carbon fiber production.