



WESTERN MICHIGAN UNIVERSITY

Paper Technology
Foundation

64TH
ANNUAL
REPORT

June 30, 2023



WESTERN MICHIGAN UNIVERSITY

Paper Technology
Foundation

1903 West Michigan Avenue
Kalamazoo, Michigan 49008-5438

wmich.edu/papertechfoundation

64TH ANNUAL REPORT JUNE 30, 2023

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Managing Director **Report**

Overview

The Paper Technology Foundation is a 501c3, not-for-profit organization currently consisting of 35 voting member companies that represent the pulp, paper, and affiliate industries. Since its inception in 1958, more than 1,200 WMU Paper Engineers have been educated and trained for influential careers in pulp, paper, and affiliate industries.

Our 64th Annual Meeting was held at Western Michigan University's new Student Center, which opened this fall and represents a \$100 million investment by the University. The meeting brought together more than 160 Trustees, students, parents, faculty, and University staff to complete statutory business and to review and celebrate the achievement of students and the progress of the foundation across several fronts.

Key highlights of our meeting included the voting on new members and trustees, an enthusiastic review of our progress against our strategic objectives, and a special executive panel of career development question and answers by Palace Stepps, Vice President and General Manager for Sonoco, Shannon Kangas, Area Vice President for Nalco Water and Ray Shirley, Sr. Vice President of Corporate Engineering for Packaging Corporation of America.

The meeting concluded with a social reception with students and several parents. I want to thank Jennifer Johnson and Alyssa McCurren for all of their preparations and organization of the Annual Meeting.

PTF Financials

For the fiscal year 2022-23, the total revenue for the foundation was \$605,751 which included a \$223,000 gift-in-kind from BTG Group (new lab instruments). Excluding the gift-in-kind, revenue was up 10% at \$382,751. This represented membership dues, miscellaneous gifts, and investment activity.

Operating expenses were \$332,339. Note that this represents reclassification from previous income statements. As of June 30, 2023, the general fund had net assets of \$200,885.

Endowment Investment

As of June 30, 2023, our endowment fund balance was \$5,361,322 as a result of investment activity during the fiscal year. Our restricted fund balance was \$41,609. A detailed analysis of the Foundation's financial strengths can be found in the Case for Your Investment on page 21 of this report.

Membership

At this year's Annual Meeting, we welcomed the following new members:

- DART Container
- Kemira
- Clearwater Paper Corporation

Regretfully, we accepted the resignation of Loparex and Mativ Holdings, bringing our total membership as of this writing to 35. We also have two other corporations that provide financial support below the Board of Trustee voting membership level. Our corporate members represent the essence of the Paper Technology Foundation and we are thankful for their generous support.

Enrollment and Recruitment

This fall we welcomed 40 freshmen students to our program bringing our total enrollment to 107 students. This is an unprecedented result of which we have not seen in decades. This underscores the comprehensive efforts of our Recruiting and Outreach Specialist, Cindy Gleaton, to forge new relationships with high schools and STEM program administrators and in reaching prospective students with social media and on-campus visits. As with last year, we already have a sizable list of students interested and accepted for our fall freshman class of 2024! This year, Cindy is initiating high school outreach within the Upper Peninsula of Michigan in addition to her network closer to Kalamazoo.

Retention of students in the program remains unprecedentedly high (~90%) given the academic acumen of our students, the surplus of practicums available, and the student learning, mentoring, and fellowship offered by Ts'ai Lun- the student TAPPI organization. This past September, over 50 students visited ND Paper in Biron, Wisconsin, and Billerud in Escanaba, Michigan. These tours provided students with a first-hand view of a world-class recycled paperboard operation and an integrated pulp and paper mill. We want to thank ND Paper and Billerud for sponsoring these tours.



Fall Field Trip
September 15, 2023
Biron, WI Mill Tour



Fall Field Trip
September 16, 2023
Escanaba, MI Mill Tour

Scholarship Awards

Without question, our PTF scholarships continue to provide an effective tool for recruiting students into the program. Awards for the 2022-2023 academic year were \$373,305.

Once again we have revised the award amount to balance our spending with our growing enrollment. For fiscal year 2025, students who apply to WMU Paper Engineering with a GPA of 3.8 or higher will receive a total of \$15,000 during their academic time in the Paper Engineering program at WMU.

As enrollment increases, our scholarship fund is not sufficient to sustain the total scholarship expenditure. This is the No. 1 priority of PTF going forward. We must increase our scholarship funding if we are to provide more Paper Engineers consistent with the call from our corporate members and other industry participants. You can be a part of the solution, and we are asking that you consider the following:

PTF Corporate Members | Increase annual membership gift to \$25,000. Both WestRock and Graphic Packaging International have generously implemented this. Also, named endowments can be established with only a \$6,000 investment for five years totaling \$30,000.

Board Trustees | An annual \$1,000 gift consistent with the principles defined in our Trustee Agreements. Perhaps your company will match your gift.

WMU Paper Engineering Alumni | An annual \$500 - \$1,000 gift as a way of giving back for the financial support you received from PTF, and a way to help the next generation.

Paper Night and Engineering Expo

This year, we offered an improved venue at Fetzer Center for Paper Industry Night and asked for a \$1,500 fee for participation per the Board of Trustees recommendation. We welcomed 25 membership corporations and collected \$34,000 of income which will be added to our scholarship fund.

The Engineering Expo was attended by 35 paper industry-related companies for internships, co-ops, and career placements. As a result, all students benefited greatly and again, we anticipate all students will have employment whether it be career placement or summer internships/co-ops.

Faculty

We are pleased to report that Dr. Kecheng Li, Department Chair of Chemical and Paper Engineering, now has the means to proceed with the Dr. Raymond L. Janes Endowed Professorship in Paper Engineering. This initiative has been several years in the making and will provide meaningful subject matter expertise to our faculty. We want to thank the many donors who have supported this with their passion and financial resources.

Also, we want to highlight that more than 25 subject matter experts and trustees provided instruction in four paper engineering courses throughout the academic year. Thank you to all who take the time to invest in our students!

Graduate Placement

Our Spring 2023 graduates included:

• **Rowan Edmonds** joined **Kimberly Clark** in Beech Island, South Carolina. Rowan was also recognized with the Outstanding Senior Award.

• **Hannah Kalleward** joined the Leadership Development program with **Graphic Packaging International** in Kalamazoo, Michigan.

- Kourtney Keranen** joined **NSK** in Ann Arbor, Michigan.
- Isabel Lopez** joined **Gentex Corporation** in Holland, Michigan.
- Lindsey Lovato** joined **Packaging Corporation of America** in Filer City, Michigan.
- Isabelle Ownby** joined **AxChem, USA** in Port Townsend, Washington.
- Liam Powell** joined **USG** in Otsego, Michigan.
- Olivia Price** joined **Capstone Technology**, a subsidiary of **Voith**.
- Hunter Shulfer** joined **Billerud** in Escanaba, Michigan.
- Andrew Siegfried** joined the Leadership Development program **Graphic Packaging International** in Carol Stream, Illinois.
- Australia Weatherall** joined **Irving Tissue** in Macon, Georgia.
- Sheri Wood** joined **JRS** in Schoolcraft, Michigan.
- Daniel Kent** - undecided

Our Fall 2023 graduates include:

- Ethan Klaiss** will join **Billerud** at their Escanaba, Michigan mill.
- Sophia Loudon** will join **Georgia Pacific** at their Technical Center in Neenah, Wisconsin.

Congratulations to our 2023 graduates!

PTF Priorities

With rising enrollment and the Raymond L. Janes Endowed Professorship being implemented, the priority of the Foundation is to increase our scholarship fund through more corporate memberships and increased giving from corporations, trustees, and alumni. To this end, we will be seeking progress across several initiatives including more consistent communication and engagement with WMU Paper Engineering alumni.

Beyond this, we will continue to make meaningful input and contributions to the curriculum as well as supporting and mentoring our students.

In closing, we want to thank our faculty, foundation officers, trustees, staff, and students for their continued commitment to shaping WMU Paper Engineering into the leading academic program of its kind.

Go Broncos!

Brian Pahl, Managing Director



Brian Pahl

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Cindy Gleaton

Recruitment & Outreach
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Alyssa McCurren

Marketing Specialist
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Department of **Chemical & Paper Engineering**

Paper Engineering Enrollment

We currently have 107 undergraduate students in Paper Engineering and 5 PhD students in the Paper Engineering and Printing Science program. The Department has a total of 255 undergrad students, 8 MSc students in Chemical Engineering program and 9 PhD students in the Chemical Engineering program.

Faculty & Staff Updates

The department plans to hire two faculty members, one for the Raymond Janes Endowed Professor in Paper Engineering and the other for the chemical engineering program, pending final approval from the University. We expect to start the hiring process in January 2024 for the position start in August 2024.

We also hired two part-time instructors for Spring 2024 semester to supplement our teaching. We are pleased to announce that Dr. Larry Anker will be again teaching PAPER4300-Surface and Wet-End Science and Dr. Jan Pekarovic will be teaching the new course PAPER3800-Pulp and Paper Laboratory.

Teaching & Course Offerings

We are offering both PAPER2420-Coating and PAPER5501- Advanced Paper-Making Processes in Spring 2024. We have decided that PAPER2420 and PAPER5501 will be offered once every year. Several PTF members and alumni have already agreed to provide guest lectures in the two classes. Brian Pahl is helping coordinate the teaching schedule. We appreciate all your contributions to teaching the courses.

Research & Graduate Studies

All our research is progressing very well. Every faculty member is either a PI or a co-PI on a project. In addition to our ongoing projects, i.e., Advanced Battery Materials from DOE led by Dr. Wu, Enzyme-based Technologies for Paper Recycling from DOE REMADE led by Dr. Li, and Nonevaporative Water Removal for Paper Web from DOE led by Dr Li. We have also obtained another DOE award for Enzyme/DES Enhanced Kraft Pulping to Reduce Carbon Footprint which is led by Dr Li. Our graduate students benefit from the full scholarship support as well as from the opportunity to work on research projects that are at the forefront of current science and engineering development.

We have also created a new PhD program in chemical engineering. Now all our PhD students previously registered under PhD in Engineering have been transferred into this new PhD in Chemical Engineering program. Our department now has all three levels of degrees, BSE, MSc, and PhD in all three programs.

Should you have any questions, feel free to contact me.

Kecheng Li Ph.D., PEng. FRSC(UK), FTAPPI
Paper Technology Foundation Endowed Professor & Department Chair
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Recruiter Report

It has been an absolute pleasure to welcome 40 new students to WMU's Chemical and Paper Engineering Department this fall. Included in this group are 33 first-year students and 7 transfers with 50% of our new students being females. Sharing about the paper engineering program at Western Michigan University is very rewarding. We've had many opportunities this year to engage with potential students and their families, alumni, and industry representatives. The compelling story is the support the students feel in WMU's paper engineering program. It's not just about the financial support with scholarships and internship opportunities, it's about finding support for your life from your paper family!

Each of the 40 freshmen received several touchpoints throughout the yielding season. These points of contact have included handwritten thank you notes and holiday cards, customized emails welcoming them to events, texts from current students offering a student's perspective and encouragement, and an invitation to the Spring PTF Board meeting with a Graphic Packaging Mill tour. The breakdown of the first recruitment touchpoints for this class of students is below:

26% WMU Events

26% Mass mailer to admitted paper, chemical, and undecided engineers

23% High School Presentations (Mill Town and students' alma maters)

13% Tours of the WMU Pilot Plants

10% Mass email to the applied paper, chemical, and undecided engineers

2% Other



Parker Anderson, Ethan Schwach and Noah Johnson at the October 17 PTF Reception



Morgan Herremans and Ally Block at the October 17 PTF Reception

Presenting in high schools' advanced math, science, and STEM classes has proven to be successful. We continue to utilize our Milltown Strategy (partnering with high schools and PTF membership companies nearby) and the current students to connect with high schools, which helps prospective students make the connection between their college experience and careers in paper engineering. A big thank you goes to Graphic Packaging International, Packaging Corporation of America, USG, and WestRock for their support of the Milltown Strategy. We'd also like to thank the following schools for hosting our paper engineering team: Battle Creek Area Math and Science Center, Center for Science and Industry-Utica, Dewitt HS, Gull Lake HS, Kalamazoo Central HS, Ludington HS, Lutheran HS N, Manistee HS, Martin HS, Mason County Central HS, and Northview HS. Upcoming High School presentations include Allegan Tech Center, Brighton HS STEAM Center, Otsego HS, Parchment HS, and Loy Norrix HS. We are still working to reach potential students in the Upper Peninsula School Districts but have not been able to connect yet. (Please reach out if you have contacts with high schools in the UP. Thank you!)

WMU events were also a key point in the recruiting cycle this year. This past spring, we hosted several "Lab Crawls" at WMU's College of Engineering and Applied Sciences. These events for prospective students and their families included paper hand sheet making in the wet lab and tours of the WMU Paper Pilot Plant with current students. We are fortunate to work with this incredible group of students. They are living proof of the support received from the PTF, and they enthusiastically share it. For those who couldn't make it to Kalamazoo, we brought WMU and paper engineering to Meijer Gardens in Grand Rapids, The Detroit Institute of Arts in Detroit, and the Drury Lane Theater in Chicago.

To reach the younger crowd, we hosted several groups at WMU's College of Engineering and Applied Sciences. Kalamazoo's Academically Talented third through fifth graders, and Kalamazoo's Y.O.U program for eighth and ninth graders had several days in the lab and Pilot Plant learning what paper engineering is and how it is a sustainable industry. We also provided pulp-making and molded fiber machine activities to underclassmen in chemistry and math classes from schools all over Michigan.

In addition to all of the in-person events, we continue to grow our social media following and look forward to more interaction within the different platforms. Please follow [wmu_paper_engineering](#) on Facebook, Instagram, and TikTok. We have one TikTok with over 800K likes – you should check it out!

Thank you for your continued support. We feel it, and the students do too!

Cindy Gleaton, Recruiting and Outreach Specialist
cynthia.gleaton@wmich.edu



Senior Emma Perrin, networking with students and Trustees



Sophomores Lucas Thibault, Rachel Musser, Addie Higgins, Paige Hofemeister and Allen Crowe enjoying the PTF Reception

Pilot Plants

Annual Summary

2023 Results

The WMU Paper Pilot Plants had a strong year of business, seeing record gross revenue (again) and a variety of great projects from around the world. The backlog is strong and we continue to maintain a reasonable lead time for most of our clients with the help of two additional employees added mid-year. The addition of new employees along with continued process improvements has allowed us to get more done in a day, and add a second shift or second operation on certain days. The compostability lab is up and running as we work through the final stages of BPI (Biodegradable Products Institute) certification. Our new molded fiber machine is also running well for client work. These additions will help us broaden our offerings to the industry and bring more clients here to do their R&D.

We continue to work to not only maintain, but improve our equipment and offerings. We are in the process of getting a major rebuild done on our rewinder, adding dataParc, and installing a large-scale instant hot water system. The new paper machine continues to run extremely well, and often. The coater business continues to pick up with interesting new projects in both paper and synthetic products, while the recycling plant continues to stay busy with a steady stream of non-wood, pulp modification, and recycling projects. Jason Wang has been a great addition to our team, bringing Ph.D. firepower to our lab capabilities. His excellent work includes compost reject analysis for the Compost Consortium, microscopy work, and fiber analysis for several clients, non-wood fiber development (cooks and refining), and R&D on our molded fiber machine.

We were able to once again offer the Fiber Recycling Course and Paper Coatings Course this past summer with strong attendance yet again! Both courses were highly successful on all accounts and received great reviews. We are already in the process of planning the 2024 versions of the courses as they continue to evolve to meet industry needs. We currently have 5 undergraduate students working alongside our professional operators and clients in the plant. They are getting to see some very interesting products being developed here; including lignin-based barrier coatings, specialty pulps, insulative packaging, and new molded fiber chemistries – great additions to a young resume! All in all, another great year.

Pilot Paper Machine

Thank you again to Valmet for the newest addition to our paper machine – the shiny new QCS scanner. The profile detail is amazing and is helping us take our production and quality to another level. The next planned upgrade is a new Valmet edge deckle system.

Recent work has been focused on a few main areas: super specialty grades, fluff pulp, and alternative fibers (cotton, grass, hemp, wheat straw). We continue to make production scale quantities for several repeat customers. We call these orders of 1-5 tons our “super specialty” grades. The multi-ply capability of our machine is also being used more and more. The machine is a dual fourdrinier, and we have added a trolley system that can hold a 3rd headbox, slot die, spray booms, or anything else our customers can dream up. Some cool projects are happening here that we hope to someday share with the world. Paper manufacturers, chemical suppliers, and start-up companies alike, continue to use the machine for early-stage product development and scale-up.

Coater Operations

Our pilot coater continues to see steady business in two main areas; sustainable packaging and building materials. There is significant work going on in heat sealable coatings and barriers of all types, as many flexible packaging products look to become more sustainable (recyclable, compostable, sustainably sourced, etc.). We may have set a record this year, applying over 300 gsm of coating to a 100 gsm substrate for a special client. This is the type of challenge our crew welcomes – pushing the limits! With the addition of 2 more employees, we have started running multiple operations simultaneously (i.e. coater and recycling plant).

Recycle Operations

Corporate sustainability goals push the supply chain to innovate, and increasing legislation against single-use plastics is driving many fiber-based alternatives forward. We have the privilege of seeing and testing many prototypes while in development, and get the satisfaction of seeing some of them make it into the market. Our recyclability protocols continue to be well utilized as we help clients with the certification and labeling of their products. The plant screening, cleaning, and refining operations are also being used extensively, as we prepare wood pulps, non-woods, and even synthetics for trial blends on our paper machine. The POM mixing systems continue to come in handy for blending pulps and adding chemistry in preparation for papermaking.

Molded Fiber

Our KFT Lab V03 is up and running well, ready for customer trials most any week on our schedule. We see molded fiber as a rapidly growing part of packaging and consumer goods of all types. We refer to it as 3D papermaking, due to the very similar processes. Stock preparation, forming, pressing, and drying are the key components of molded fiber production. The current challenges with wet molded fiber include cycle time and barriers. Areas of trial interest include alternative fibers, wet-end chemistries, coatings, mold (drainage and formation) improvement, and moisture reduction (cycle time improvement). The newly formed Fiber Molding committee within TAPPI is up and running. We are starting to work on standards and content for TAPPICon, and build out the technical knowledge of our members. Thank you to Joe Grygny (The Godfather of molded fiber), Dustin Ziegelman, and Mark Lewis for their help in leading this effort. It is a great honor to serve alongside Joe and start to build a formal platform of learning and best practices for the molded fiber community.

Thank you all for your support of our students, program, and pilot facilities. Go Broncos!

Lon Pschigoda, WMU Pilot Plants, General Manager
lon.pschigoda@wmich.edu

TAPPI Ts'ai Lun Report

Ts'ai Lun, our TAPPI Student Chapter, hosted several successful events in the fall of 2023. We started September with the Freshmen Welcome, which extended a warm welcome to our new students in the paper program. At this event, freshmen were able to meet their classmates and their personal mentor who actively engages with them throughout the school year, providing guidance on resumes, practicing interview skills, and checking in on their engagement in the program.

Additionally, by introducing an element of friendly competition, an engineering contest captivated students as they designed catapults using limited supplies. The challenge tasked them with catapulting a ping pong ball as far as they could with their self-constructed catapults. The winning team not only received a prize but was also featured on our Instagram.

In addition to our student events, Ts'ai Lun also hosted multiple fundraisers in its efforts to send 48 paper students to Student Summit in January 2024. This year, we introduced our inaugural golf outing, which took place the Friday after the Engineering Expo. With an impressive turnout of approximately 60 participants, the event achieved considerable success, generating \$6,000 in funds– a goal made possible through the generous support of sponsors Solenis, GPI, and Albany International. Thank you so much for your support! We look forward to hosting this event again in September of 2024 and are actively searching for players and potential sponsors. Please consider participating and reconnecting with your fellow alumni and corporate members! Sponsorship for the 2024 golf outing is warmly welcomed!



The golfers for the inaugural Ts'ai Lun Golf Outing. Thank you to everyone for your support!



Baylee Stainforth and Emma Norwood enjoying the sunshine while recording the winner for longest drive

As another successful fundraising event, upperclassmen of the paper engineering program hosted a training in paper-making for Roosevelt Paper. They created comprehensive training PowerPoints covering the fundamentals of papermaking, which were presented over the course of a two-day training session. We received overwhelmingly positive feedback which encouraged us to consider future training sessions for any companies that are interested.

Due to successful fundraising events in the fall, Ts'ai Lun will be able to sponsor the attendance of 48 students at the TAPPI Student Summit in Greenville, SC. This event offers excellent opportunities for students to meet paper students from across the country, attend seminars hosted by industry professionals, engage in career fairs leading to interviews and job placements, and participate in paper mill tours. Making our way to Summit requires an estimated cost of \$35,000 this year. Looking forward to 2025, we welcome any contributions to our annual fundraising goal, which will go toward sponsoring a strong attendance at the 2025 TAPPI Student Summit.

As the fall draws to a close, we look forward to hosting two employer nights for our students: one with Dart Container and one with Emerson. We will again hit the ground running in spring 2024 with Student Summit, more employer nights, Galentine's Day celebrations, and a formal dance near the end of the semester. We are excited for an eventful and promising 2024.

Ally Block, Ts'ai Lun President
alyson.block@wmich.edu



Freshmen Welcome 2023



Alaina DeHart and Cassidy Edwards at the PTF Reception



Noah Johnson and Caidon Bowman getting their industry swag bags



Freshmen Welcome 2023

Foundation Organization

Officers

President | Steve Myers '91 | Individual Patron - Voting

President-Elect | Chris Wetherford | PaperWorks

Vice President | Leslie McLain | Imerys

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Non-Voting Members

Brian L. Pahl | Managing Director, Paper Technology Foundation Inc., WMU

Lon Pschigoda | General Manager, Pilot Plants, WMU

Dr. Kecheng Li | Chair, Department of Chemical and Paper Engineering, WMU

Committee **Reports**



Steve Myers
Governance Committee Chair
Myers CI Consulting, LLC

The Governance Committee met on October 16 before our Board of Trustees meeting on October 17, 2023. We welcomed Tom David from WestRock as Secretary, replacing Peter Fernstrum from Loparex. Loparex has discontinued its membership, and we thank Peter for all his contributions over the past few years. In attendance were Brian Pahl, Steven Myers, Leslie McLain, Tom David, Jan Van Der Kely, and Colleen Scarff.

Interest in the Foundation and the curriculum has increased over the past year. We are excited to welcome 40 new students this fall into the program, hitting our incoming student goal 2 years early thanks to the hard work of the Foundation, the Recruitment and Scholarship Committee, and especially Cindy Gleaton. In addition, we are pleased to see our membership grow to 35 corporate trustees. The Foundation would like to thank Brian Pahl for his ongoing efforts in this area.

Over the past year, we have filled the Paper Technology Endowed Professorship with the unanimous decision to award it to our Chemical and Paper Engineering Department Chair, Dr. Kecheng Li. We are also pleased to report that our 2nd Endowed Professorship – Dr. Raymond L. Janes Endowed Professor in Paper Engineering has been budgeted for the upcoming year. The MOU for this position is being finalized, as well as the selection committee and criteria.

With both Endowed Professorships secured, and with our enrollment hitting our target of 40 incoming students, the PTF must focus its efforts on increasing our endowed funds to support scholarships. The current endowment is not sufficient to support this level of students that our member companies indicate they need for their organizations. Our current annual gap is roughly \$150K per year, which is being made up at present with membership dues. The Foundation needs to grow its named endowments and each company should aim to support a named endowment. Details on how to accomplish this with your company or an individual endowment can be discussed with our Managing Director, Brian Pahl.

In closing, I'd like to thank all of our trustees and companies who support the foundation with their time and funds. The PTF has a bright future in supporting our young professionals who will succeed us in our ever-changing and dynamic industry.



Larry Anker **Education and Research Committee Chair** **Solenis**

The Education and Research Committee has made progress in several aims throughout the last year.

After much effort, The Raymond L. Janes Endowed Professorship can now proceed to form a search committee. This position will enable Dr. Li to implement several changes regarding the sequence and content of the Paper Engineering curriculum. In addition, Dr. Li will also look to emphasize the use of the Pilot Plants for instruction and visual learning.

Twenty-five guest lectures have volunteered to teach PAPER 1000, PAPER 2420 (Coating), PAPER 330 (Pulping and Bleaching), Paper 4300 (Wet-End Chemistry) and PAPER 5501 (Advanced Paper Processes). Thank you to all for investing in our students and sharing your expertise.

Finally, we are excited to announce that we have received nine proposals for Senior Design projects. The presentation of these projects will be seen by our Board of Trustees during our April 2024 Board Meeting.



Mark Zempel **Recruitment and Scholarship Committee Chair** **AxChem, USA**

The Recruitment and Scholarship Committee is developing success and progress with both fronts of our responsibilities, and the Committee itself is strengthening our approach through the PTF's new committed membership approach.

Cindy Gleaton continues to create success in our recruiting efforts as she crosses the Midwest spreading the word about the amazing value proposition that a WMU Paper Engineering degree offers. Her passionate approach is reinforced by continuously refreshed supporting materials, designed by her and the PTF team based on what is resonating best with prospective students. The message is compelling: world-leading facilities and faculty, extensive PTF and WMU financial support, valuable (and rewarding) co-ops and internships in industry, well-attended recruiting events, 100% job placement, and high compensation relative to most other areas of study. The PTF coordinates much of this activity in close partnership with the Department, the College, and the University. Altogether, it means we are now confidently pulling in the 40+ incoming first-year students we are seeking, with upside, and with sustainability beyond just the current year. Thanks to Cindy and all who support our recruiting efforts for this positive step!

Our other mission is to ensure that a meaningful scholarship incentive is part of our recruiting (and retention) package. In this area, too, we are having success, just not enough. The industry's increased expectations around enrollment means that existing PTF Endowment and operating funds that support the scholarships are spread across more students. We have made necessary adjustments to the number of scholarships, the dollar amounts, and the criteria to fit our available funding, but we are also working hard to increase that funding to keep those scholarships at difference-making levels.

Brian Pahl, the PTF members, and staff work hard to highlight the value of endowment gifts as a way to deliver continuous support, and we do have some additions to the endowment to be grateful for. More is needed. Beyond that, increases to the operating fund that can support scholarships annually have come from increased PTF membership, corporate and individual one-time gifts, and a new paper recruiting night fee that directly supports scholarships. This is not enough. We have several projects underway; for example, developing a “prospectus” for potential supporters to consider the various ways they can help (endowment, membership, gifts, and others in development). We are also considering if and how to incorporate sponsored annual scholarships in addition to those already funded by the endowment and the operating fund. More concepts and projects will follow as new ideas are generated and explored.

The PTF has recently adopted a direct-commitment approach to joining the committees and it means we have built a committed, engaged, and creative group to build on the progress made by those who have led us to the place we are now with only “good problems” to work on. I’m excited by the energy of this group and look forward to what we will accomplish!



Jennifer Lechlitner **Alumni Engagement Committee Chair** **Graphic Packaging International**

The Alumni Engagement Committee was established fall of 2023 to include 9 members, Scott Varney (Vice-Chair), Jen Johnson (Secretary), Brian Paul, Derek Depuydt, Rick Hartman, Bryan Moore, Josh Jelenek, and Julie Lonchante. The team charter has been finalized: To substantially increase alumni engagement that would manifest through Foundation participation, program involvement, and financial support.

We are developing protocols to professionally and ethically reach out to alumni to solicit gifts, participation, and contact information. We desire to increase the amount of in-person contact through alumni dinners and events. With our upcoming alumni outreach efforts, our goal is to create opportunities to reconnect and for more alumni to be involved. Upcoming activities under consideration are an alumni open house event to be scheduled the week of the PTF Spring Meeting and increased alumni participation with Ts'ai Lun events. We are planning to incorporate the “State of the Union” video recently created and the PTF LinkedIn page into the communication process. Also, we continue to circulate 2 Paper Trail e-newsletters in May and November. The open rate for these newsletters has been very successful at 39%. Industry comparison is 4-6%. Additionally, the holiday card containing a pledge form will be sent out again this season as another touchpoint.

Most alumni have benefited from PTF scholarships to assist with their collegiate funding. In addition, the PTF community has been valuable in assisting with ongoing paper industry careers and opportunities. I am fortunate to have benefited from both, and I am excited to give back in multiple ways. We all have our own stories to encourage us to contribute. Each alumnus has their reason and timing to continue to be involved with the PTF and to contribute time and/or funds. Our mission is to ensure that all alumni are informed of PTF events and encouraged to participate. Several paper companies are involved in a company match for the personal contributions of their employees. We are thankful for those matches and encourage additional companies to do the same. We are evaluating recent individual donation levels with the goal of year-over-year incremental improvement.

We are thrilled about the opportunity this committee brings and we look forward to re-connecting with so many fantastic alumni.

Corporate Members

Corporate Benefactor

Any company or organization that established a named scholarship fund and maintains corporate member status with the prescribed annual dues.

Albany International Corporation

Rob Hansen '79

International Paper

Derek Depuydt '99

Nalco Water-An Ecolab Company

Paul Barrera

Packaging Corporation of America

Mark Kowlzan

Solenis LLC

Larry Anker

WestRock

Tom David '00

Corporate Member

Any company or organization that contributes the prescribed annual dues.

Ahlstrom

Nick Kapsa

AxChem, USA

Mark Zempel '92

Billerud NA

Krista Gadzala

Canadian National Railway

James Gunther

Clearwater Paper

Calvin Bemby

Dart Container

Jeff Esser

Domtar

Kurt Mehlberg

Essity

Erik Standerfer '97

Graphic Packaging International

Mike Farrell

Green Bay Packaging

William Cone

Greif

David Scott

Huhtamaki

Alan Reynolds

Imerys

Leslie McLain

Kemira Chemicals

Derek Maddox

Kimberly-Clark

Bryan Moore '99

New-Indy Containerboard

Paul DeHaan '88

ND Paper

Bob Fieck

NSK

Matt Erickson

PaperWorks

Chris Wetherford

Pixelle

Mark Comensoli '96

Pratt Industries

Vinny Krell

Premier Packaging

James Catabia

Primient

Meggan Hostetler-Schrock

PROServices

Josh Jelenek

Sappi

Kraig Melin

Sonoco

Leo Bisch III

Trinseo

Greg Welsch

USG

Eric Bock

Voith/BTG

Scott Varney

Corporate Contributors

Any company or organization that contributes annual dues but not an amount needed to qualify as a Corporate Donor.

Kadant Johnson LLC

Wes Martz

Roosevelt Paper Company

David Kosloff

Individual and Lifetime Members

Any individual or alumni who contributes \$1,000 or more. These individuals have voting rights at the Annual Meeting. The full list can be viewed in Appendix A.

Foundation Awards

Alumni Excellence

This elite group of alumni are recognized by the WMU College of Engineering and Applied Sciences for their achievements in their profession, contributions to their organization and field, as well as their reputation for having high personal integrity. Alumni Excellence Award recipients are selected from their respective departments.



Alumni Excellence Fall 2022 | Brian Pahl, BSE '80

Brian Pahl, B.S.E.'80, is the Managing Director for the Paper Technology Foundation at Western Michigan University. From 2008-17, he served as President and CEO of BTG Group based in Eclepens, Switzerland. Prior to that he was the head of papermaking effects for CIBA Specialty Chemicals in Basel, Switzerland, and President of the paper technology division of Hercules, Inc. from 2001-05. He joined Hercules, Inc. in 1980 as a technical representative in Portland, Oregon, and moved through various assignments in sales, marketing and business management over 25 years in Green Bay, Wisconsin, and at Hercules' headquarters in Wilmington, Delaware.

PTF Honor Award

The Honor Award is made to individuals whose contribution to the pulp, paper, and related industries and interest in the Foundation have enhanced the reputation of the Department of Chemical and Paper Engineering for training young men and women who wish to pursue careers in the industry. Below we feature the recipients for the past fiscal year. A historical list of all recipients can be found in Appendix B.



PTF Honor Award Fall 2022 | Rob Hansen '79

Rob Hansen received the PTF Honor Award in recognition of his exceptional contributions to the Paper Technology Foundation at Western Michigan University. Rob is Senior Vice President and Chief Technology Officer at Albany International. He previously served as Vice President – Corporate Research and Development from April 2006 to January 2010. Hansen joined Albany in 1981 as a design engineer for press fabric. Following a position in Charleston, SC, he moved to Helsinki, Finland, where the company built a new plant to serve the Finnish market. When Albany International acquired Geschmay group, Hansen became technical director for press fabrics, from 2004 to 2006. He served the company in a number of technical management, research and development positions in Europe and the U.S. In 2008, he returned to the United States when he was named CTO. Hansen earned his WMU Bachelor of Science double majoring in paper science and chemistry. Hansen chaired the Foundation's Recruitment and Scholarship Committee for four and a half years. Thank you for your service, Rob!

Foundation Fellow Award

The title of Foundation Fellow is conferred on individuals who have distinguished themselves through service to the Foundation or to the Department of Chemical and Paper Engineering. The recipient must be or have been a member of the faculty or staff, or a member of the Foundation. Below are the recipients from the past fiscal year. A historical list of all honorees can be found in Appendix B.



Fall 2022 | Dr. Kecheng Li

Dr. Kecheng Li received the PTF Fellow Award for his distinguished service to the Foundation and the Department of Chemical and Paper Engineering. Dr. Li has more than 20 years of R&D experience in the pulp and paper manufacturing technologies. His areas of research interests include biorefining for biofuels, nanocellulose, and biochemicals; enzyme technologies for wood and fiber processing, and wastewater treatment; and state-of-the-art surface and nanoscale techniques. Dr. Li and his students have authored 100+ journal papers and book chapters, and delivered numerous conference presentations. He has also developed more than ten proprietary technologies/disclosures and holds six US patents. Congratulations, Dr. Li!



Spring 2023 | Jan Van Der Kley

Jan Van Der Kley has been recognized as a Paper Technology Foundation Fellow for her many years of service to PTF. Jan received her BS degree from WMU in 1980 and her MBA soon thereafter. She is the Vice President for Business and Finance for Western Michigan University and our Foundation Treasurer. Her unwavering support and guidance to our Governance Committee continue to be invaluable. Thank you Jan, and congratulations!

WMU Service Award | Fall 2022



Jennifer Johnson

We presented Jen Johnson with the WMU service award for 15 years with the Paper Technology Foundation. During her time with the Foundation, she has acted as board liaison, helped students refine their resume, assisted with intern, co-op and full-time placement, hosted career fairs and facilitated thousands of student and industry professional relationships. Thank you, Jen for all you do!

Hall of Fame Award

The Hall of Fame Award, the Foundation's highest honor, is bestowed on an individual in recognition of long and distinguished service in achieving the objectives of the Foundation. Lifetime membership in the Foundation is conferred upon the recipient of this award. A complete list of the Hall of Fame Award recipients can be found in Appendix B.

Endowed Professorships

PTF Inaugural Endowed Professor



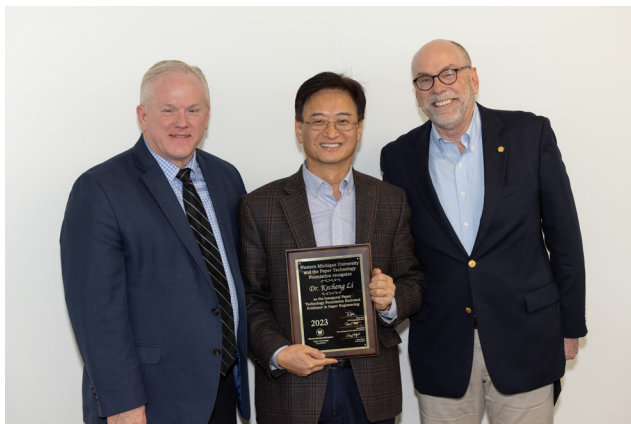
Dr. Kecheng Li

Dr. Kecheng Li, Chair of the Department of Chemical and Paper Engineering, has been awarded the inaugural Paper Technology Foundation Endowed Professorship. This recognizes Dr. Li's many contributions to the pulp and paper industry and the Paper Engineering program at WMU. This professorship will support additional research and associated publishing.

Dr. Li joined WMU in 2016 as a professor and the Chair of the Department of Chemical and Paper Engineering. Prior to joining WMU, Dr. Li was a professor and University research scholar in the Department of Chemical Engineering at the University of New Brunswick, Canada.

Dr. Li obtained a Ph.D. in Chemical Engineering from the University of Toronto. Dr. Li is a Fellow of the Royal Society of Chemistry (UK) and a Fellow of the Technical Association of the Pulp and Paper Industry (TAPPI).

Please join us in congratulating Dr. Li for this well-deserved recognition.



Dr. Steven Butt, Dr. Kecheng Li, and Brian Pahl at the dedication of the inaugural Paper Technology Endowed Professorship



Dr. Kecheng Li and several paper engineering students at the Endowed Professor Luncheon

Breaking News |

Dr. Raymond L. Janes Endowed Professorship Fully Funded

A second professorship honoring the late Dr. Raymond L. Janes is fully funded and will be fulfilled in the near future. Major donors for this professorship include Graphic Packaging International, New-Indy Containerboard, ProServices, Domtar, and numerous alumni.

Case for Your Investment

Mission

The Paper Technology Foundation, Inc. (PTF) provides resources and leadership to Western Michigan University and the Department of Chemical and Paper Engineering in ways that benefit the pulp and paper industry with talented and well-trained engineering graduates. Our aim is to build WMU Paper Engineering into a center of excellence for more sustainable fiber-based products and technologies. Evidence of this pursuit will be:

- Increasing enrollment of well-educated, motivated well-trained, and ready engineering students
- Growing membership of companies fully engaged in PTF and committed to sustainability
- Faculty with increasing industry experience and engagement along with well-recognized instruction and research acumen
- Pilot facilities that are uniquely equipped to help achieve industry objectives in sustainability and innovation

Sound Strategic Direction and Objectives

To accomplish our mission, the Board of Trustees has agreed upon a strategic plan that defines the following objectives:

- Student Enrollment** – given the State of Michigan landscape and the talent acquisition requirements of our members, the Board has established a goal of having 120 students enrolled in Paper Engineering by 2025. We are off to a promising start with 40 freshmen enrolled in the fall of 2023, bringing total enrollment to 107. With our current level of recruitment and retention, our enrollment objective should be reached.
- Scholarship Funding** – with rising enrollment, scholarship funding has now become a pressing requirement. While we have reduced our awards per student, this deficit must be closed if we are to reach and hold our enrollment objective. Corporations, trustees, and alumni will continue to be our primary donors.
- Corporate Membership Development** – this will continue to be the primary focus of the Managing Director. Currently, we have 37 companies that financially support PTF, 35 at the level to be voting Board Trustees. This is one of the largest membership lists among Pulp and Paper Foundations. We aspire to continue to grow this by modifying the By-Laws to enable up to 46 members. Our membership represents a good cross-section of industry producers and suppliers of materials and services.
- Faculty Development** – with the PTF Endowed Professorship in place and awarded to Dr. Kecheng Li, we now pivot our search of candidates for the Dr. Raymond L. Janes Endowed Professorship. These professorships will provide additional classroom instruction and research capacity.

Financial Strength

In many ways, we are as financially strong as any time in our nearly 65-year history. Our growing corporate membership and rigorous management of operating expenses allow us to use the operating surplus to support scholarships. Our endowments of \$5,361,322 are exposed to investment activity, this has benefited by the pooling of our funds with the much larger \$540 million WMU investment portfolio. This provides us with greater diversification and access to alternative investments such as direct lending, private equity, and even modest hedge fund participation. This has helped mitigate much of the volatility experienced in stocks and bonds over the past couple of years.

In summary, your investments make a financially sound and vibrant, results-oriented foundation which in turn helps to shape our superior academic and practicum programs that provide exceptional Paper Engineering graduates. We thank you for your investment in time and financial resources, and encourage others to join us in this exciting and enriching mission.

Foundation Scholarships

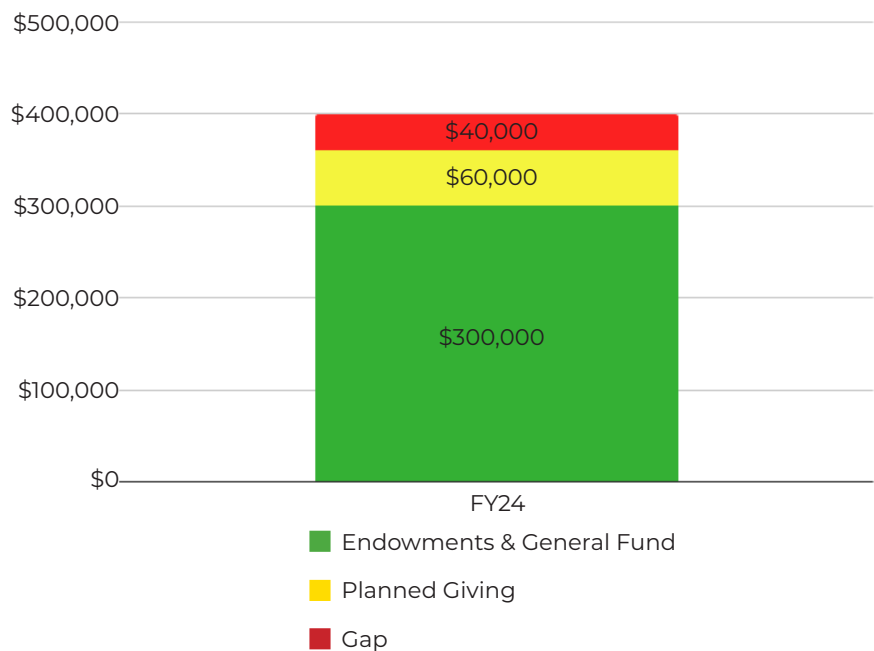
The Paper Technology Foundation administers a scholarship program designed to encourage students to pursue studies in the pulp and paper programs. Based on academic achievement and merit, scholarships are awarded on an academic year basis to exceptional young men and women who demonstrate both aptitude and interest in the pulp and paper and allied industries.

The funds that underwrite the scholarship program come from several sources. Many individual donors have established named scholarship funds, and others contribute to memorial funds, to previously established endowments and to the general scholarship endowment. Many companies have contributed to named endowments and, from time to time, enhance the value of those funds with additional gifts. All of the scholarship endowment funds are permanently invested so that the earnings on the investment are available for scholarship expenditures and for reinvestment to ensure continued growth of the individual funds. Finally, Foundation members—companies, alumni and friends—contribute annually to the Foundation to help sustain the scholarship program. These scholarship endowment funds are delineated in this report. To all of these donors, and on behalf of the student recipients, the Foundation wishes to express its deepest gratitude. We are very proud of our scholarship students and they appreciate your continued support.



Scan here to help the PTF in our goal to close the scholarship gap.

Scholarship Gap



PAPER TECHNOLOGY FOUNDATION, INC.

SUPPLEMENTAL SCHEDULE OF CHANGES IN ENDOWMENT FUNDS
YEAR ENDED June 30, 2023

	Balance June 30, 2022	Gifts	Net Investment Income	Disbursements, Intrafund Transfers and other Increases (Decreases)	Balance June 30, 2023
Endowments					
Albany International Corporation Scholarship	\$ 25,658	\$ -	\$ 1,653	\$ (1,762)	\$ 25,550
Anonymous Alumnus and Close Friend Paper Engineering Endowment	22,727	500	1,467	(1,696)	22,997
Atkinson Family Endowment	15,240	-	1,021	(346)	15,915
Raymond L. Janes/Beloit Corp. Scholarship	43,744	-	2,878	(3,771)	42,851
John F. Bergin Family Endowment	38,400	6,000	2,611	(2,665)	44,346
Dan and Bev Bergsma Endowed Scholarship	36,083	-	2,335	(2,293)	36,125
David and Doris Bossen Scholarship	35,275	-	2,287	(2,176)	35,385
Burgess-Cellulose Foundation Scholarship	35,492	-	2,301	(2,181)	35,612
Mae Munter Callighan Endowment	57,779	-	3,767	(3,178)	58,368
Olin W. Callighan Endowment	54,196	-	3,554	(3,403)	54,347
Cargill, Inc. Scholarship	35,217	-	2,337	(1,990)	35,564
Carlton H. Cameron Scholarship	45,282	-	2,980	(3,895)	44,366
Celanese Polymer & Specialties Co. Scholarship	8,054	-	539	(183)	8,410
CIBA-GEIGY/Joseph A. Pacietto Scholarship	31,162	-	2,033	(1,690)	31,505
Class of 1990 Endowed Scholarship	21,233	-	1,368	(1,465)	21,136
Consolidated Papers Foundation Inc. Scholarship	44,034	-	2,902	(3,579)	43,357
Bert Cooper Scholarship	32,685	-	2,108	(2,216)	32,577
Corn Products Endowed Scholarship	57,301	-	3,730	(3,266)	57,765
Theodore W. and George C. Dunn Memorial Scholarship	91,769	-	6,080	(5,654)	92,195
E. I. Du Pont Ti-Pure Scholarship	22,553	-	1,511	(512)	23,552
E. I. Du Pont deNemours and Co., Inc. Scholarship	6,298	-	313	(2,109)	4,503
E. B. Eddy Paper, Inc. - A. Richard Wagner Endowed Scholarship	28,241	-	1,816	(2,017)	28,040
John M. Fisher/Ts'ai Lun Scholarship	37,778	102	2,460	(2,234)	38,106
Fletcher Paper Company Scholarship	63,273	-	4,238	(1,435)	66,077
Richard and Marijane Flores Endowed Scholarship	11,226	-	752	(255)	11,723
James A. Foxgrover Memorial Scholarship	87,214	-	5,842	(1,978)	91,077
Georgia Pacific Alumni Scholarship	20,210	-	1,354	(458)	21,105
Georgia Pacific Endowed Scholarship	53,781	-	3,494	(3,186)	54,089
Philip H. Glatfelter Endowment	57,137	-	3,719	(3,262)	57,594
Grain Processing Corporation Scholarship Fund	51,537	-	3,354	(2,938)	51,953
Gilman-Hafer Scholarship Fund	20,899	-	1,346	(1,457)	20,788

PAPER TECHNOLOGY FOUNDATION, INC.

SUPPLEMENTAL SCHEDULE OF CHANGES IN ENDOWMENT FUNDS
YEAR ENDED June 30, 2023

	Disbursements,				Balance June 30, 2022	Gifts	Net Investment Income	Intrafund		Balance June 30, 2023
	Balance June 30, 2022	Transfers and other Increases (Decreases)	Transfers and other Increases (Decreases)	Balance June 30, 2023						
	\$	\$	\$	\$						\$
Endowments										
Hafer-Teugh Endowed Scholarship	15,291	-	1,024	(347)	15,968					
Gerald A. Hale Scholarship	33,310	-	2,209	(1,947)	33,572					
Albert S. Harman Scholarship	146,892	-	9,427	(10,803)	145,516					
Hercules, Inc. Scholarship	39,857	-	2,561	(2,870)	39,548					
Paul T. and Sally S. Hoelderle Family Endowed Scholarship	22,707	-	1,467	(1,498)	22,676					
Dr. Richard and Marilyn Hartman Family Endowment	28,669	-	1,855	(1,830)	28,694					
J. M. Huber Scholarship	37,909	-	2,431	(2,826)	37,514					
International Paper Company Endowment	713,386	-	46,470	(47,749)	712,108					
William G. James Scholarship Fund	27,273	-	1,718	(2,585)	26,407					
Dr. Raymond L. James Memorial Scholarship	32,674	-	2,107	(2,215)	32,566					
Dr. Raymond L. James Endowed Professor in Paper Engineering	807,453	41,825	45,667	175,000	1,069,945					
Michael and Sarah Joyce Endowed Scholarship	13,371	-	841	(1,286)	12,926					
Danny K. Kaiser Endowed Scholarship	28,581	-	1,817	(2,418)	27,980					
Kalamazoo Valley TAPPI Scholarship	11,784	-	735	(1,250)	11,269					
* Jonathan C. and Denise D. Kerr Paper Engineering Endowment	-	-	802	-	30,802					
John F. King Family Scholarship	68,251	-	4,513	(4,724)	68,039					
Perry H. Koplik Scholarship Fund	31,237	-	2,016	(2,085)	31,169					
Dr. and Mrs. Stephen I. Kukolich Scholarship	13,842	-	927	(314)	14,455					
Dale L. Leedy Memorial Scholarship	16,975	-	1,137	(385)	17,727					
Texo-Louis Lerner Scholarship	39,069	-	2,519	(2,656)	38,933					
K. A. Uno Lowgren Scholarship	27,022	-	1,756	(1,596)	27,182					
Gerard and Aleta Marshall Family Endowment	10,171	-	681	(231)	10,621					
Dr. George F. and Jane L. Martin Family Scholarship	28,165	-	1,832	(1,622)	28,375					
E. D. Marvin/Orr Felt Scholarship	38,082	-	2,525	(2,253)	38,354					
John and Diane Maryanski Scholarship	60,172	-	3,846	(4,707)	59,311					
Michigan Carton Co. Scholarship	42,632	-	2,747	(2,933)	42,446					
Nalco Chemical Company Scholarship	40,727	-	2,619	(2,890)	40,456					
Anthony S. Nigrelli Endowed Scholarship	15,865	550	993	(1,837)	15,571					
OMNOVA Solutions Foundation Inc. Scholarship	35,350	-	2,292	(2,178)	35,464					
Packaging Corporation of America Scholarship	62,204	-	4,115	(4,190)	62,130					
Paper Technology Alumni Endowed Scholarship	134,869	300	8,922	(9,427)	134,664					

PAPER TECHNOLOGY FOUNDATION, INC.

SUPPLEMENTAL SCHEDULE OF CHANGES IN ENDOWMENT FUNDS
YEAR ENDED June 30, 2023

	Endowments		Disbursements,		Balance June 30, 2023
	Balance June 30, 2022	Gifts	Net Investment Income	Intrafund Transfers and other Increases (Decreases)	
David K. Peterson Family Environmental Scholarship	\$ 88,571	\$ 23,060	\$ 6,327	\$ (3,969)	\$ 113,989
Roger C. Peterson Memorial/Betz PaperChem, Inc. Scholarship	38,592	-	2,454	(4,032)	37,014
PIMA Scholarship	22,321	-	1,441	(1,489)	22,272
Dr. Paul and Deborah Proxmire Family Endowment	11,599	-	723	(1,246)	11,076
Recknagel Scholarship	34,223	-	2,216	(2,152)	34,287
Rohmnova Endowed Scholarship	25,370	-	1,634	(1,755)	25,249
Sandoz Scholarship	42,998	-	2,772	(2,941)	42,828
Ellsworth H. Shriver Memorial Scholarship	114,390	-	7,563	(7,954)	113,999
William and Martha Siekman Scholarship	64,728	-	4,302	(3,255)	65,776
Simpson Paper Scholarship	43,951	-	2,835	(2,963)	43,824
TAPPI/Paper Chase Scholarship	34,497	-	2,202	(2,748)	33,951
Tracy Family Endowment	17,037	-	1,141	(386)	17,791
Clifford E., Richard N. and Corliss A. Van Buren Scholarship	27,428	-	1,783	(1,605)	27,606
WestRock Foundation Endowment	317,445	-	21,027	(19,904)	318,568
Total Endowments	\$ 4,698,416	\$ 102,337	\$ 301,141	\$ (74,298)	\$ 5,027,595
Funds Functioning as Endowments					
General Scholarship Endowment	\$ 422,411	\$ -	\$ 28,225	\$ (12,035)	\$ 438,601
Paper Technology Endowed Professor Quasi-Endowment Fund	-	-	-	-	-
The Pilot Plant Capital Improvement Fund Quasi-Endowment	-	-	-	-	-
Total funds functioning as endowments	\$ 422,411	\$ -	\$ 28,225	\$ (12,035)	\$ 438,601
Total Endowment Funds	\$ 5,120,827	\$ 102,337	\$ 329,367	\$ (86,334)	\$ 5,466,197

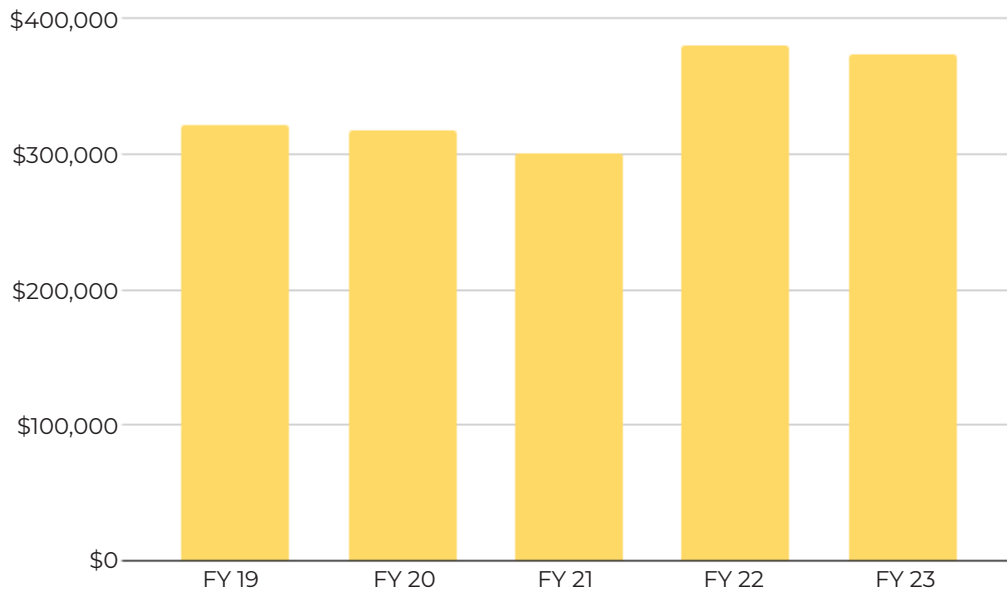
* New

** The following donors have committed \$10K or more to this endowment:

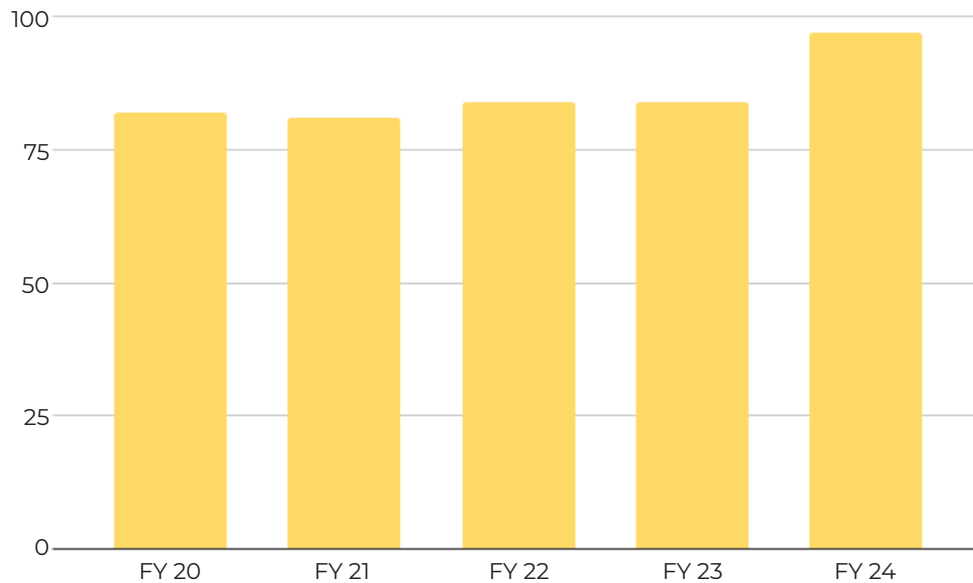
- John and Susan Bergin - \$68,000
- Domtar Corporation - \$150,000
- Graphic Packaging - \$225,000
- Richard and Marilyn Hartman - \$50,000
- New-Indy Containerboard - \$150,000
- Pro Services - \$25,000
- Timothy E. Hagenbuch - \$10,000
- C. Wesley Smith - \$20,000 cash and \$500,000 Life Annuity

Scholarship and Enrollment Records

Awarded Scholarships



Fall Enrollment



·This data includes students represented in yearly census & students on co-op

Department Activity

UNDERGRADUATE STATISTICS (FALL SEMESTER)

Enrollment by Program	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Total	329	321	298	264	239	255

Enrollment by Class: Paper*	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Freshmen	19	21	26	17	27	32
Sophomore	14	20	14	17	13	22
Junior	14	14	25	18	19	12
Senior	30	27	16	32	25	31
Non-registered & co-op students						10
Total	77	82	81	84	84	107

Enrollment by Class:	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Chemical Engineering						
Freshmen	22	23	33	13	17	16
Sophomore	40	42	30	24	17	25
Junior	54	44	51	37	31	20
Senior	118	115	96	102	86	86
Total	234	224	210	176	151	147

Enrollment by Class:	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Graphic and Printing Science						
Freshmen	2	1	1	0	0	0
Sophomore	0	2	1	1	0	0
Junior	7	4	0	1	1	0
Senior	9	8	5	2	3	1
Total	18	15	7	4	4	1

GRADUATE STATISTICS

Graduate Enrollment	2018-19	2019-20	2019-20	2021-22	2022-23	2023-24
Paper PhD	17	14	10	9	7	5
Chem MS						8
Chem PhD						9

New Freshmen and Transfers Majoring in Paper Engineering

Parker Anderson | Tecumseh, MI

Toby Archer | Lake Orion, MI

Marty Barker | Dryden, MI

Colton Bigelow | Manton, MI

Ian Bird | Carleton, MI

Caidon Bowman | Kalamazoo, MI

Ava Byars | Dewitt, MI

Elise Ciciura | Tinley Park, IL

Thang Cin | Battle Creek, MI

Shelby Conley | Marengo, OH

Alaina DeHart | Niles, MI

Cole Detloff | Cedar Springs, MI

Hannah Eberly | Lawton, MI

Cassidy Edwards | Chesterfield, MI

Abby Goodwine | Utica, MI

Maleah Hampton | Kalamazoo, MI

Luke Hanley | Kalamazoo, MI

Morgan Herremans | Montague, MI

J.T. Hilton | Battle Creek, MI

Fariz Hisham | Kalamazoo, MI

Anastasiia Hrukach | Traverse City, MI

Noah Johnson | Kalamazoo, MI

Scott Kangas | Mattawan, MI

Carolyn Kolassa | Battle Creek, MI

Raquel Matos Ogando | Santo Domingo Oeste, DR

Jake McCubbin | Niles, MI

Leah Merriam | Highland, MI

Nick Millen | Plymouth, MI

Maria Moss | Plymouth, MI

Natali Cristina Sambo Cedeno | Kalamazoo, MI

Tabitha Newberry | South Haven, MI

Ashley Plambeck | Saginaw, MI

Emily Sakorafos | Sterling Heights, MI

Alayna Sarver | West Bloomfield, MI

Ethan Schwach | Cadillac, MI

Katy Shotwell | Battle Creek, MI

Makayla Socall | Lowell, MI

Sage Suits | Grand Haven, MI

Wren Underhill | Ottawa, IL

Noah Walters | Appleton, WI

Emma Yohn | Elkhart, IN



Juniors Elisha Ewing, Sheila Gubachy, Mira Marino, Katy Zaborowski



Freshmen Toby Archer, Nick Millen, Katy Shotwell, Marty Barker, J.T. Hilton at the PTF Reception

2022-2023 WMU Senior Engineering Design Projects

COMPARISON OF OPTIONS FOR THE REPAIR OR REPLACEMENT OF A CALENDAR STACK

By: Kourtney Keranen, Isabel Lopez, Liam Powell, Olivia Price & Zhenqiang Zhuo

Sponsors: Paul DeHaan, B.S.'88, New-Indy Containerboard & Chandler Thomas, New-Indy Containerboard

Faculty Advisor: James Springstead, Ph.D.

Hydraulic pressing, also known as calendaring, improves the uniformity, thickness, and smoothness across a sheet of paper. An economic analysis was performed to determine the best option between adding a new calender stack, rebuilding a legacy calender stack, or continuing to operate without one. The overall safety and environmental constraints of implementing a new calender stack were also taken into consideration. Calendered paper improves runnability at converting facilities which reduces customer dissatisfaction and revenue lost to quality claims. This analysis can be used to provide guidance on the implementation of a calender stack.

AIR PRE-HEAT SYSTEM OPTIMIZATION FOR FLASH DRYERS

By: Harold Liz Liriano, Sophia Marie Louden, Tyler Logan Matta, Valeri Pamela Perez Sanchez & Steven Jose Santos Cruz

Sponsors: Donald L. Larson, Primient, Drake Schafer, Primient & Emily Struble, Primient

Faculty Advisor: James Springstead, Ph.D.

A corn processing facility faced high energy costs due to natural gas use in its flash dryers. A heat recovery system was implemented with two heat exchangers to transfer heat from a hot waste stream to a glycol loop, to preheat the air entering the dryers. Optimal flow rates of glycol were determined, and pump capacity evaluated to maximize heat recovery. The result was a reduction in energy costs, with an estimated payback and internal rate of return calculated for the modifications. This demonstrated how proper heat recovery systems can reduce energy consumption and costs in industrial processes.

PRECIPITATED CALCIUM CARBONATE—LOW COST MEANS TO INCREASE SOLIDS

By: Christopher Bradshaw, Rowan Edmonds, Ethan Klaiss & Tyler Thompson

Sponsors: Leslie McLain, Imerys, Perry Veal, Imerys

Faculty Advisor: James Springstead, Ph.D.

Precipitated calcium carbonate (PCC) is manufactured at low solids and is usually delivered via pipeline to the customer. However, in some cases, PCC is sold off site within a short geographic distance. Higher solids are desirable in order to increase inventory/ ton of slurry and avoid excess freight costs incurred by shipping excess water in the product. The PCC at the target plant is produced at 20% solids, and this project explored various options to increase the solids up to 30% prior to shipment via slurry truck. This project also investigated the re-suspension behavior of PCC at higher solids.

APPLICATION OF NEW COATING TO REPLACE POLY LINER

By: Hannah Kalleward, Lindsey Lovato, Isabelle Ownby, Andrew Siegfried & Sheridan Wood

Sponsors: John Brown, StenCo LLC & Jim Fogg, Solenis LLC

Faculty Advisor: James Springstead, Ph.D.

Current liner produced by a mill is sent to Canada for a barrier coating, which is then sent back to multiple facilities in the U.S. This process has high shipping costs as well as sustainability issues with the coating. This project explores a new coating that is more environmentally friendly and can be applied to the board in the mill. This new barrier coating was investigated, and the economics of these systems were looked at and evaluated for profitability. Applications outside of the facility will also be considered.

API DRYING AND PACKAGING TECHNOLOGY UPGRADES

By: Saleh Altissan, Clarissa Gonzalez Chacin, Nicholas Marentette, Jennifer Parker & Destiny Washington

Sponsors: Zachary Marentette, B.S.'19, Pfizer, Nicholas Muller, M.S.'17, Pfizer, Carl Stachew, Pfizer & Zachary Wolf, B.S.'15, Pfizer

Faculty Advisor: James Springstead, Ph.D.

Certain classes of APIs require higher levels of containment during handling. This project explored upgrades and new technology to improve currently used systems. The upgrades will include containment during drying and packaging while maintaining required ergonomic, industrial health, and GMP requirements. Design of this system and a full economic analysis will be performed for these upgrades.

AUTOMATING ACTIVE CLAY TESTING OF GREEN SANDS FOR USE IN FOUNDRIES

By: Ethan Church, David Hanson, Weston Judd, Max Vreman & Rachel Zawerucha

Faculty Advisor: James Springstead, Ph.D. & Sam Ramrattan, Ph.D.

Active clay measurement is critical for the proper operation of green sand molds; the traditional methylene blue titration method for measuring clay content is slow and prone to operator error. An automated device was designed to improve the measurement of active clay in green sands using UV-Vis spectroscopy and reduce human involvement. This device accurately provides a quantitative active clay measurement that foundry operators can use for process control and optimization. The production, costs, and benefits of this new device are analyzed and compared to the traditional active clay method.

BIO-MASS TO BIO-OIL REACTOR SYSTEM COMPARISON

By: Ashlin Arnett, Nicholas Hayes, Tyler Hong, Ethan Ray & Angel Torres

Faculty Advisor: Abdus Salam, Ph.D.

Biomass is produced in multiple industries and can be converted to a usable fuel substitute for petroleum. A proposed alternative process to conventional pyrolysis, operating with companion coal gasification, offers several potential advantages that may allow for a simpler design of the biomass pyrolysis reactor and potentially significant savings in terms of total energy costs. Several methods of analyzing the pros and cons of these two methods were used, including a cash flow table, process flow diagram, and economic indicator values. This can allow for a greater use of bio-oil to offset the increasing demand for damaging oil harvesting practices.

GENERATION OF ELECTRICITY FOR A PAPER PLANT

By: Tobi Oluwaseyi Da-Silva, Paola Diaz Fernandez, Joshua Wetzel & Jeff Woodin

Faculty advisor: Said AbuBakr, Ph.D.

The 50 MW generation of electricity was assessed for a paper plant. The facility purchased electricity from a local nuclear plant at a cost of \$0.165/kW, but that plant was closing. A power plant was designed within specifications and constraints, to generate its own electricity by a natural gas method and investigated the feasibility of renewable energy. The basic Rankine cycle for the plant was outlined and modified by adding a heat recovery system and a gas turbine; creating the cogeneration cycle. Wind, solar, and nuclear energy sources were also investigated for feasibility, the benefit of self-sufficiency, and cost savings.

MASS-PRODUCTION OF AN INFLUENZA MRNA VACCINE

By: Zaid Ahmed, Heather Gipe, Hunter Shulfer & E Hern Tan

Faculty advisor: James Springstead, Ph.D.

Recently, mRNA vaccines have been produced to fight the COVID pandemic. Historically, influenza vaccine has been produced with the use of cells, but mRNA vaccines offer promise, potentially lowering cost of production without the use of cells and increasing efficacy. In this project new technical information on effectiveness of a potential influenza vaccine will be implemented in the design of a plant to produce an influenza vaccine. The internal rate of return, payback period, and other key economic indicators will be determined at different price points for the sale of this future vaccine.

PRODUCTION OF GEL-CAPSULE PHARMACEUTICALS

By: Madeline Baldovino, Christopher Hranchook, Alexis Lynn Kaczanowski, Daniel Kent & Nathan Kitler

Faculty advisors: Mert Atilhan, Ph.D. & James Springstead, Ph.D.

Insoluble active pharmaceutical ingredients (API) without solubilization in an effective drug delivery system. For safe and effective drug delivery, this vehicle must be a biocompatible compound that allows for effective transport in the body. Deep eutectic solvents (DES) have been identified as a potential drug delivery system for APIs as they are nontoxic and have the potential to increase bioavailability and efficacy. DES were incorporated into gel capsule design to increase solubility of hydrophobic drugs. A plant was designed for the production of gel capsules with DES-solubilized API a full economic analysis was performed to determine the required sale price to reach key economic benchmarks.

REMOVAL OF PFAS CONTAMINANTS FROM WATER BY SOLVENT & FILTRATION TECHNIQUES

By: Aleya Brandon, Anamim Horokoski, Abigail Maletta, Jordan Puah & Zahi Sanchez Genao

Faculty advisors: Mert Atilhan, Ph.D. & James Springstead, Ph.D.

Water contamination is an increasing global issue, particularly in the Midwest region of the United States. Per- and polyfluoroalkyl (PFAS) compounds are among the many worrisome contaminants. In this project, various solvents and filtration processes were used to extract PFAS from water. The extraction efficiencies of solvents for PFAS were confirmed using high-performance liquid chromatography and mass spectroscopy. After confirming extraction efficiency, a treatment procedure was designed for integration into an existing wastewater plant. The designed process provides an option for PFAS removal while evaluating both solvent recovery and repurpose of extracted compounds. A full economic analysis was performed to determine the cost of PFAS removal using this designed system.

NANOTUBE-REINFORCED CELLULOSE COMPUTER SIMULATIONS

By: Noor Abdulmuhsin A Alfaraj, Diego Andres Garcia, Joshua T VanSlambrouck & Australia Weatherall

Faculty Advisor: Dewei Qi, Ph.D.

Recycling paper over time degrades its mechanical strength, shortening its potential uses. Integrating nanotube-reinforced cellulose can overcome the challenges presented as nanotubes possess a high amount of mechanical strength. Computer simulations using Visual Molecular Dynamics showed in theory that inserting nanotubes in the chemical structure of cellulose improved the strength of recycled paper. Modifying cellulose led to outstanding results, thereby it can lead the industry to replace the current methods of reinforcing paper which is made with chemicals. The shift to nanotube-reinforced cellulose as a method to increment recycled paper mechanical strength improved the quality of the paper. A process was designed to produce nanotube-reinforced cellulose and the required sale price to reach required IRR.

EFFECT OF VARIOUS BINDERS ON SI-ANODE PERFORMANCE & FEASIBILITY OF BATTERY PRODUCTION PLANT

By: Sarah Beasley, Joel Carpenter, Grace Harter, Jacob Henrikson & Derek Ronayne

Faculty Advisor: Qingliu Wu, Ph.D.

With the promise of high capacity, silicon-based materials are the most promising candidates for anodes in next-generation lithium-ion batteries (LIBs). However, the wide adoption of Si-based anodes to electrical vehicle batteries is greatly limited due to the fast capacity decay and the undermined electrode structure during the lithiation and delithiation process. Therefore, development of silicon-based anodes with a robust structure for high-performance LIBs are being studied. Particularly, various binders will be used in the silicon-based anodes, and the dependence of electrode property and battery performance on the binders will be investigated. In addition, the impact of binders on the cost of Si-based anodes will also be studied. Finally, a full economic analysis was performed to determine required price points for the production of these batteries.

Publications

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Paper Technology Foundation, Inc.

Financial Statements
for the Year Ended June 30, 2023



WESTERN MICHIGAN UNIVERSITY

Paper Technology
Foundation

November 2023

Dear Donors, Alumni, and Industry Friends:

The enclosed June 30, 2023 financial statements of Paper Technology Foundation, Inc. have not been audited. As a component unit of Western Michigan University, Paper Technology Foundation, Inc. financial information is discretely presented as part of Western Michigan University's reporting entity. Western Michigan University's audited financial statements are available at

https://wmich.edu/sites/default/files/attachments/u2594/2023/wmu_finreport_2023.pdf

Page four (4) of the referenced report identifies the Paper Technology Foundation as one of three component units discretely presented entities that are part of the University's reporting entity. Page twenty (20) of the referenced report presents the Paper Technology Foundation's financial statements which are prepared in accordance with generally accepted accounting principles as prescribed by the Financial Accounting Standards Board (FASB).

Sincerely,

Brian Pahl '80
Managing Director
Paper Technology Foundation
Western Michigan University
brian.pahl@wmich.edu



Discretely Presented Component Units – Balance Sheet and Statement of Activities and Changes in Net Assets

Balance Sheet	Western Michigan University Foundation		Paper Technology Foundation, Inc.		Western Michigan University Homer Stryker M.D. School of Medicine	
	June 30		June 30		June 30	
	2023	2022	2023	2022	2023	2022
	2023	2022	2023	2022	2023	2022
Assets						
Cash and short-term investments	\$ 24,571,255	\$ 32,314,914	\$ 250,398	\$ 266,795	\$ 22,344,850	\$ 15,732,004
Investments	621,610,136	540,996,680	5,463,147	5,094,527	24,337,285	21,939,897
Pledges receivable - Net	380,300,620	429,273,023	44,791	116,146	3,147,500	3,225,000
Cash surrender value of life insurance policies	1,036,341	1,028,464	-	-	-	-
Other receivables	-	-	-	-	7,140,008	5,024,621
Other assets	-	-	-	-	2,349,997	1,767,881
Right-of-use lease assets	-	-	-	-	7,185,206	-
Land, land contracts, and other property	1,500,000	1,190,000	-	-	91,846,056	93,747,333
Interest in net assets of WMU Foundation	-	-	-	-	286,016,834	279,222,174
Total assets	<u>\$ 1,029,018,352</u>	<u>\$ 1,004,803,081</u>	<u>\$ 5,758,336</u>	<u>\$ 5,477,468</u>	<u>\$ 444,367,736</u>	<u>\$ 420,658,910</u>
Liabilities						
Accounts payable	\$ -	\$ 7,045	\$ 4,658	\$ 4,658	\$ 2,120,535	\$ 1,648,386
Accrued payroll, withholdings, and other	-	-	-	-	19,115,078	12,349,382
Deferred compensation	-	-	-	-	13,823,302	11,513,540
Other long-term obligations	-	-	-	-	62,575,594	57,760,000
Total liabilities	-	7,045	4,658	4,658	97,634,509	83,271,308
Net Assets						
Without donor restrictions	303,347,213	298,166,683	639,460	596,640	29,659,087	26,452,804
With donor restrictions	725,671,139	706,629,353	5,114,218	4,876,170	317,074,140	310,934,798
Total net assets	<u>1,029,018,352</u>	<u>1,004,796,036</u>	<u>5,753,678</u>	<u>5,472,810</u>	<u>346,733,227</u>	<u>337,387,602</u>
Total liabilities and net assets	<u>\$ 1,029,018,352</u>	<u>\$ 1,004,803,081</u>	<u>\$ 5,758,336</u>	<u>\$ 5,477,468</u>	<u>\$ 444,367,736</u>	<u>\$ 420,658,910</u>

Statement of Activities and Changes in Net Assets

	Year Ended June 30		Year Ended June 30		Year Ended June 30	
	2023	2022	2023	2022	2023	2022
	2023	2022	2023	2022	2023	2022
Revenue Gains, Losses, and Other Support						
Gifts, contributions, and other	\$ 29,245,549	\$ 33,084,685	\$ 659,875	\$ 415,382	\$ 26,319,658	\$ 31,277,021
Investment income	11,911,862	11,244,463	82,406	92,598	-	-
Contracted services and support	-	-	-	-	51,061,631	49,399,887
Patient service revenue	-	-	-	-	10,309,714	11,163,480
Governmental grants and contracts	-	-	-	-	31,129,337	23,274,661
Other income	60,949	85,924	18	5,674	-	-
Net (loss) gain from security and other investment transactions	25,792,539	(39,948,280)	263,137	(299,700)	7,348,154	(4,718,419)
Transfers from related parties	17,682,276	17,579,065	270,597	114,809	-	-
Total revenue gains, losses, and other support	84,693,175	22,045,857	1,276,033	328,763	126,168,494	110,396,630
Expenditures and Distributions						
Program services	3,655,100	2,639,593	174,315	73,884	103,359,518	93,809,959
Management and general	2,657,167	1,380,229	95,658	94,066	13,463,351	12,682,807
Fundraising	3,540,370	2,649,076	141,887	105,791	-	-
Total expenditures	9,852,637	6,668,898	411,860	273,741	116,822,869	106,492,766
Distributions to related parties	50,618,222	42,848,889	583,305	1,705,059	-	-
Total expenditures and distributions	60,470,859	49,517,787	995,165	1,978,800	116,822,869	106,492,766

Appendix A

Individual and Lifetime Members

Any individual or alumni who contributes \$1,000 or more. These individuals have voting rights at the Annual Meeting.

Individual Members

Mrs. Mary Bales | Traverse City, MI
Mr. John Bergin | Wisconsin Rapids, WI
Mr. Eric Bock | Grand Haven, MI
Mrs. Carol Borich | Highland, MI
Dr. Timothy Estes and Dr. Valerie Estes | Greenville, SC
Mr. Alexander Fleck and Ms. Rielle Walker | Kalamazoo, MI
Mr. Timothy Hagenbuch | Troy, OH
Mr. Chuck Klass, II | Madeira Beach, FL
Mr. Geoffrey Mallett | Kalamazoo, MI
Mr. Robert Mellema | Hickory Corners, MI
Mr. Steven Myers | Appleton, WI
Mr. Brian Risinger | Kewaunee, WI
Mr. Brian Pahl | Winona Lake, IN
Mr. Troy Taormina | Macon, GA
Mr. Mark Zempel | Acworth, GA

Lifetime Members

Jeffrey G. Atkinson, Holland, MI
John T. Bales, Traverse City, MI
Robert M. Beam, Kalamazoo, MI
John F. Bergin, Wisconsin Rapids, MI
John T. Bernhard, Kalamazoo, MI
John A. Ferguson, Pentwater, MI
John M. Fisher, Kalamazoo, MI
Patrick Gibney, Hilton Head Island, SC
Richard R. Hartman, Fort Worth, TX
Gerald A. Hale, Summit, NJ
Paul T. Hoelderle, Charlevoix, MI
Raymond L. Janes, Gainesville, FL
Gordon H. Kettering, Hilton Head, SC
Charles P. Klass II, Madeira Beach, FL
Peter C. Longjohn, Fort Meyers, FL
Gerard M. Marshall, Chesterfield, MO
Stanley L. Oakleaf, Plainwell, MI
Alice King Parker, Lewes, DE
William P. Peters, Twin Lakes, WI
Lowell P. Rinker, Kalamazoo, MI
William A. Siekman, Appleton, WI
C. Wesley Smith, Foley, AL
Frank A. Somers, Kalamazoo, MI
James S. Stolley, Erie, PA
Leonard J. Timmer, Climax, MI
Denise Trainer, Portage, MI
William H. Trice, Savannah, GA
Richard N. VanBuren, Macon, GA
A. Richard Wagner, Chillicothe, OH
Charles R. Young, Dublin, OH

Appendix B

Foundation Fellow Award Recipients

1983 Richard B. Valley Gordon H. Kettering W. Chester Fitch Raymond L. Janes	1989 Keith D. Manion	2005 Thomas Joyce Margaret Joyce
1984 Robert E. Boughner John T. Bernhard	1990 Donna A. Fitch Carl F. Shuster	2013 Jennifer Johnson
1985 William V. Cross Robert B. Wetnight	1991 Raja Aravamathan Barbara A. Vilenski	2017 Peter Parker
1986 James B. Matthews David K. Peterson	1992 Arvon D. Byle	2019 Greg Wedel
1987 Robert M. Beam James E. Kline	1993 Ellsworth Shriver	2020 Patti Van Walbeck
1988 Richard W. Flores William J. Fondow	1994 Jack S. McCoy Andrew LaPekas	2021 Mike Farrell
	1995 Ruth H. Peterson	2022 Kara Morin
	2002 Charles P. Klass II	2022 Dr. Kecheng Li
		2023 Jan Van Der Kley

Honor Award Recipients

1970 Olin W. Callighan, William A. Kirkpatrick, Dwight L. Stocker, Bert H. Cooper, Alfred H. Nadelman, James A. Wise	1985 John E. Maryanski, William P. Peters
1971 Maxwell D. Bardeen, Frederick B. Curtenius, George E. Kohrman, Paul W. Bartholomew, Rudolf Germanson, Albert Sherwood, Robert D. Caine	1986 Homer Bogart, Everett Potts
1972 Arne Anderson, David B. Gearhart, Gerald Osborn, James A. Foxgrover, James W. Miller	1987 William A. Long
1973 Carlton H. Cameron, Gerald A. Hale, Richard N. VanBuren, Kenneth A. Craig, William A. Siekman, Robert B. Wetnight	1988 William Weidenfeller
1974 B. W. Recknagel, Martin F. Schnauffer	1989 Frank A. Somers, Robert A. Welborn
1975 Phil Budd, Stephen I. Kukolich, Robert Rohwer	1990 Richard R. Teugh, Louis K. Wilhelm
1976 Edward M. Root	1991 Gary L. Butryn, Richard N. Furer, Stanley L. Oakleaf
1977 Raymond L. Janes, A. T. Luey, James S. Stolley	1992 John T. Bales, Barbara S. Cichon, James C. Farrand
1978 William V. Cross, John M. Fisher, Robert F. Longbine	1993 Daniel E. Bergsma, James A. Lewis, A. Richard Wagner
1979 Robert Barron, John T. Bernhard, James Wallach	1994 William Foster, Paul T. Hoelderle, C. Wesley Smith
1980 James E. Kline	1995 Thomas F. Sullivan
1981 W. C. Fitch, Ele Simpson, William H. Trice	1999 Emmett F. Finley, Charles W. Rowland
1982 Kathy A. Goyer, Hugh E. Warren	2002 F. Claus Globig
1983 Kenneth A. Johnson, Richard L. Post, Robert G. Rubom	2005 John F. Bergin
	2007 Robert M. Beam
	2014 Richard R. Hartman
	2015 Dr. Margaret K. Joyce
	2021 Dr. Tony Lyons
	2022 Rob Hansen

Hall of Fame Award Recipients

1973 | George E. Kohrman | WMU Dean Emeritus

James W. Miller | WMU President Emeritus

1974 | Robert D. Caine | WMU Trustee Emeritus

Bert H. Cooper | First Foundation President

1975 | James A. Foxgrover | Perkins-Goodwin Company

John R. Fanselow | Past Acting Department Chair

1976 | E.E. Ludwig | Past Foundation Executive Secretary

1977 | Dwight L. Stocker | Michigan Paper Company

1978 | Carlton H. Cameron | Past Foundation President

1979 | Stephen I. Kukulich | Past Associate Professor

1980 | Maxwell Bardeen | Lee Paper Company

William Kirkpatrick | Allied Paper Mills

1981 | Paul W. Bartholomew | Past Foundation Executive Secretary

A.T. Luey | B.R.D.A.

1982 | Martin F. Schnauffer | Past Foundation President

1983 | Alfred H. Nadelman | Past Foundation Executive Secretary

1984 | William A. Siekman | Appleton Papers Inc.

1985 | James S. Stolley | Past Foundation President

1986 | John M. Fisher | Associate Professor Emeritus

1987 | Richard N. VanBuren | Past Foundation President

1989 | Raymond L. Janes | Past Department Chair

William H. Trice | Past Foundation President

1990 | John T. Bernhard | WMU President Emeritus

Gerald A. Hale | Past Foundation Secretary and Trustee

1991 | Gordon H. Kettering | Past Foundation President

William P. Peters | Past Foundation President

1992 | William A. Long | Past Foundation President

1993 | Frank A. Somers | Past Foundation President

1994 | Robert M. Beam | Foundation Treasurer

1995 | John T. Bales | Past Foundation President

1999 | C. Wesley Smith | Chairman, Captial Campaign

A. Richard Wagner | Past Foundation President

2005 | John Ferguson | Past Executive Director

2006 | John F. Bergin | Past Foundation President

2007 | Charles P. Klass | Past Chair, Education and Research Committee

2009 | Stanley L. Oakleaf | Past Chair, Recruitment and Scholarship Committee

2011 | Lowell P. Rinker | Foundation Treasurer

2012 | Charles R. Young | Past Foundation President

2013 | Dr. Denise Trainer | Past Chair, Education and Research Committee

2016 | Gerard M. Marshall | Past Chair, Recruitment and Scholarship Committee

2017 | Mr. Patrick Gibney | Past Foundation President

2019 | Dr. Richard Hartman | Past Foundation President

Appendix C

2022–23 Scholarship Distribution

Last Name	First Name	Fall '22 Award	Spring '23 Award	Scholarship
Allison	Mitch	1000	1400	General Scholarship Endowment
Areaux	Samantha	1500	1500	Hartman, Richard and Marilyn, Family Endowment, WestRock Foundation Endowment
Ball	Ryan	2000	4000	General Scholarship Endowment
Barima	Kofi	1000	3000	General Scholarship Endowment
Bartsch	Abigail	2500	3500	Harman, Albert S. Scholarship, Consolidated Papers Foundation, Inc. Scholarship
Bet	Sam	1000	0	General Scholarship Endowment
Bishop	Joanna	4500	4500	International Paper Company Endowment
Block	Ally	3500	4545	Recknagel Scholarship, Carlton H. Cameron Scholarship
Bowie	Aidan	1500	2500	Anonymous Alumnus and Close Friend Paper, Olin W. Callighan Endowment
Boyd	Alex	4500	4500	International Paper Company Endowment, WestRock Foundation Endowment
Breining	Caleb	1000	3000	General Scholarship Endowment
Coyne	Tyler	0	3500	Ray L. Janes/Beloit Corp
Craun	Quade	3500	4545	Burgess Cellulose Foundation Scholarship, Carlton H. Cameron Scholarship
Crowe	Allen	1000	3000	General Scholarship Endowment
Edmonds	Rowan	4500	4500	International Paper Company Endowment
Ewing	Elisha	3500	4500	Georgia-Pacific Endowed Scholarship, WestRock Foundation Endowment
Force	Calvin	1000	0	General Scholarship Endowment
Fredenburg	Kylie	1000	3000	General Scholarship Endowment
Gleaton	Nick	1500	3000	General Scholarship Endowment
Gubachy	Sheila	0	3500	William & martha Siekman Scholarship
Gyurich	Katelyn	1500	3000	General Scholarship Endowment
Hamann	Alexander	3500	4500	Bergin, John F., Family Endowment, Ellsworth H. Shriver Memorial Endowed Scholarship
Heerlyn	Meegan	3500	3500	Lerner, Texo-Louis Scholarship, WestRock Foundation Endowment
Higgins	Addison	1000	3000	General Scholarship Endowment
Hoard	Carter	0	2500	Gerald A. Hale Scholarship
Hofmeister	Paige	1000	3000	General Scholarship Endowment
Jackson	Olivia	1000	1400	General Scholarship Endowment
Kalleward	Hannah	4500	4500	International Paper Company Endowment, Ellsworth H. Shriver Memorial Endowed Scholarship
Karam	Rachel	1000	1800	General Scholarship Endowment

Kent	Daniel	4500	4500	International Paper Company Endowment, WestRock Foundation Endowment
Keranen	Kourtney	4500	4500	International Paper Company Endowment
Kinney	Jackson	1000	1800	General Scholarship Endowment
Klaiss	Ethan	4500	4500	Omnova Solutions Foundation Inc. Endowed, John F King Family Scholarship
Lambert	Aimee	1500	0	General Scholarship Endowment
Langellier	Parker	3500	3500	TAPPI/Paper Chase Scholarship, International Paper Company Endowment
Lauraine	Colin	1000	3000	General Scholarship Endowment
Lawson	Noah	1000	0	General Scholarship Endowment
Lopez	Isabel	3500	3500	Albany International Corporation, Roger C. Peterson Memorial/Betz PaperChem Inc.
Louden	Sophia	4500	4500	International Paper Company Endowment
Lovato	Lindsey	3500	3500	Koplik Perry H. Scholarship Fund, E.D. Marvin/Orr Felt Scholarship
Marino	Mira	2500	0	Harman, Albert S. Scholarship
McElroy	Megan	1000	0	General Scholarship Endowment
Moranko	Sydney	2500	2500	Harman, Albert S. Scholarship, Consolidated Papers Foundation, Inc. Scholarship
Musser	Rachel	1000	3000	General Scholarship Endowment
Nason	Brady	2500	2500	Harman, Albert S. Scholarship, Theodore W. & George C. Dunn Memorial Scholarship
Nickless	Cole	2500	2500	Harman, Albert S. Scholarship, Cargill Inc. Scholarship
Nixon	Taylor	1000	3000	General Scholarship Endowment
Norwood	Emma	3500	4515	Kaiser, Danny K. Endowed Scholarship, Paper Technology Alumni Endowed Scholarship
Ownby	Isabelle	4500	0	International Paper Company Endowment
Perrin	Emma	3500	4500	Maryanski, John and Diane Scholarship, Paper Technology Alumni Endowed Scholarship
Pominville	Scott	1000	0	General Scholarship Endowment
Powell	Liam	3500	0	Eddy, E. B., Paper Inc. - A. Richard Wagner
Price	Olivia	4500	4500	International Paper Company Endowment, Ellsworth H. Shriver Memorial Endowed Scholarship
Quigley	Micah	1000	2600	General Scholarship Endowment
Randall	Ashley	2500	0	Corn Products Endowed Scholarship
Reifert	Noah	1000	1800	General Scholarship Endowment
Ridley	Jenna	1000	3000	General Scholarship Endowment
Roach	Keaton	0	3500	Theodore W. & George C. Dunn Memorial Scholarship
Schulz	Reed	1000	2600	General Scholarship Endowment
Secord	Gabe	0	4500	International Paper Company Endowment
Shulfer	Hunter	3500	0	Bossen, David and Doris Scholarship
Siegfried	Andrew	4500	4500	International Paper Company Endowment, Paper Technology Alumni Endowed Scholarship
Slaght	Nicholas	2500	0	Rohmnova Endowed Scholarship

Smith	Matthew	1000	0	General Scholarship Endowment
Sparks	Benjamin	2000	0	General Scholarship Endowment
Stainforth	Baylee	1000	2600	General Scholarship Endowment
Stephayn	Evan	1000	3000	General Scholarship Endowment
Sturcz	Logan	4500	4500	International Paper Company Endowment, David K. Peterson Family Environmental Endowed
Tellez	Andrew	3500	3500	Maryanski, John and Diane Scholarship, Ray L. Janes/Beloit Corp
Thibault	Lucas	1500	3000	General Scholarship Endowment
Turmo	Andrew	1000	2600	General Scholarship Endowment
Walker	Tre	1000	2600	General Scholarship Endowment
Weatherall	Australia	1000	0	PTF Silent Partner
Weller	Breton	3500	4500	Fisher, John M./Ts'ai Lun Scholarship, Packaging Corporation of America Scholarship
Wood	Brandon	3000	4500	Callighan, Mae Munter Endowment, Packaging Corporation of America Scholarship
Wood	Sheri	4500	0	Grain Processing Corporation Scholarship
Zaborowski	Katy	0	1500	WestRock Foundation Endowment
Sub-Total		\$169,000	\$204,305	
Grand Total		\$373,305		

Thank you to our PTF Corporate Members





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