



Collecting industry information that counts

As the technical association for the worldwide pulp, paper, and related industries, TAPPI provides a peer-reviewed, scientific forum for members to gain knowledge that helps them in their careers. This month's *TAPPI Journal* is a prime example of how TAPPI brings together research to help pulp and paper professionals address various challenges. On another front, TAPPI is also collecting valuable industry information at its new library.

Quality, runnability, and safety

On the cover is a photo of the electret film sensor discussed in Tatu Pitkänen and Bob Bettendorf's paper on an intelligent roll system that allows mills to optimize runnability without major capital outlay. Mounted in machined grooves on the roll shell, the force-sensitive electrets measure nip load, tension, and roll profiles online. A portable option lets field technicians solve difficult issues that impact quality. This paper provides examples of the roll measurement system running on linerboard, supercalendered, and freesheet production lines.

Also in this month's issue is an article on starch encapsulated fillers from Yulin Deng, Phil Jones, Leslie McLain, and Art Ragauskas. Their research shows that mills can take advantage of the economic benefits of fillers without jeopardizing strength properties. Mill trial results indicate that addition of up to 6% of starch-coated clay will not impact linerboard

properties like mullen and STFI. Also, trials using starch encapsulated kaolin revealed significant improvements in machine runnability.

Digester runnability problems actually provided an excellent opportunity for researchers Lasse Tolonen, Eero Hiltunen, Jukka Helttunen, and Herbert Sixta to study the effects of chip impregnation time. In a series of commercial-scale kraft pulp mill trials, the researchers were surprised to find that certain paper properties improved at shorter impregnation times. Although analytical results did not reveal a clear reason as to why this occurred, the authors provide several hypotheses for the findings.

TJ also presents an important literature study on turpentine's role in explosions of noncondensable gases from Risto Lautkaski. The research presents critical information for avoiding explosions due to high concentrations of turpentine vapor. One of Lautkaski's most interesting findings was that the burning velocity of turpentine was incorrectly listed in sources due to a misprint, leading to many erroneous conclusions.

The new TAPPI Library

As companies have consolidated, corporate libraries have merged or even dispersed. Also, many senior leaders and researchers have retired and need a home for their extensive personal libraries. In 2008, TAPPI President and CEO Larry N. Montague began reestablishment of the



The new TAPPI Library in Norcross, GA.

TAPPI Library at headquarters in Norcross, GA. With several corporate and personal donations, an impressive collection now exists.

For example, Dr. Margot Lyon, daughter of Malcolm G. Lyon – TAPPI's longest standing member who passed away last August – donated her father's research to the TAPPI Library. During his 40-year career with Champion Paper and Fiber Co., Malcolm directed pulping research for many species. Paper industry veteran Bob Vyse, winner of this year's Process Control Division Technical Award, also just donated his personal library. TAPPI gratefully acknowledges these individuals for their foresight and generosity.

Recently, a group of TAPPI Fellows met to discuss how best to collect the technical achievements of our industry. TAPPI's new library has become a "safe zone" for such intellectual capital. If you have any questions about the TAPPI Library, please contact David Bell at TAPPI (dbell@tappi.org).

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