

PROUD TO BE A PAPERMAKER

of ownership in the industry. Thus, the total cost of owning and servicing is less in the long run. It sometimes takes longer to convince customers of this, but it is one of our strengths that we must promote. Our other strengths are in paper quality and process measurements, process and quality controls, and CD actuators.

Voith has a strong knowledge of papermaking applications so we must make sure the automation solutions are embedded in the paper machinery products we make. I am sure that in the future Voith automation will be a part of Voith machines, and that our competitors will do the same.

There is good cooperation between papermaking and automation divisions which avoids any arguments about who is going to pay for a certain development; it is a give-and-take relationship. Also, one of our company values is to work closely with our colleagues and never let them down.

Q: You partner with DCS suppliers to offer total, integrated automation solutions. How does this work? We are focused 100 percent on papermaking applications. For our business it doesn't make sense to concentrate on DCS development since that requires a high initial investment and continuing costs for enhancements. For us, the QCS, CD actuators and papermaking application controls are the heart of our business. With open technology nowadays, it is much easier to make a seamless integration of QCS and DCS. So we partner with Siemens, Rockwell and other vendors to offer a single scope of supply under the Voith brand to ensure we meet our customers' needs. We take total responsibility for the projects, including Voith branded valves and instrumentation. We believe that there is a profitable future in the pulp and paper automation business.

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Voith Paper Automation's Neuwied facility in Germany is the heart of its QCS business.

A Leader in Scientific



Dr. Celso Foelkel.

Dr. Celso Foelkel (or "Mr. Eucalyptus," as he is unofficially known in many circles), is a well-known figure in the Brazilian pulp and paper industry with more than 40 years of experience. He is also former president of the Brazilian Pulp and Paper Technical Association (ABTCP), a former member of the TAPPI BOD, and a TAPPI Fellow.

This year Dr. Foelkel received the Madeira 2010 (Wood 2010) award in the "Researcher" category, one of the most important awards presented at the traditional Wood event organized every two years in Brazil.

Dr. Foelkel has published more than 500 scientific technical articles, lectures, columns and opinions. He has also managed the R&D areas of companies in the sector, was a professor at five universities, and is now heavily involved in the field of eucalyptus research and communicating technical issues to interested parties throughout the world.

"Instead of teaching classes to a small number of students, I saw that I could present information to thousands of people through the internet," says Foelkel as he describes Project Eucalyptus Online Book, a totally free digital bilingual book available at www.abtcp.com.br and www.eucalyptus.com.br. Here are his thoughts on a few important issues.

Research: **Dr. Celso Foelkel**

ON BECOMING A RESEARCHER IN BRAZIL

"Public universities offer scientists the opportunity to work on two fronts: teaching knowledge as a career, and developing innovations through academic research. The problem is that once students earn a graduate and/or postgraduate degree, there is not much demand for these R&D competencies in this country. Companies should maintain more researchers on staff and also provide additional support to research carried out by academic and private institutions."

ON COMPANY-UNIVERSITY R&D PARTNERSHIPS

"In the forestry area, several companies participate in cooperative programs carried out by certain institutions (IPEF, SIF, CEPEF, FUFEP, etc). Project Genolyptus-Eucalyptus Genome is a good example. About ten universities joined forces with about a dozen companies to conduct the study. The government also sponsored and participated in a major part of the project. All parties agree that molecular genetics can be a major competitive advantage in creating better quality and more productive eucalyptus forests, but there is still the issue of whether society will accept the production of genetically modified eucalyptus."

ON ACCESSIBILITY OF RESULTS OF THE EUCALYPTUS GENOME PROJECT

"This is a long term research project and I believe that those companies contributing to the research will be given priority (but not exclusive) in terms of having access to data. It is natural for companies to invest in projects that affect the market in which they do business. I don't feel that having exclusive access to certain information on innovations is a negative factor as the country needs our companies to remain competitive globally. Privileged information means power on the international science and technology scene."

ON BRAZIL'S ADVANCEMENT IN SCIENCE AND TECHNOLOGY

"The government encourages industrial development with public investment, but there needs to be more contribution from companies. While companies in the forestry and industrial areas possess research teams, few invest in adequate research centers or laboratories. Perhaps they still see research as an expense rather than an



Logging fast growing eucalyptus trees in Brazil.

investment. The amount of resources allocated to technological development projects is small, representing 0.3 percent to 0.5 percent of company annual revenues.

While producer companies focus their attention on making their mills more productive and efficient, suppliers seek to optimize their process equipment designs and use of chemical products. The focus is on the very short term and on operational costs and does not have the amplitude that innovation requires to truly make things happen."

ON THE FUTURE OF BRAZIL'S PULP AND PAPER INDUSTRY

"I see the sector growing in a number of recycling areas as well as in minimizing waste in a more environmentally friendly manner. Additionally, I believe the industry will change from focusing on a single production area (such as market pulp, only), to focusing on a broader area integrated with other businesses (clusters).

Opportunities today are unbelievable for innovative companies and people (whether researchers or not), such as in biofuels and reuse of waste. For these interactions to take place, a lot of research and development in technology will be needed. At the same time, many operation and research engineers are dominated by the use of information technology (computers and the internet) to the point of moving away from the hands-on process. They no longer visit mills and forests to see and "speak" with their machines and trees. I hope this changes as we need creative people, but they must be linked to the process they are developing."

This article was excerpted with permission from an interview by Caroline Martin that appeared in the June 2010 issue of O Papel magazine.