



## Recovery boiler insights

**D**ue to extreme operating conditions, understanding and optimizing the internal processes of a recovery boiler are challenging propositions for both mills and boiler manufacturers. In this issue of *TAPPI Journal*, authors Nici Bergroth, Markus Engblom, Christian Mueller, and Mikko Hupa look in-depth at a specific lower furnace process for this giant and critical piece of mill equipment – the char bed.

In part 1 of their research, Bergroth and company describe development of a computational fluid dynamics (CFD)-based model that reasonably describes chemical processes on the char bed in steady state, including the variation in reactions on different regions of the bed. Part 2 of the research employs the CFD-based model to explore the impacts of liquor droplet size and bed shape on internal processes, such as carbon conversion and air jet impingement. The authors recognize the importance of incorporating such a char bed sub-model into CFD software for full 3-D recovery boiler simulation and look forward to validating this model against observations from real boilers.

### New editorial board expertise

As you recall, we recently announced the addition of Dr. Mahendra Doshi and Dr. Norman Lifshutz as new editorial board members for *TJ*. Dr. Doshi and Dr. Lifshutz

have begun to share papers from their respective areas of expertise – recycling and nonwovens – in this issue of *TJ*, and we eagerly anticipate more input from them in the coming months.



**Arthur Ragauskas,**  
*Georgia Institute of Technology*

I am now pleased to announce the addition Dr. Arthur Ragauskas of the Georgia Institute of Technology as a *TJ* editorial board member. In addition to being a TAPPI Fellow, Dr. Ragauskas is a Fulbright Fellow and a Fellow of the International Academy of Wood Science. His research program at Georgia Tech focuses on understanding and exploiting innovative sustainable forest bioresources, and he is program leader for a Georgia Tech Focused Research Program in Biofuels, Biopower and Biomaterials. *TJ* looks forward to Dr. Ragauskas' input as a lead reviewer and in identifying and attracting cutting-edge research for our readers.

### Recognizing an important TJ voice

Dr. Bjorn F. Hrutford passed away early this year at the age of 78. An active member of the Pacific Section of TAPPI, Bjorn consistently presented papers at TAPPI Conferences, especially the Pulping Conference, as a member of the Alkaline Pulping and Research Committees.

Bjorn published more than 60 scientific research papers, many of which appeared in the pages of *TAPPI Journal*. He was highly regarded by an extensive network of scientists and researchers in the forest products and pulp and paper industry. In addition to a long teaching and research career in pulp and paper chemistry at the University of Washington, from which he retired as Professor Emeritus in 1998, Bjorn was a consultant for Monsanto Chemical Co. and Rhone Poulenc Chemical Co. for over 35 years.

According to Bill Fuller, *TJ* editorial board member, Bjorn was pleased to network and share his expertise with the industry. "At conferences, Bjorn was always active in a conversation as he shared his in-depth knowledge of wood and pulping chemistry," Fuller describes.

### Monica Shaw

Editorial Director, *TAPPI Journal*