



SIGMUND WANG

Fifty Years in Cellulose Research and Technology

Pioneering is one thing; maintaining undisputed technical leadership in a sharply competitive field of important industrial endeavor over half a century is another. Few have ever achieved a combination of these distinguished accomplishments; Sigmund Wang is one of them.

He was born in Norway on July 7, 1887, obtained a degree of Chemical Engineering at the Technical University of Oslo in 1909 and carried out postgraduate studies under Professor Schwalbe in Darmstadt until 1912. For two years (1912-1914) he worked as a chemist in the Oxford Paper Company in Rumford, Maine and joined the Riordon Pulp and Paper Company in Hawkesbury, Ontario, Canada on April 5, 1914. In 1917, he married Ethel Louise Pattee; they had one son, Peter Wang, who is now a distinguished and successful veterinary surgeon. In 1920, Mr. Wang was promoted to chief chemist of the Riordon Company. In 1925, this company was acquired by Canadian International Paper Company and Mr. Wang was appointed Manager of Laboratories. In 1948, he was appointed President and General Manager of the newly formed Industrial Cellulose Research Limited, Hawkesbury, Ontario, a wholly owned subsidiary of Canadian International Paper Company. Later, he rose to the position of Chairman of The Board of the same organization and is now Honorary Chairman of the Board.

Mr. Wang is a member of many professional societies such as Technical Association Pulp & Paper Industry, Technical Section Canadian Pulp and Paper Industry, Engineering Institute of Canada, The Society of Chemical Industry, The Norwegian Paper Makers Technical Society, and a Fellow of the Chemical Institute of Canada. He has given to these organizations freely his time, experience and advice; he also served on important Committees of several institutions such as the National Research Council of Canada, the Research Advisory Board of the Pulp & Paper Research Institute of Canada, the International Committee for Cellulose Analysis and others.

When young Sigmund started to accept responsible tasks in Hawkesbury, science and technology of cellulose was purely descriptive and boiled down to a number of confusing and frequently contradicting empirical recipes and rules; he succeeded in mastering this situation and established his company as one of the prominent producers of high grade wood cellulose for all kinds of applications. Today, as his able successors are taking the burden of difficult decisions from his shoulders, they inherit from him one of the best organized, most elaborately equipped and most ably staffed cellulose research laboratories in the world, more than adequate to face the difficult problems of the future. During this period he contributed to the development and the successful utilization of wood celluloses for the then infant industries of synthetic fibers, transparent films, and cellulose derivatives and has watched these industries grow to their present dominant position. Cellulose is now faced with a different problem. It has to defend its markets, volume, performance, and cost against the relentless onslaught of numerous formidable competitors such as the polyolefins, the vinyls, the polyesters, and the polyamides. Mr. Wang sensed earlier than anybody else that only a combination of basic research, streamlined production and aggressive marketing could save his industry from shrinking into an unattractive, second grade commercial operation. He succeeded not only in establishing such a combination over a period of 40 years in the framework of the Canadian International Paper Company and International Paper Company, but kept close enough to these three avenues of progress that he was able to exercise personal leadership in each of them.

There were many serious fluctuations during these years, depressions and wars, radical changes in the production, collection and processing of wood, disappearance of old and entrenched uses, and sudden developments of large and profitable new applications. Properties, specifications, and markets which were the backbone of the business became meaningless overnight and new demands, characterizations and applications became of overriding importance.

Mr. Wang weathered all these storms and attenuated all fluctuations with infinite patience, unshakable confidence and never-failing intuition. It has been customary for higher executives of prominent industries to render eloquent lip service to the importance of basic understanding and fundamental research in times of prosperity, but, nevertheless to decimate their

professional staff in times of crisis and dubious economic conditions. Nothing like that could ever happen in Hawkesbury where the pattern of organized growth was occasionally slowed down but never interrupted by any political or commercial event. This is the legacy which Mr. Wang passes on to his successors, this is the spirit which he created in the scientific and technical community of his organization and this is the guarantee for the future leading role of Hawkesbury in the science and technology of cellulosic materials.

Sigmund Wang is more than a successful industrial leader; he is a gentleman in the best sense of the word, has a soft heart for all members of his community, a helpful hand for everybody who is in need, a warm and profound feeling for music, poetry, painting and architecture, and, on top of it all, a delightful sense of humor and of philosophical forgiving for all human deficiencies.

All his friends and, in fact, all cellulose chemists will be deeply saddened by the news that Mr. Wang passed away unexpectedly on April 4, 1964. Their condolences will go to the members of his family and to all those who are working in the laboratory which he created and which he directed with so much success for many years.

H. Mark