



# Center for Paper Business and Industry Studies

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*Newsletter of the Center for Paper Business and Industry Studies*  
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## ***Technology Adoption and Impact***

CPBIS has partnered with the Georgia Tech Economic Development Institute (EDI) and the Georgia Traditional Industries Program for Pulp and Paper (TIP<sup>3</sup>) to sponsor the latest in a portfolio of projects designed to shed light on business issues of importance to the pulp and paper industry. TIP<sup>3</sup> is a partnership of state government, Georgia's University System and the pulp and paper industry. It conducts research to improve the competitiveness of the state's forest products industry, which employs one out of every nine manufacturing workers in Georgia.

The one-year project is entitled, "Adoption and Impacts of New Technologies and Techniques in the Paper Manufacturing Sector in Georgia." The principal investigators are Philip Shapira, Professor, School of Public Policy, Georgia Tech, and Jan Youtie, Principal Research Associate, EDI.

Quoting from their proposal, "As manufacturing faces increasing pressures from foreign operations in lower cost locales, the ability of U.S. firms to compete hinges on the ability to harness knowledge, adopt modern manufacturing technologies and techniques, and be innovative. Nowhere is this more true than in the pulp and paper industry, which, although generally considered a mature and resource-intensive industry, is increasingly focused on issues such as how to minimize waste and environmental byproducts, how to reduce capital and operational costs, how to better organize workers, how to acquire and use knowledge, and how to develop new product, process or service innovations that can be differentiated from the competition."

The project will benefit from the extensive experience of the researchers in technology and

knowledge use in industry. Their study of the pulp and paper sector will employ proven, research-based survey techniques designed to elicit high response rates and sound data. It will be undertaken as part of the 2005 statewide Georgia Manufacturing Survey, which will provide important benchmarking opportunities.

Quoting further from the proposal, "The objectives of ... [the] ... project are to

- Measure the adoption and use of current and emerging technologies and techniques among pulp and paper manufacturers, including new manufacturing, design, information, communications, web, supply integration, knowledge management, and organizational technologies and techniques
- Benchmark pulp and paper manufacturers' use of these technologies and techniques against those of other manufacturing industries.
- Assess the outcomes and net benefits that accrue to paper manufacturers from using these technologies and techniques, including effects on innovation in products and processes, productivity, quality, profitability, and growth.
- Identify technological, financial, human capital, and market issues affecting the adoption of these technologies and techniques and their business and policy implications."

Although the project is targeted specifically toward the Georgia industry, we expect that the lessons learned will be broadly applicable, and look

forward to a report that will be of great interest to CPBIS sponsoring organizations and to the industry nationally.

### ***Innovate. Transfer. Deploy.***

Better hurry if you want to attend the upcoming Forest Products Techno-Business Forum, at the Georgia Tech Hotel and Conference Center next week, Oct. 26-27. As described in the August issue of this newsletter, the Forum is a successor to the IPST Executives' Conference, and is sponsored by IPST and CPBIS. It will examine innovative technologies with apparent potential for industrial application, with attention to their business and social aspects. Here are a few excerpts from the agenda:

- Keynote by Kathryn L. Shaw, Ernest C. Arbuckle Professor of Economics, Stanford Graduate School of Business; Member, Council of Economic Advisors, Executive Office of the President, 1999-2001.
- Techno-Business Opportunities for the Forest Products Industry
- Evolving Industry Opportunities: New Materials (Nanotechnology) and New Processes (Biorefinery)
- Improving Industrial Performance With Academic Research

For details and how to register (by COB, Oct. 22) see [http://www.cpbis.gatech.edu/news\\_events/news/040910technobusiness.htm](http://www.cpbis.gatech.edu/news_events/news/040910technobusiness.htm)

### ***Distinguished Lecturer***

The 2004-2005 CPBIS Distinguished Lecture Series (DLS) starts tomorrow, Oct. 22, with what promises to be a highly topical and well informed presentation by a recognized expert. Donald Carli will deliver a lecture entitled, "The Sustainable Print Media Challenge," which will address difficult issues at the nexus of corporate social responsibility and commercial opportunity associated with graphic communication. Carli is a member of the faculty of the New York City College of Technology, The City University of New York, and a Senior Research Fellow at the Institute for Sustainable Communication. He is also founder and President of Nima Hunter Inc., a consulting firm established in 1986 providing Fortune 500 companies with marketing research, market analysis, technology assessment and strategic planning services related to graphic communication technologies and related business processes.

As always, the Distinguished Lecture Series is offered live in IPST's Kress Auditorium and by live

and archived Webcast. For more information on the DLS or to register for the free Webcast please visit: <http://www.cpbis.gatech.edu/dls2005>

Speakers at DLS events in the winter and spring of 2005 will include Dr. Erica Groshen, Assistant Vice President in the Domestic Research Function at the Federal Reserve Bank of New York, and George Weyerhaeuser, Senior Vice President, Technology, at Weyerhaeuser Corporation, the international forest products giant.

### ***Biotechnology for Box Plants***

In recent years, corrugated products have accounted for slightly more than half of the industry's total paper and paperboard production, making this a fertile area for research directed toward improved profitability. One of the six presentations to be heard at two CPBIS sessions at the TAPPI Fall Technical Conference (Atlanta Marriott Marquis, Nov. 1) will elaborate on the implications of biotechnology for box plant economics. David White of IPST will deliver a paper co-authored by Gary Peter (U of FL) and several of their colleagues entitled, "Impact of Forest Biotechnology on the Economics of Corrugated Box Production." They determined the economic impact of biotechnologically achievable wood quality changes on box plant economics, using a newly developed cash flow model of a box plant. They will make a convincing argument that such changes can increase annual box plant net income by 9%.

### ***Upcoming Events***

**Six Sigma.** The PIMA/CPBIS Webcast Course on Six Sigma continues on Nov. 3 and 17. See <http://www.pimaweb.org/training/fall04seminar2.html>

**Management Development Course.** October 25-29, IPST. A unique opportunity to acquire skills that will significantly improve your management performance and value to your organization. See <http://www.cpbis.gatech.edu/mgtdev>

**Techno-Business Forum.** October 26-27, Ga. Tech Hotel and Conference Center. See article above.

**CPBIS at the TAPPI Fall Technical Conference.** Nov. 1, Marriott Marquis, Atlanta.

**Market Pulp Seminar.** November 18, IPST, Atlanta. How users and suppliers can best use the extensive market pulp properties database that is one of the products of a CPBIS-funded project. See <http://www.cpbis.gatech.edu/marketpulp> ■