

# 1995 TAPPI FOUNDATION/AF&PA CONFERENCE: PAPER INDUSTRY RESEARCH CHALLENGES

WILLIAM L. GRIFFITH

**T**HE SIXTH ANNUAL JOINT CONFERENCE, PAPER INDUSTRY Research Challenges, by the TAPPI Foundation and American Forest and Paper Association (AF&PA) was held Nov. 8–10, 1995, in Mobile, AL. Previous conferences were held in Charlotte, NC; Baton Rouge, LA; Green Bay, WI; Portland, OR; and Savannah, GA.

The conferences reflect a TAPPI goal to enable the pulp and paper industry to meet the challenges of the 21st century's global economy. In presenting pulp and paper industry concerns, TAPPI and AF&PA hope to interest young professors from top-flight institutions in research opportunities and, therefore, dramatically increase funding for these areas. Young professors are specifically targeted because the current federal research support system tends to reward academics for extending work in a given area. Government "seed money," which provides crucial early support, coupled with the conference's focus on industry's research needs, could prompt the pursuit of research opportunities throughout an academic career. This will both attract federal funding to the industry and increase the number of graduate students interested in pulp and paper research issues.

***FUNDING AND RESEARCH OPPORTUNITIES IN THE PULP AND PAPER INDUSTRY ARE PLENTIFUL. FOCUSING ON THE FUTURE, TAPPI FOUNDATION AND AF&PA ACTIVELY RECRUIT YOUNG SCIENTISTS THROUGH THIS ANNUAL CONFERENCE.***



**(L to R) Conference Chairman Bruce Lyne, speaker/consultant James E. Luce, and industry consultant Alfred H. Nissan discuss an issue during the Papermaking session.**

## **TECHNICAL PROGRAM AND MILL TOUR**

The conference brought over 50 leading academic and industrial researchers together to discuss potential research opportunities in the pulp and paper industry.

These conferences provide an opportunity for leading pulp and paper industry researchers to explain the industry's present technology and perceived needs to the young professors.



Academic and industry researchers converged in Mobile, AL, for research and funding opportunity updates.



(above) (L to R) Speaker Gary A. Baum and Theodore H. Wegner, assistant director of the USDA Forest Service, greet speaker Hou-Min Chang.

(left) Speaker Larry L. Graham (L) responds to a participant's question.

Conference Chairman Bruce Lyne, together with TAPPI President/Foundation Chairman Jack Chinn and AF&PA representative David Cooper, welcomed participants and discussed purposes and priorities of each organization. Gary Baum, chairman of the Foundation Research Funding Committee, discussed academic "seed money" funding opportunities through the TAPPI Foundation's Research Funding Program. The "seed money" grants are intended to complement major research funding by other interested parties.

The Nov. 9 sessions started with an overview, Where we get trees, by Carlyle Franklin, director of Woodlot Forestry, North Carolina State University. Presentations on current pulp and papermaking processes by Larry Graham, chairman of the Paper Sciences Department, University of Wisconsin, and Hou-Min Chang, professor, and Gary Baum, head, Department of Wood and Paper Science, North Carolina State University, followed.

The discussions set the stage for an afternoon tour of the International Paper Mobile mill whose 1300 people annually produce 500,000 tons of uncoated office, printing, and bag and wrapping papers. The mill which has five papermaking machines, two Will sheeters, a precision folio sheeter, and three CRD sheeters provides a good introduction to current papermaking technology. Its powerhouse includes three recovery boilers, three power boilers, and three turbine generators. The pulping

operations which include a Kamyrdigester, four brown stock washers, two bleach plants, three lime kilns, and three evaporator lines illustrate the integrated operations of modern mills. John W. Rankin, general manager, and Kirt Cuevas, department of engineering, International Paper Co., hosted the mill tour.

At the banquet in Mobile, Buddy Neeley, manager for polymer R&D, Texas Eastman Division, Eastman Chemical Co., discussed polymer paper structures.

Before the Nov. 10 morning breakout sessions, Jim Luce reviewed papermaking. The participants then divided into three groups. Bruce Lyne, manager paper science, International Paper Co., led the session on surface properties. Arthur Ragauskas, assistant professor, Institute of Paper Science and Technology, Atlanta, GA, led the session on application of NMR in the pulp and paper industry. (See IPST Research Update, p. 16, in the March 1996 issue.) John Egan, chief design engineer, Black Clawson Co., led the session on machinery needs. The breakout sessions permitted both an overview of these topics and detailed discussions, where academic and industrial researchers could discuss mutual interests one on one.

#### CONFERENCE CHANGES PERCEPTIONS

Many of our academic guests have told us that before the conference they generally had little knowledge of the pulp and paper industry but knew that the industry was

under environmental attack. They perceived the industry to be slow to change and generally relying on old technology. They were unaware of the many technological problems facing the industry and were uncertain of the industry interest in R&D.

After the conference, the perceptions our guests reported were changed. Typically, they felt the industry was craving for solid scientific and technical approaches to solve complex problems within a context of sincere concern for the environment. Most academic participants felt that some relationship existed between industry needs and traditional fields of research, and a willingness to conduct research in these areas if funding were available.

#### **A STATUS REPORT FROM TAPPI FOUNDATION**

The Paper Industry Research Challenges Conferences, together with the "seed money" program, have increased pulp and paper research. At the time of the conference, 144 proposals were submitted to the TAPPI Research Funding Committee; 27 were funded. The Funding Committee met Nov. 8, 1995, to review 50 new proposals and recommended funding seven of these.

#### **1996 CONFERENCE IN WISCONSIN**

The 1996 Research Conference will take place Sept. 25-27 at the Meade Inn in Wisconsin Rapids, WI. Ron Swanson will serve as the 1996 Research Conference chairman. **TJ**

---

*William L. Griffith, Ph.D., is a scientist at Oak Ridge National Laboratory, Bldg. 4500S, MS 6150, Oak Ridge, TN 37831-6150.*

*Acknowledgement TAPPI Foundation would like to acknowledge Bill Griffith for his role as chairman of the recruiting effort of the academic participants.*