



PAPTAC ANNUAL REPORT



Dear Executive Councillors,

We have the pleasure to report the featured activities PAPTAC has organized in 2013.



Daniel Archambault *Kruger Inc. PAPTAC Chairman*



Greg HayPAPTAC
Executive Director

PAPTAC IN BRIEF

The Association now has over 3000 men and women as its members. Most are employed in paper mills, in private or publicly supported research organizations, in universities, government departments, consulting firms, and in companies which supply the industry. Membership is also open to students and librarians, and persons who have retired from careers in the industry. Approximately 80% of these members are located in Canada; the remainder is found in many other pulp and paper producing countries.

The organization was founded in 1915 as the Technical Section of the Canadian Pulp and Paper Association.

On September 30, 1998 it was incorporated under the name of Pulp and Paper Technical Association of Canada (PAPTAC) as an independent not-for-profit association.

PAPTAC is a wide and well-organized network of individuals and represents a world of information exchange and experience for the benefit of the professional development of its members and the pulp and paper industry. We are inviting you to get actively involved in our industry by joining our technical communities, by attending conferences and presenting papers, and by participating in our TECH courses and Webinars. The benefits of your involvement and participation will provide value back to you, your company and to the industry.

OBJECTIVES

To provide means for the interchange of knowledge and expertise among its members; To improve the skill levels and effectiveness of present and future employees through training and education;

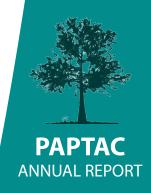
To provide technical and practical information on pulp and paper manufacture and use;

To further the application of the sciences in the pulp and paper industry;

To assist in the solution of problems confronting the industry;

To encourage and assist innovation;

To promote the efficient stewardship of natural resources.



2013 EXECUTIVE COUNCIL

The 2013 Executive Council was chaired by **Daniel Archambault**, Executive Vice President, Kruger Inc..



Daniel Archambault Kruger Inc. Vice Président Exécutif



Eric AshbyDomtar Windsor
VP & Mill Manager



Gerry MurrayAtlantic Packaging
Director of Mills



Patrice Mangin Centre intégré en pâtes et papiers Directeur général



Carlo Dal Monte Catalyst Paper Corporate Energy Director



Tom Johnstone *Buckman Senior Consultant*



Robert Dufresne Canfor Pulp LP General Manager



Kim Madsen Stowe / Weavexx Technical Sales



Greg HayPAPTAC
Executive Director

2013 BRANCH & COMMUNITY CHAIRMEN



Process Control Holton Quinn Alberta Newsprint Company



EnvironmentPierre Martel
FPInnovations



Standard Methods *Wayne Bichard FPInnovations*



Paper Machine Technology Louis Morimanno Omva



Energy Cost Saving *Sébastien Lafourcade Pepite Technologies*



Atlantic Branch
Ross Griffin
Minas Basin Pulp and
Power Company Ltd



Bleaching
Paul Earl
Paul Earl
Consulting Inc.



Finishing, Shipping and Warehousing Richard Gravel Kruger - Bromptonville



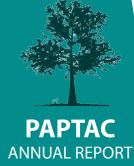
Mechanical Pulping

Zhirun Yuan

FPInnovations



Research Yonghao Ni University of New-Brunswick



Financial Results, three-year record

During 2013 the Association had revenues of \$ 913 820 and expenditures of \$ 885 694. The net result for the year was a surplus of \$28 126.

YEAR	REVENUE	EXPENSES	NET
2013	913 820 \$	885 694 \$	28 126 \$
2012	546 530 \$	625 990 \$	- 79 460 \$
2011	744 170 \$	622 665 \$	121 505 \$

PAPTAC 2013

MAJOR ACTIVITIES AND INITIATIVES

In 2013 PAPTAC announced the following:

Nomination Daniel Archambault as PAPTAC Chairman for 2013

At the Annual General meeting on Thursday February 6th, Mr. Daniel Archambault, Executive Vice President at Kruger was appointed PAPTAC Chairman for 2013. Daniel has been a member of the PAPTAC Executive Council since 2010 and has been involved in a number of PAPTAC activities for several years. He has been a PAPTAC member since 1979.



Atlantic Branch Conference – May 15-17, 2013

In 2013 PAPTAC's Atlantic Branch held its Annual Conference May 15-17 2013, in Fredericton/ Nackawic, New Brunswick. Under the theme "Atlantic Canadian Innovation in the Pulp and Paper Industry", the conference showcased emerging, innovative and technological advancements in our industry, including mill process safety, energy optimization, and quality and process improvement projects. The conference was a great success with a 30% improvement in attendance over the previous year.

For more info please visit the conference website: http://www.paptac.ca/atlantic_branch/index.php/en/atlantic-branch-conference.html.





PAPTAC BIOREFINERY Course – June 9-11, 2013, Vancouver, BC

PAPTAC launched in Vancouver, the very first edition of the PAPTAC Biorefinery Course. From June 9 to 11 this 3-day course featured a world-class faculty of experts from around the world, under the leadership of Course Leader, Dr. Paul Stuart of École Polytechnique. The aim of the course is to provide the knowledge and tools for forest industry leaders, technology providers and consultants to develop biorefinery strategies and better understand emerging biorefinery technologies and their design/implementation in a business strategy. Participants had a great opportunity to learn from international experts on practical biorefinery

topics.



PACWEST Conference - June 12-15, 2013

The PACWEST Technical Conference organized every year since the mid-60s on the West Coast on Canada, symbolizes the interdependence of those who develop technology in the pulp and paper industry and the many suppliers of related materials and equipment. It provides an opportunity to network with peers, industry leaders and technical experts while enhancing professional development. Through the numerous sessions, short courses, roundtable discussions and the popular trade fair, participants learn about new technologies, process improvement and the latest challenges and successes of the industry.

The PACWEST 2013 conference took place at the Delta Sun Peaks, BC and featured a full Program of Meetings; Technical Sessions; Roundtables; Panel Discussions; and Short Courses under the theme "Improving Performance Through Optimization and Reliability". Several technical sessions and the trade fair followed on Thursday and Friday, along with the Awards Gala, Friday evening. The annual golf tournament closed the conference on Saturday.

PAPTAC provided the official coverage of the event. Please visit the website below to access the 2013 PACWEST Conference Review:

http://issuu.com/paptac/docs/pacwest2013-fullreview?e=8061923/4247774





PaperWeek Canada 2013

PaperWeek Canada remains PAPTAC's most attended annual event.

A significant increase in the of number of attendees, over 1000, a larger amount of activities, such as the Mill Managers' meetings, new tracks and additional keynote speakers and industry leaders, contributed to make the 99th edition of PaperWeek Canada the most successful edition in recent years.

PAPTAC provided the official review and coverage of PaperWeek Canada 2013, including exclusive interviews with participating CEOs and industry leaders, videos, session reviews, editorials, and highlights of the 99th edition of the Annual Conference of the Canadian Pulp and Papers Industry. Here is the link to view the official review: http://issuu.com/paptac/docs/pwc2013-review



Webinars:

As a practical tool to bring value to members through its technical communities, PAPTAC continued also this year to organize webinars revolving around different topics as requested by its members and the industry in general. Here are some of the webinars that generated the most interest:

Environment Community

The Environment Community hosted 3 webinars in 2013.

The first one was organized on April 18th entitled "National Assessment of Cycle 5 Environmental Effects Monitoring Data from Pulp and Paper Mills", and was presented by Barb Buckland and Isabelle Matteau, Environmental Effects Monitoring (EEM) specialists, Environment Canada; this webinar was followed by "Diagnosing the Causes of Acute Toxicity of Effluents to Trout and Daphnia" on October 16, 2013, presented by Valerie Naish, Principal Technical Specialist - Environment and



Sustainability at FPInnovations. The third webinar of the year was "Quebec Carbon Cap and Trade" on December 4, presented by Myrzah Bello, M. Sc., M. Env. Director, Climate Change, SNC-Lavalin Environment & Water.

Mill Managers

The Mill Managers' Community held a Webinar on February 26, 2013 entitled "Sustained High Performance through Personal Energy Management" featuring Thomas D. Johnstone, Leadership/Management Coach & Senior Consultant with Buckman.



A second webinar "Industry Demographics Challenges – An overview of the PaperWeek panel presentation" on June 6, 2013 was led by Jim Farrell, who

was Executive Director, Forest Products Sector Council, and Jean Francois LaRue, Chief Economist, FPAC. The webinar focused on the timely topic of demographics, providing the audience with options and opportunities for the renewal of the industry's workforce.



Mechanical Pulping

In 2013, the PAPTAC Mechanical Pulping Community organized 2 webinars on September 10th and December 11th entitled, respectively:

"Refiner control and energy reduction in a mechanical pulp plant", presented by Lahoucine Ettaleb, Ph.D., FPInnovations and "Energy Cost Management in Pulp & Paper Industry" presented by Surendra Singh, Alberta Newsprint Company and covered ANC's experience and hurdles towards energy conservation, results and major projects.



PMTC

The Paper Machine Technology Community (PMTC) held a webinar on "Headbox Fundamentals", led by Daniel Liard, Product Manager - Roll Covers at Metso and took place on March 26th, 2013. This webinar was specifically aimed at mill operating personnel involved with the operation of a paper machine and technical personnel new to the industry.



On September 24th a second webinar entitled "Pulp Screening: Operation and Optimization" was presented by Robert Gooding – Aikawa Fiber Technologies. It focused on the basics of screen operation and mill strategies to optimize screen performance.

Maintenance

The PAPTAC Maintenance Community organized a webinar entitled "Bearing inspection and Maintenance", which was presented by Greg Nennig – Stowe Woodward, and Jeff Moore – Stowe Woodward on september 17th, 2013.



Paperboard Packaging

The PAPTAC Paperboard Packaging Community held in 2013 a webinar on May 7th, entitled "Performance-based Design of Corrugated Box and Board", which focused on fundamental rethinking of the "strength-based" design criteria for corrugated boxes and boards . Dr. Tetsu Uesaka from Mid Sweden University was the presenter of this successful webinar.



ISWFPC

PAPTAC hosted the 17th International Symposium on Wood, the Fibre and Pulping Chemistry where hundreds of participants gathered in Vancouver B.C. in June 2013 at the Sheraton Wall centre hotel. ISWFPC is a world-renowned symposium on the utilization of forest resources and gathers leaders from academia and industry to discuss the properties & processes, development

and innovation of wood, fibres and other lignocellulosic materials. This year it was up to Canada to host the Symposium and PAPTAC organized the event. Under the leadership of the Chairman Prof. Sylvain Robert and the members of the program committee, over 200 expert presentations on wood chemistry were presented at ISWFPC. For the complete review please visit the following website http://issuu.com/paptac/docs/iswfpc-review





Pre-Symposium on NCC during ISWFPC – June 9-10, 2013

The majestic city of Victoria, British Columbia hosted the first symposium dedicated to R&D advancements in the growing field of cellulose nanocrystals (CNC). The 2-day event had eminent invited speakers presenting 19 seminars on the fundamentals and applications of CNC, including nanocomposites and advanced functional materials for medical, engineering and sensor applications.

This ISWFPC's Pre-Symposium highlighted many presentations from world-renowned experts in CelluloseNanocrystals, and featured keynote presenter Arthur Carty, Executive Director of the Waterloo Institute of Nanotechnology. The Pre-Symposium event took place



in Victoria a few days before the Symposium, on June 9-10 and was chaired by Wadood Hamad from FPInnovations.

FIBRE Network Conference

The first FIBRE (Forest Innovation by Research and Education) Network conference, the largest and most collaborative university-led forestry research meeting in the world, took place on May 13-16 at Cornwall, ON.

PAPTAC, in collaboration with Paper Advance and Le Maître papetier, brought together the official coverage of the very first FIBRE Network Conference, showcasing the highlights of this major gathering.

400 delegates attended the first-ever collaborative FIBRE conference of Canada's eight forest sector research networks. The conference highlighted university-led forest product and process innovations, university-industry collaborations and student training. The



conference featured as well 175 scientific technical posters and an entrepreneurial workshop for students. PAPTAC provided the coverage of the event, visit this page to access the coverage: http://www.fibrenetwork.org/first-fibre-network-conference-may-13-16-2013/

Technical Community meetings

The technical communities have been formed among PAPTAC members who are interested in a particular aspect of the industry. Members discuss practical and scientific developments in their area of specialty. They work on projects to learn more about the industry, and then disseminate this information to the industry through technical presentations and reports.



PAPTAC Paperboard Packaging Community Meeting

The PAPTAC Paperboard Packaging community organized a meeting on Oct 1-2, 2013. The meeting started with a tour of the Strathcona Paper Mill located in Napanee, Ontario followed by a brief business meeting, technical presentations and a tour of Sonoco, Trenton, ON.





Roundtable - Superintendents finishing/shipping/warehousing

PAPTAC hosted a roundtable day for finishing / shipping / warehousing superintendents at the Hôtel Classique in Quebec City on Friday, September 20. This roundtable aimed to bring together superintendents in a networking environment with a productive agenda addressing a list of key topics to discuss around improvement, health / safety and workforce.



PAPTAC's Niagara Branch Energy Conservation and Sustainability Roundtable

The PAPTAC Niagara Branch hosted an Energy Conservation and Sustainability Roundtable on Friday September 13th at Legends on the Niagara.

The agenda for this timely roundtable included presentations on current Sustainability practices from:

- Jeffrey Mazzei, EIT, on Energy Reduction Program Projects
- Julio Lopez, Horizon Utilities, on Operating Cost Savings in the Pulp & Paper Industry
- Éric Gingras, NRCan, on the Canadian Industry Program for Energy Conservation - CIPEC



The roundtable, chaired by Ed Slachta, District Manager - Paper Technologies with Buckman, was followed by a group lunch and a golf outing at the Legends Battlefield Course.

J-FOR

The Journal of Science & Technology for Forest Products and Processes, is PAPTAC's new flagship publication, incorporating high-quality peer-reviewed papers dealing with the technology and science of traditional and emerging areas that are pertinent to the forest industry.

In 2013, 6 issues of J-FOR were published and distributed to corporate subscribers and members in over 30 Countries.

The six issues published papers dealing with:

- Issue no 1: articles dealing with traditional and emerging fields, from Pulping to Nanotechnology;
- Issue no 2: selected papers from the 2013 International Symposium on wood, Fibre and Pulping Chemistry (ISWFPC) hosted by PAPTAC;
- Issue no 3: papers from the 2013 International Black Liquor Colloquium;
- Issue no 4: a blend of articles from Advancements in pulping and paper making to new CNC properties;
- Issue no 5: articles from International Biorefinery Symposium at PaperWeek Canada;
- Issue no 6: a blend of articles in emerging areas and an editorial by outgoing Editor-in-Chief, Dr. Honghi Tran.

To date, J-FOR has had 18 issues under its belt with over 90 papers involving nearly 400 authors; the quality of our publications has been excellent and is on the rise.





Special thanks to Dr. Honghi Tran, for his contribution and excellent work as the outgoing editor-in-chief of J-FOR.

National Awards:

Safety Leadership Award

Domtar Windsor Mill

Domtar

Environmental Strategy of the Year Award

Canfor Pulp Limited Partnership
Prince George Pulp & Specialty Paper Mill

Canfor Pulp Limited Partnership



Mill Manager of the Year Award

Jim Blight General Manager Domtar, Dryden Mill



John S. Bates Memorial Gold Medal

Dr. Pierre Lepoutre, founder of the Paper Surface Science Program at the University of Maine, was presented the John S. Bates Memorial Gold Medal, in recognition of his long-term contribution to the science and technology of the pulp and paper industry. The official presentation took place during the Annual General Meeting of the Association during Thursday's PaperWeek Luncheon.



Honorary Life Membership

An Honorary Life Membership was bestowed upon Mr. André Bernier, General Manager, Resolute Forest Products – Fort Frances Mill, in recognition of his leadership as past Chairman of PAPTAC (2009-2010) and long-term dedication to the Association.



Certificate of Appreciation

A Certificate of Appreciation was awarded to Mariya Marinova, École Polytechnique de Montréal, for her exceptional leadership as Chair of PaperWeek Canada's International Forest Biorefinery Symposium.



Douglas Atack Award for Best Mechanical Pulping Paper

Youfeng Lin and Robert Lanouette of l'Université du Québec à Trois-Rivières, received the Douglas Atack Award for their paper entitled The Production of Mechanical Pulp from Jack Pine: Selective Refining or Whole-Pulp Refining?





F.G. Robinson Award

The F.G. Robinson Award for exceptional service by a Technical Committee Chairman was presented to Wayne Bichard, FPInnovations, Chairman of the Standard Methods Committee.





Energy Conservation Opportunity Annual Competition Award

Winning entry: Véronique Morin

Title: Medium consistency loop optimization Mill: Cascades Boxboard Group East Angus, a division of Cascades Canada ULC



Douglas Jones Environmental Award

Allan Elliott, Talat Mahmood, FPInnovations and Denis Bélanger, Kruger Inc., received the Douglas Jones Environmental Award for their paper entitled Reducing Biotreatment Nutrient Addition Costs.







Howard Rapson Memorial Award for Best Chemical Pulp Bleaching Paper

Luc Lapierre, Jean Bouchard and Richard Berry, FPInnovations, receive the Howard Rapson Award for their paper entitled Assessment of Pulp Machine White Water Quality of Market Kraft Pulp Mills.





The Marcus Wallenberg Prize

We are proud to announce that in 2013, one of our distinguished and long-time PAPTAC members, Dr. Derek Gray of McGill University has received the 2013 Marcus Wallenberg Prize (MWP), one of the most prestigious awards in the field of forest products research, for his pioneering study of cellulose nanocrystals (CNC). The initial announcement was made at the FIBRE Network Conference.

Dr. Gray officially received the prize in Stockholm last September from H.R. Carl XVI Gustaf the King of Sweden.



PAPTAC to take on secretariat for ECBLRBAC

PAPTAC assumed the Secretariat for the Eastern Canadian Black Liquor Recovery Boiler Advisory Committee (ECBLRBAC). The collaboration between the two groups took effect in September 2013 with the aim to help with the planning of ECBLRBAC's future meeting, which the first was on November 18-20 in Montreal.

PAPTAC is working with the committee by helping with the communications, marketing and logistics by utilizing some of its tools and resources to support the structure and organization of ECBLRBAC.

Students Members

In order to respond to the growing need for the renewal of the industry's workforce, PAPTAC announced it would grant free membership to students across Canada and internationally as of January 2013. This initiative created a vibrant network for students who are looking to get involved in the industry and develop their future careers. This new action stimulated several schools to register their students to PAPTAC. The total number of student members in PAPTAC increased dramatically and PAPTAC is happy to represent the future workforce category as well.







