The Dandy Scroll

Volume XLVI No. 1 • Spring2003

MAINE, A GOOD PLACE TO MAKE PAPER? A Messsage From Peter A. Duncan, Executive Director

It has been a tough winter. Two big snows around the holidays followed by the deep freeze for most of January and February. Many superlatives have been used to describe this winter weather, i.e., "old fashion winter," "the deep freeze," etc., and in spite of our concerns for global warming over the last decade, a more accurate descriptive might be "normal." Relatively mild winters for the last several years have geared our expectations to less cold, less snow, and less sand and salt. In the telling, we tend to exaggerate the temperature or amount of snow but the facts are clearly represented in the oil bill. So this is normal, but ... it has been a tough winter.

And it has been tough on the business front. We continue to see consolidation and reduced workforce in most industries, one example being the telecom industry. But our focus is paper. With 24% of all manufacturing jobs in Maine, the paper industry captures the attention of all of us. The bad news is overwhelming. Several layoffs have been announced but the most devastating is the bankruptcy of Great Northern Paper Company. At the time the Great Northern Paper Company was built, it was the largest Paper Company in the world. Today we have 1,100 people unemployed with questionable, if any, benefits. The reader may not be aware but the impact of this event is even greater on the service community than on the Company itself. Steps have been taken to direct a solution. A bidding process was concluded with a judgment that Nexfor/Fraser take possession late in April and a startup date posted for May. It is for the good of all of us that Great Northern Paper Company gets back on its feet quickly. And as with the weather, we look for an early spring.

The paper industry continues to grow at the rate of 2-3% world wide depending on the grade. And at 748 pounds per capita, we in North America are the largest consumers of paper in

Maine, A Good Place - continued page 2

2003 Open House - Largest Ever! Governor Baldacci Holds A Concurrent Session and Delivers KeyNote Address

In these continued difficult economic times, The University of Maine Pulp and Paper Foundation's 2003 Open House program attracted more than 340 guests, an all-time high. In addition to our normal program we conducted a concurrent session where Governor John E. Baldacci held individual meetings with senior level representatives of paper companies, participated in a facilitated session of forest and paper industry stakeholders, and delivered the keynote address at our Thursday evening banquet.

The Open House Program started with John Wolanski, Product Development Manager, US Filter/Vivendi Environment, and Foundation Membership Committee Chair welcoming members and guests to our second, "Members Only" luncheon. Featured speaker Lee Bingham, Senior Vice President, SCA North America, LLC, enlightened more than 100 Foundation members and friends with his current experiences in the construction of a greenfield two machine tissue mill in Alabama.

Leading off our afternoon session with his thoughts regarding the status of the paper industry was Dr. James A. McNutt, Executive Director, Center for Paper Industry Business and Studies, a leading industry consultant. Dr. McNutt was followed by a lively panel discussion where current scholarship recipients had the opportunity to exchange thoughts and ideas with our speaker and audience.

Later that afternoon, following individual meetings with paper companies, Governor Baldacci attended a facilitated session titled "A New Beginning" where senior level industry executives and representatives from labor, environment, and government addressed the status of the Forest and Paper Industry in Maine with three questions, i.e., *Where are we?*, *Where are we going?*, and,



Lee Bingham, Senior Vice President, SCA North America, LLC, and Foundation Chairman welcomes Maine Governor, John E. Baldacci.



2003 Open House Student Panel with Dr. James McNutt, Executive Director, Center for Paper Industry Business & Studies (center).

the world. Yet we have relinquished leadership in the paper industry to other regions of

Continued - Maine, A Good Place

the globe. There are many reasons for this and the finger can be pointed in numerous directions. Finger pointing is part of the problem, as is the need for leadership. The fact is that industry leadership has been captured by two countries, each of which is no larger than the size of the state of Maine in land mass or population. Both countries have similar climate and virtually the same species of trees. Stakeholders in both countries recognize the value of the forest for jobs and they have pulled together over several decades to take this leadership position. Perhaps even more interesting, Companies from this region have purchased several paper mills in North America. How is it possible that their vision of our forest industry is so different from our own? Now to be more parochial, the state of Maine once held a commanding position and at times was considered the most significant region of paper making in North America. This is no longer the case as each Maine mill works hard to achieve economic parity with mills in other parts of the country and in other parts of the world. Over time, stakeholders have developed priorities often opposed, or certainly different from those of the paper industry. So while papermakers were focused on the business of making paper, all of which supported jobs [Note that the average pay of a papermaker in Maine is \$1,000/week, 20% over the next closest category] business leaders, labor, government, environmentalists, and others have pulled in different directions. The net result is that we do not have common goals and we often have opposing goals. With this lack of a common vision, it has become increasingly difficult to make paper in the State of Maine. If a small country no bigger then Maine can lead the industry, why can't Maine?

In a recent speech Peter Vigue, President and CEO of Cianbro spoke of the sign you see when you enter Maine from New Hampshire "MAINE, A GOOD PLACE TO LIVE" and asked why that sign could not continue by saying "MAINE, A GOOD PLACE TO WORK." I hope you all hear a lot more about this in the coming weeks, especially now, following our Open House in April where the focus of our activities was the "Forest and Paper Industry - A New Beginning." Governor Baldacci thought it important enough to give us an afternoon and evening and initiated a committee of stakeholders to focus on forest and paper industry initiatives. It will need constant attention from all of us if we are to make a difference.

Continued - 2003 Open House

How will we get there? At the conclusion of the session, Governor Baldacci established a commission of stakeholders to address the issues and concerns of the Forest and Paper Industry in the state of Maine.

The evening banquet was a great success as Chancellor Joseph Westphal brought greetings from the University of Maine System, and Peter Vigue, newly elected Foundation President, introduced Governor Baldacci who spoke about his goals for the state of Maine and the importance of the Forest and Paper industry in his plans. Both Peter Vigue and the Governor spoke about incentives, including "Pine Tree Zones" that are intended to encourage capital investment.

The Open House banquet closed with the presentation of Named Scholarships and the 2003 Honor Award to two recipients this year, Elias M. Karter and E. Nobles Lowe. The Department of Chemical Engineering recognized Dr. Joseph Genco for his direction and leadership of the University of Maine Pulp & Paper Process Center. Named Scholarship announcements, Honor Award and Dr. Genco's presentation are described in separate Newsletter items.

The Friday Breakfast Seminar continued in 2003 with Philip F. Valence, President, Blackridge, Ltd., Management and Marketing Consultants. Following breakfast, Mr. Valence conducted an interactive session titled "Client Management – Foundation For An Enduring Business. The program demonstrated how to develop and manage enduring client relationships, and how by using, the "Curve of Relationships," to reduce the risk of rejection and defection by identifying more closely with client needs and issues.

The Open House closed with our 3rd Annual "Casual Friday" Pizza luncheon catered by Pat's Pizza in the Soderberg Atrium.It was a lively and productiveOpen House for all of those that attended.

Two UMaine Chemical Engineering Students Accept "Out-of-Country" Co-Op Positions for Summer 2003

Peter Duncan, Executive Director has announced success in placing two chemical engineering students in summer co-op positions out of the country. Last fall we started our "global" co-op program with Melissa Hendrickson accepting a position offered by Metso Paper USA in Jyvaskula, Finland. This summer Melissa will be in Dachau, Germany working on projects for MD Lang. Melissa is a chemical engineering junior from Presque Isle, ME.

The second student to be accepted into our "global" co-op program is Katherine "Katie" Frost, a chemical engineering sophomore from Hermon, ME. Katie will spend her summer working for the Specialty Minerals Division of Minerals Technologies, Inc., in Hermalle, Belgium. Katie will be working in the production facility in the scale up of new precipitated calcium carbonate coating pigment.

Sending students abroad for study and work opportunities is a new venture for The Pulp and Paper Foundation. Locating com-

panies to sponsor our students is an area we hope to expand upon in the future. There are alot of details requiring attention. If you, or your company is interested in sponsoring a co-op student abroad, please contact Foundation Executive Director, Peter Duncan by telephone at 207/581-2298 or by email at duncan@maine.edu.



Katherine Frost had the opportunity to meet her co-op sponsors from Minerals Technologies, Inc. at Open House. Pictures (left to right) are: Ken Massamine, Vice President & General Manager; Katherine Frost, chemical engineering scholarship recipient; Paul Saueracker, Chairman, CEO & President; and John Sorel, CFO.

Elias M. Karter and E. Nobles Lowe Receive Foundation's 2003 Honor Award

The Pulp and Paper Foundation Honor Award each year recognizes a person who has contributed significantly to the University of Maine's reputation for excellence within the paper and related industries. For the first time, the Pulp and Paper Foundation presented its 2003 Honor Award to two people.

The first recipient of the 2003 Honor Award, Eli Karter, is a 1962 chemical engineering graduate who earned a fifth year Certificate in Pulp and Paper Management and M.S. degree in 1963 and Ph.D., also in chemical engineering, in 1968. Dr. Karter was a recipient of a Pulp and Paper Foundations scholarship as an undergraduate and was among the first students to receive a stipend from the Foundation in support of his Ph.D. studies.

Dr. Karter began his professional career at Westvaco's Covington, VA mill where by 1972 he was pulp mill superintendent. He moved in 1976 to the Company's Wickliffe, KY mill as assistant mill manager, a position he held for three years prior to moving to Boise Southern at Deridder, LA, as mill manager. He joined Mead Corporation in 1981 as president of the paperboard division. In 1983 he was named vice president responsible for paperboard, packaging and container operations. In 1984 he became vice president manufacturing and technology, and in 1994 became Mead's vice president-operating officer, and in 1996, executive vice president.

Dr. Karter has served the Pulp and Paper Foundation in a volunteer capacity for many years as a member of the investment management committee, as a vice president, as president, and most recently as chairman.

The second honor award recipient, E. Nobles Lowe, is not a University of Maine engineering graduate. He was born in Arkansas and grew up in Louisiana. He organized and initiated the first Boy Scout troop in Clairborne Parish, LA. He attended the University of Arkansas and in January, 1934, he received his LL.B. and was admitted to the Arkansas Bar.

In 1943, Westvaco Corporation (then West Virginia Pulp and Paper Company) invited Mr. Lowe to become general counsel, public relations director and government affairs officer. Later he was corporate secretary and a vice president.

In addition to his career at Westvaco, Mr. Lowe has also served as Chairman of the American Arbitration Association and the Practicing Law Institute. He has also served as both a Governor and Chairman of the National Council for Air and Stream Improvement (NCASI), in addition to serving as counsel to The University of Maine Pulp and Paper Foundation.

In 1990 Mr. Lowe was the recipient of The Pulp and Paper Foundation's first Distinguished Service Award and is a man who has served his industry with distinction for more than 50 years.

In announcing the recipients of the 2003 Honor Award, selection committee chair, Roy Barry, retired President and CEO of Madison Paper Industries, said, "The Honor Award is designated to a person who has improved the reputation of the University of Maine for excellence within the pulp and paper industry. It is a pleasure to recognize Eli Karter and E. Nobles Lowe's valuable contributions by presenting them with these citations."

Recent previous recipients of the Pulp and Paper Foundation's Honor Award have been Stanley N. Marshall, Jr., retired Executive Director, University of Maine Pulp & Paper Foundation; Roy Barry, retired President & CEO, Madison Paper Industries; and Lou Boos, President, Nordic Engineering.



The 2003 Honor Award was presented to Elias M. Karter, (retired) Mead Corporation by Honor Award Committee Chair, Leroy J. Barry (left) and Foundation Executive Director, Peter A. Duncan (right).



The 2003 Honor Award was presented to E. Nobles Lowe, Foundation Counsel by Honor Award Committee Chair, Leroy J. Barry (left) and Foundation Executive Director, Peter A. Duncan (right).

E. Nobles Lowe Honored With Completion of Named Scholarship

For a number of years E. Nobles Lowe has been contributing yearly to an Endowment Fund he established with the Foundation knowing sooner or later

it would reach the \$10,000 necessary to become a named scholarship.

When he announced he would be stepping down from his position as



Presentation of the E. Nobles Lowe Endowment at Open House. Pictured (left to right) Roy Barry, Foundation Honor Award Chair; Peter A. Duncan, Foundation Executive Director; E. Nobles and Maggie Lowe

Foundation Counsel, members of the Executive Committee and Board of Directors decided it would be a fitting tribute too recognize Nobles for the many outstanding contributions he has made to our industry by completing his scholarship and surprising him with a formal presentation at our 2003 Open House. The bronze plaque presented reads, The E. Nobles Lowe Scholarship Fund, Established by Himself, Friends & Associates, 2003.

The Lowe Scholarship will be awarded for the first time in the Fall 2003 to a deserving student selected by the Foundation's Scholarship Committee.

Additional information about the Foundation's scholarships for UMaine students is available from the Pulp and Paper Foundation's Executive Director, Peter A. Duncan, at 5737 Jenness Hall, Orono, ME 04469-5737, or by calling Peter at 207/581-2298. You may also email Peter at Duncan@maine.edu.

University of Maine Calder Professor Joseph M. Genco Honored

Joseph M. Genco, Calder Professor, University of Maine was recognized for his dedicated, effective and valued leadership of the University of Maine Pulp & Paper Development Center at the Foundation's 2002 Open House. Dr. Genco stepped down as Director in December.

Representing the Department of Chemical Engineering, J. Larcom Ober Professor, Adriaan van Heiningen enlighted the audience with stories of "how he became Joe Genco's personal chauffeur" while traveling with Joe to various mill locations around the State of Maine.

The citation reads... Dr. Joseph Genco has made major contributions to the design, construction and development of the Chemical Engineering Pilot Plant. He provided critical leadership for the initial development of the facility as a teaching laboratory and its expansion to a research facility to provide technical assistance to the Pulp and Paper Industry. He used the funds generated from research contracts to modernize and upgrade the equipment. Through his continuing effort the "Pilot Plant" evolved into the "Pulp and Paper Process Development Center" providing world-class research services to corporate and other clients.

Joe's achievements as Director of the Center are a clear example of the three-fold mission of the University; teaching, research and service to the community. Many of his students now hold important positions in the Pulp and Paper Industry. He is internationally recognized for his research in pulping,

oxygen-based delignification and the understanding and consequences of fiber properties. He has used this vast knowledge and his many contacts in the industry to serve the pulp and paper community through the development of processes which are more economical and environmentally friendly.



Dr. Joseph M. Genco, Calder Professor of Chemical Engineering was presented a special citation noting his contributions to the University of Maine Pulp & Paper Development Center. Pictured (left to right) are: Roy Barry, Madison Paper Industries (retired); Joe Genco, UMaine; Peter Duncan, UMaine Pulp & Paper Foundation; and Adriaan van Heiningen, UMaine.

Alumni Personals

Edwin D. Healy, '58, was recently appointed Vice President, Kadent Inc., in Middletown, OH.

Roderick F. Berg, '64, was promoted to EDI Implementation Specialist with Sony Electronics, Inc., in Woodcliff Lake, NJ.

Ronald Lewis, '64, has been named Associate Scientist with MACTEC Engineering & Consulting in Portland, ME.

Gary D. Ackendorf, '71, has joined ONDEO Nalco in Naperville, IL, as a Technical Specialist.

Dennis J. Castonguay, '76, been named Operations Manager, International Paper, Bucksport, ME.

Vernon M. ("Bud") Philbrook, Jr., '76, is now President & CEO of Plassein International in Willington, CT.

William F. Igoe, Jr., '80, has joined Nexfor Fraser Papers in Berlin, NH as Mill Manager.

Jeffrey A. Hamilton, '82, has been named Mill Technical Services Manager at International Paper in Bucksport, ME.

Joyce I. Edwards, '87 has been promoted to Supervisor - Chemical Additives at International Paper in Franklin, VA.

Steven W. Hachey, '88, has been promoted to Paper Machine Superintendent at Sappi Fine Paper NA, in Skowhegan, ME.

Mark D. Hallowell, '90, has joined Nexfor Fraser Papers in Berlin, NH, as a Process Engineer. **Thomas C. Cole,** '90, has been promoted to Branch Manager, MA District with General Electric in Stoneham, MA.

David P. Anderson, '93, has joined Nexfor Fraser Papers in Berlin, NH as a Process Engineer.

Adam C. Griffiths, '93, has joined Cognex Corporation in Scarborough, ME, as Paper Industry Manager, Northeast Region.

Bob M. Langlois, '97, has been promoted to Machine Coordinator at International Paper in Jay, ME.

Matthew D. Vose, '99, has been promoted to Process Engineer, Raw Materials Team at International Paper in Bucksport, ME.

Foundation Promotes Faye Woodcock-Murray

Mergers, acquisitions, and workforce reduction have resulted in an unexpected synergy, i.e. less companies has resulted in a reduced membership at Foundations such as ours. We continue to achieve good results but more time is required to cultivate existing members and to recruit new members for this Foundation. Still the needs of day-to-day business must be met and there is a continuing need to create new programs and promotional materials.

In response to these changing needs, we have promoted Faye Woodcock-Murray to the position of Manager of Business and Special Projects. Faye is becoming more involved with the day-to-day activities of the Foundation, the organization of Open House and other events, and in general interaction with students, faculty, and Foundation membership.

This change in organization will allow Peter Duncan, Executive Director, to direct more time to membership cultivation and recruitment of new members.

2003 Annual Meeting Elects Foundation Officers, Directors and Committee Chairs

The Foundation's 2003 Annual Meeting elected Lee M. Bingham, Senior Vice President, SCA North America, LLC, to be chairman and Peter G. Vigue, President & CEO, Cianbro Corporation to be the Foundation's president. Retiring as chairman is Elias M. Karter, Executive Vice President (retired), Mead Corporation.

Other officers, directors and committee chairmen elected are as follows: Vice Presidents - Eldon Doody, President, D&S Engineering; Jeffrey C. Dutton, Vice President, Operations, MeadWestvaco Corporation; Raymond J. Heuchling, Vice President Pulp Sales, Irving Forest Products; Theodore D. Kennedy, Vice President, Palatka Operations, Georgia-Pacific Corporation; and Raymond R. Parent, Vice President Technology, Sappi Fine Papers. Rick C. Leonard, Manager of Financial Services, Cianbro Corporation will serve as Foundation Treasurer and Theodore S. Curtis, Jr., will serve as the Foundation's counsel.

Incoming Directors will be Donald P. Aiken, President, ABB Incorporated; Victor L. Bilodeau, Jr., Project Manager, Bowater Incorporated; Michael Craft, Mill Manager, Androscoggin Mill, International Paper; Gary M. Curtis, Vice President Operations, Rumford Mill, MeadWestvaco Corporation; Keith A. Meyer, Executive Vice President, Andritz Inc.; Robert C. Rourke, National Sales & Marketing Manager, Precision Roll Grinders Inc.; and Paul Turina, Vice President Sales & Marketing, Safe Handling Inc.

Newly elected chairman of the Open House Committee is Albert B. Moore, Assistant to the President, Buckman Laboratories. Other committee chairmen will continue their responsibilities for 2003.



2003 Pulp & Paper Summer Institute Features 16 Industry Experts

The 44th Pulp and Paper Summer Institute is scheduled for June 10-12, 2003 at the University's Orono campus.

The program will include a comprehensive overview of the paper industry's current process technology as well as descriptions of emerging trends presented by industry experts.

Ted Kennedy, Vice President, Palatka Operations, Georgia-Pacific Corporation, and Summer Institute Committee Chairman has invited many previous Summer Institute speakers to join us again this year. Many of our Summer Institute lecturers have been making presentations for several years continuously updating their presentations to cover new trends as well as process fundamentals.

Dr. Joseph M. Genco, UMaine Calder Professor of Chemical Engineering will lead off the Summer Institute program with a presentation of the pulping and papermaking process in a joint session. Dr. Genco will also define terminology unique to our industry.

The Pulping Technology session will be addressed by five speakers describing mechanical and chemical pulping as well as wood preparation, bleching and chemical recovery.

In the Papermaking Technology session participants will learn about fiber preparation, non-fibrous raw materials, papermaking, wet pressing, druing and converting as well as coating and printing. State of the art technologies will be described in practical and theoretical detail.

Over the years the University of Maine Summer Institute has helped more than 5,000 people from more than 400 companies as they develop their careers. Many participants are industry newcomers seeking to improve their job effectiveness. Others are experienced in their current positions and are interested in strengthening their company's product line. People in administration, finance and personnel have found the Institute has helped them to understand the processes which they support from their positions of staff responsibility.



Summer Institute registrations are accepted as they are recieved until all spaces are allocated. To register call Program Registrar, Faye Woodcock-Murray at 207/581-2297. Early registration is advisable as class space is limited.

Electronic copies of the complete 2003 Summer Institute Brochure are available on our website at: www.mainepulpaper.org.

Pulp Technology Sessions TUESDAY, JUNE 10

Registration

Pulping/PaperMaking

Process Overview JOSEPH M. GENCO

7:30 - 8:30 a.m.

8:30 - 11:45 a.m.

Calder Professor **Chemical Engineering** University of Maine 1:00 - 5:00 p.m. Chip Production & Quality WILLIAM FULLER Senior Scientist Weverheauser Company WEDNESDAY, JUNE 11 Kraft Pulping 8:00 a.m. - noon DAVID J. LEBEL. Mar. Process Technology Andritz Inc. Mechanical Pulping 1:00 - 5:00 p.m. MARC SABOURIN Dir. Research & Dev. Andritz Inc. 5:00 - 6:00 p.m. Reception 6:00 - 7:00 p.m. Lobster/Steak Banquet 7:15 - 8:45 p.m. **Executive's Panel** DONALD BEAUMONT Executive Vice Pres. Metso Paper USA **KATHLEEN BENNETT** Vice President Georgia-Pacific Corp. LEE BINGHAM Senior Vice President SCA North America LLC

Presentation of Certificates THURSDAY, JUNE 12

8:00 a.m. - noon

CHRIS VERRILL
Research Chem. Eng.
MeadWestvaco Corp.

1:00 - 5:00 p.m.
Pulp Bleaching & New
Developments in
Pulping & Bleaching
ADRIAAN VAN HEININGEN
J. Larcom Ober Prof.
University of Maine

Kraft Recovery Process and Equipment

Paper Technology Sessions

| i aper recimology ocasions | |
|----------------------------|----------------------------|
| TUESDAY, JUNE | |
| 7:30 - 8:30 a.m. | Registration |
| 8:30 - 11:45 a.m. | Pulping/PaperMaking |
| | Process Overview |
| | JOSEPH M. GENCO |
| | Calder Professor/ChE |
| 1:00 - 2:00 p.m. | Fillers |
| · | ANDREW NEGELE |
| | Technical Services Mgr. |
| | Engelhard Corporation |
| 2:00 - 3:00 p.m. | Dry and Wet Strength |
| · | Additives |
| | TODD JORDAN |
| | Sr. Applications Engineer |
| | Hercules Incorporated |
| 3:15 - 5:00 p.m. | Wet End Retention, |
| | Microbial, Foam, and |
| | Contaminant Control |
| | LAWRENCE HUTCHINSON |
| | Director Technical Support |
| | ONDEO Nalco |
| WEDNESDAY, JUNE 11 | |
| 8:00 a.m noon | Paper Machine Wet Ends |
| | & Practical Papermaking |
| | TOM KAST, Manager |
| | Applied Technology |
| | Voith Paper Inc. |
| 1:00 - 2:45 p.m. | Stock Preparation |
| | WILLIAM STEVENS |
| | Mgr. Engineering Services |
| | Hill Engineering Inc. |
| 3:00 - 5:00 p.m. | Fundamentals of Wet |
| | Pressing |
| | WILLIAM MADDOCK |
| | Technology Specialist |
| | Albany International |
| 5:00 - 6:00 p.m. | Reception |
| 6:00 - 7:00 p.m. | Lobster/Steak Banquet |
| 7:15 - 8:45 p.m. | Executive's Panel |
| | DONALD BEAUMONT |
| | Executive Vice Pres. |
| | Metso Paper USA |

Presentation of Certificates

| 12 |
|-----------------------------|
| Drying & Dry End |
| Operations |
| GREGORY WEDEL |
| V.P. Marketing & Tech. |
| The Johnson Corporation |
| Paper Finishing/Winding |
| MIKE DAUL |
| Technical Sales Manager |
| Metso Paper USA |
| Papermaking Problem |
| Solving Town Meeting |
| Coating |
| ALONZO OSGOOD |
| Senior Project Leader |
| SAPPI Fine Paper NA |
| Printing |
| |

KATHLEEN BENNETT, VP

Georgia-Pacific Corp.

LEE BINGHAM, Sr. VP

C. DAVID NILES, Mgr.

Printing Technologies

SAPPI Fine Paper NA

SCA North America LLC

UMaine Energy Challenge Team Places 4th in National Competition

The University of Maine Energy Challence Team has been extremely busy this semester. This year's challenge was to design and construct a hang glider sail made from 80% wood fiber. Last semester, the team formed three subgroups to individually focus on paper, chemical, and design aspects.

This semester the ideas from all three groups were pulled together and put into action. First and foremost the team made three grades of 100# water resistant paper in early February. The paper was made on the University's own pilot paper machine located in Jenness Hall. A mix of old paper bags and rejected consumer waste was repulped in predetermined quantities to obtain the desired composition of hardwood and softwood fibers.

Once the paper was made, teammates shifted their focus to the sail's construction. To make the body of the sail, strips of paper were initially connected with a biodegradable glue made from animal bones, but the bond was too weak. Repulpable splicing tape was then determined to be the best option.

Once the body of the sail was made, reinforcements constructed from layers of paper were attached on high stress areas. After the final touches were added, the sail was mailed to North Carolina for the competition.

The hang glider was scored in the areas of weight (including battens), conformance to the required sail area, sail tear strength, sail tensile strength, sail moisture resistance, sail recycle content and sail aesthetics and novelty. All sails were judged by a United States Hang Gliding Association certified instructor-pilot.

In the final segment of the competition, teams flew their hang gliders from a dune (approximately 80 feet high) at Nags Head, NC. UMaine pilot was Kira Young, a chemical engineering senior and UMaine Pulp and Paper Foundation Scholarship recipient.

The competition took the form of a distance, not soaring, event. Each team was allowed three flights to determine the basis of the flying competition winner. A typical flight distance on a calm day from an 80 ft. dune is in the range of 50 to 75 yards.

Energy Challenge 2003 competition was held on Saturday, April 5th. Ten schools were represented. North Carolina State University finished first; Spartan School of Aeronautics (Tulsa, Oklahoma) finished second; Temple University finished third, and The University of Maine finished in fourth place.

Story submitted by Michelle St. Peter, Senior, Chemical Engineering.



Kira Young, UMaine ChE Senior readies herself for flight at the 2003 Energy Challenge Competition.

Pulp & Paper Scholarship Recipients Looking For Summer Employment

Many sophomore and junior Pulp & Paper Foundation scholarship recipients want to apply what they are learning in the classroom to actual engineering challenges. Summer workers also offer an opportunity to undertake projects of a short-term nature or ones that have been neglected for lack of staff time.

Many students do not come from communities where there is a paper mill, so they need help from Newsletter readers in securing an appropriate summer job.

There are two criteria which must be met each year to ensure future scholarship awards. First, students must maintain a grade point average of 3.0 or greater. Second, scholarship recipients are required to show continued "demonstrated interest" in a paper related career which is best accomplished by finding a paper related summer job.

Potential employers interested in considering an aspiring UMaine engineering student in their summer job search, please contact the Foundation's Executive Director, Peter Duncan to offer your assistance. Peter can be reached by telephone at 207/581-2298 or by email at duncan@maine.edu

Pulp & Paper Foundation Website

FOR COMPLETE "UP-TO- DATE" INFORMATION ON

- Consider Engineering
- Career Exploration Seminars
- Annual Open House
- 2003 Summer Institute
- First-Year Scholarships
- Upperclass Scholarships

VISIT US ON THE WEB AT www.mainepulpaper.org



NONPROFIT ORG U.S. POSTAGE PAID PERMIT NO. 10 ORONO, ME

Return Service Requested

Pulp & Paper Process Development Center Welcomes New Director

Change is both intimidating and a source of opportunity. This was certainly the case as the University faced the challenge of finding a successor to Joe Genco, long-time Director of the Pulp & Paper Process Development Center. The Center needed a leader who understood the needs of Maine's pulp and paper companies as well as requirements of the global industry; a person with strong technical skills who could work with companies to develop improved manufacturing practices.



Mike Bilodeau, Director, UMaine Pulp & Paper Process Dev. Center

According to Dr. Ruthven, Chair of the search committee, the University found both when Michael Bilodeau became the new director.

Mike Bilodeau has long had respect for traditional Maine industries. He grew up in the Lewiston-Auburn area where his grandparents worked in textile mills. While attending the University of Maine, he spent a summer working on a tissue machine as a winder operator, and later apprenticed at S. D. Warren's Research Lab (now SAPPI's Technology Center) as part of the co-op program. After graduating with a degree in chemical engineering, Mike chose to stay in Maine and was hired by S. D. Warren in Westbrook, ME, thus beginning a 20-year career in pulp and paper related research.

While at Sappi, Mike supported manufacturing sites in North America and, as part of Sappi's global technical resources, had the opportunity to collaborate with numerous research groups and suppliers to the paper industry. His research frequently brought him to the PPPDC, where he worked closely with the staff on many projects. "The breadth of the Center's capabilities, from standard test methods to complex laboratory procedure, to a wide range of flexible pilot equipment makes this facility a very unique and valuable resource to the paper industry. The experience, knowledge and dedication of the Center's staff

helps deliver projects on time."

Mike believes the need for the Center's services will increase as the domestic forest products industry faces tough competition from overseas. He knows firsthand how the PPPDC can help companies to reduce manufacturing costs and improve product quality. Beyond these benefits, Mike also sees an opportunity for the Center to play a larger role in developing innovative, breakthrough technologies to replace current commercial pulping and papermaking methods. "The industry needs to extract significantly more value from the raw materials they use and to do so in a more capital effective manner. This is paramount to becoming an industry that investors want to invest, and reinvest in. The PPPDC is committed to expanding our capacity to help clients meet these new challenges."

To find our more about how the Center can support your research needs, please give Mike a call. You can reach him at 207/581-2387, or by email at mbilodeau@umche.maine.edu.

The UMaine Pulp & Paper Foundation Newsletter is published three times a year by the UMaine Pulp & Paper Foundation, 5737 Jenness Hall Orono, ME 04469-5737. Peter Duncan, Executive Director, Faye Woodcock-Murray, Editor.