

Spring 2021 Newsletter

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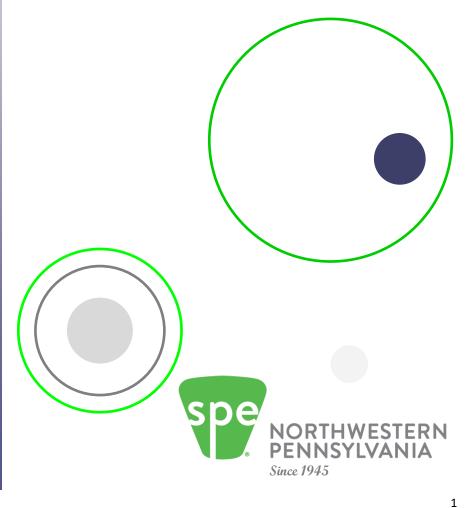
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PRESIDENT'S MESSAGE





Welcome to the 'retro' version of the NWPA SPE newsletter. Some of us more *mature* members of the section can recognize the cover page logo as the enduring icon that graced the front of our newsletter for many decades. What can I say—it's been a slow news week and I like retro.

NWPA SPE has been busy with our regular business. We had several students apply for the Student Section scholarships and we awarded four. These were smaller scholarships than we normally would give,

but we are glad to be offering something still.

Since we can't meet in person we are having a joint on-line recycling Webinar with the SPE sections in Akron, Cleveland and Pittsburgh. Cleveland SPE President Susan Montgomery tells me they are also looking forward to non-webinar, non-zoom meetings one day soon.

Read ahead in the newsletter and you will find free, funded research opportunities for three lucky section members. If you have ever had a project you never got around to, now just might be your time.

Congratulations to Joe Prischak who was recently inducted into the Plastics Hall of Fame! He joins nine others in the 2021 class of famers. The induction dinner ceremony, normally held at NPE, will not happen since that was canceled. But I do think this is well deserved—congrats. Save the Date for the NWPA SPE 2021 Golf Outing. This time we mean it! Covid has knocked

us all down and now that it looks like a recovery is coming we are moving ahead with the plans. Registration will open in mid June and I hope to see you there.

Lucy Lenhardt NWPA SPE President 20-21



"It's not whether you get knocked down, it's whether you get up." - Vince Lombardi

\$CHOLARSHIP\$





Member Scholarship

The Northwestern Pennsylvania Section of SPE is pleased to offer the 2021 NWPA SPE **MEMBER** SCHOLARSHIP. This scholarship is intended to reward outstanding students with a one-time monetary donation up to \$1000 to be used to further their education. This Award is available <u>only to NWPA SPE members with children or grandchildren.</u> If you, or a local SPE member you know, has a student in or planning to attend college, technical school or a trade school we encourage you to apply. The student may be *planning to study in any field, plastics or otherwise*, and the funds will be sent to the school of choice. NWPA SPE member benefits are many and varied, so we are glad to offer this opportunity to our members. One Member scholarship will be awarded for 2021-22 and E-membership is not valid for this award. Application deadline is June 1, 2021. Applications are available on-line at www.nwpa.4spe.org.

Section Scholarship

NWPA SPE is pleased to announce the NWPA SPE **SECTION** SCHOLARSHIP. We started offering this scholarship as a way to recognize high school students from our three county service areas who plan to attend college. This scholarship is intended *for current high school seniors planning to study plastics* or polymers at any accredited 4-year college. Any high school, charter school or home school senior *from our region of Erie, Crawford and Warren Counties* entering any plastics related field of study at an accredited 4-year school is eligible. This scholarship is \$500 and we plan to award one in each of our three county service areas of Erie, Crawford and Warren County, PA.

We all know that plastics are ubiquitous and there are many fields of study related to plastics. If your senior plans to attend college and can explain how they are planning for a career in plastics then they should apply for this scholarship. They do not need to be an SPE member, just plan for a career in plastics. Students may apply for both scholarships, but may only receive one.

Application deadline is June 1, 2021. Applications are available on-line at www.nwpa.4spe.org.

SPE = RESEARCH



RESEARCH FUNDING OPPORTUNITY FOR NWPA MEMBERS

NWPA SPE is offering our membership the opportunity to access student research at no cost. Behrend Senior Research Projects are designed to give upper-class students 12-18 months to research a topic of interest to your company. The timeline typically includes a 3-semester progression where students will perform a literature review relevant to their project topic, perform design and testing, and compile a final report. The students interface with project sponsors at whatever level is required, generally via regular meetings. Sponsoring a senior design project is a low-cost and low risk way to investigate those backburner projects you never seem to have the time or resources to get done.

NWPA SPE will fund up to three research projects for our members to work with Plastics Engineering Technology students at Penn State Behrend. Projects can be in any plastics related area such as materials, processing, design, compounding, product development and more.

All submissions must be submitted by a member of the NWPA Section of SPE who is going to act as the primary contact. Project Sponsors are responsible for providing detailed instruction on expectations and deliverables and provide regular feedback and guidance to their student group. Senior project applications normally have a fee assessed with them. However, for the three winning SPE member projects , NWPA SPE will pay the application fee. NWPA SPE will not cover the NDA fee for sponsored projects.

To apply, submit a brief outline/proposal of your project idea to nwpa.spe@gmail.com, along with your contact information. You may be contacted to discuss the merits of your project idea. Project submissions

are taken on a rolling cycle, so they will be reviewed as soon as they are submitted, and will no longer be accepted after August 20, 2021 or once three have been accepted and approved by the school faculty.

If your project is accepted, you will be notified and responsible for completing a formal application through the school website. Projects can expect to start in September 2021 with completion in May 2022.



Student Chapter SPE NWPA SPE
Connect your research ideas now!
Email nwpa.spe@gmail.org













Flash Social

BOARD OF DIRECTORS

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Member	Jeremy Weigand	Moxietec	Jweigand@moxietec.com
Member	Jon Meckley	Penn State Erie	jam135@psu.edu

The Shell Oil Company's ethylene cracker plant is located on the shore of the Ohio River in Monaca, PA. Preparation of the site started in 2015 and it has been under construction ever since. Info @ Shell.us

Fun facts—they found an old cemetery on the site, they relocated PA Route 18 and they utilized two of the largest cranes in the world.

In the Plastics Circular Economy plastics continually flow around a loop of manufacture—use—remanufacture reuse. This closed loop system will not happen over night, but happen it will. This requires the involvement of everyone from the resin creators to the product manufacturers to the users of the end products.

Map: google.com





With a great bi

Recycling Fo

Recycling plans of t Thursday March 11



The chemicals bus emphasis on carbo many beneficial ne one million metric chemical facilities

Speaker: Helmut Brenner

Helmut Brenner is the Americas Sustainability Manage States. In addition to his current role in sustainability, Economy Team with the mission to help steer a course

Helmut's background includes over 25 years in the interest of ities in Asia, Europe and North America. Previously, He Project where his team delivered three world scale Po

Helmut is a Professional Engineer licensed in Texas, er

Register here: Re



Spring 2021

g production plant comes great big responsibility...

March 11

r The Circular Economy

he future that we can implement today
, 2021 @ 5:00pm EST (on-line webinar)

iness is one of Shell's key growth priorities with a strategic on reduction and plastic circularity. This focus will result in ew programs including a plan that by 2025, will process tonnes of post-use plastic per year across Shell's global located in the US, Asia and Europe.

The majority of plastics used are never recovered. About **90% go to landfill** in the US and Canada. Recycling infrastructure and end markets are constrained by an outdated downgrading model. This presentation will show how advance recycling combined with the mass balance approach solves both of these issues.

er for Shell Chemicals where he leads the Shell Plastic Circular Economy Project in the United Helmut also serves on the ACC Plastics Recovery and Recycling Team and ACC Circular for significantly increased recycling and sustainable chemical production in the US.

ernational oil, gas and chemicals business designing, building and operating world class facilelmut was the Polyethylene Project Manager for the Shell Polymers Pennsylvania Chemicals lyethylene Units.

joys traveling, cooking and restoring vintage American muscle cars.

cycling For The Circular Economy Webinar

NWPA SPE Sponsorship

"Thank You!" to our Gold Sponsor











Plastics Training Academy

Newsletter and Website Advertising Information

BRONZE SPONSOR

Newsletter:

1/4 Page Color Ad 3-7/8" x 4-3/4"

Webpage:

Logo on Sponsor Page

Rotating Ad

\$250

SILVER SPONSOR

Newsletter:

1/2 Page Color Ad

7-3/4 x 4-3/4"

Webpage:

Logo on Sponsor Page

Rotating Ad

\$500

GOLD SPONSOR

Newsletter:

Full Page Color Ad

7-3/4" x 10-1/4"

Webpage:

Logo on Home Page

Full Banner Ad

\$1,000

Advertising Guidelines

- Advertising pricing includes promotions for 1 full calendar year.
- The NWPA SPE Newsletter will be developed twice per year.
- Limited print copies will be available at SPE Events. Digital copies will be posted on the section website.
- Acceptable file formats include PDF (*preferred*), .tif, and JPG. Files must be at least 300 dpi resolution.

Contact Michelle Hartman at maw179@psu.edu for more information

Spring 2021

SCHOLARSHIPS



NWPASPE/PLASTICS ALUMNI ENDOWMENT PENNSYL

This past year, July 1, 2019 through June 30, 2020, the NWPA Society of Plastics Engineers and Plastics Alumni Trustee Scholarship provided \$7,866.00 in endowed scholarship money.

This is the third year that this endowed scholarship, which is housed at Penn State Behrend to benefit students in the Plastics Engineering Technology Program, has been activated.

This year's recipients are **Alexandra Oliver** of Pittsburgh PA, **Rebecca Olanrewaju**, of Erie PA and **Thomas Ward**, also from Pittsburgh. Each student received \$2622.00.

STUDENT CHAPTER & MEMBER SCHOLARSHIPS

Despite missing out on our big fundraiser for the year, NWPA SPE opted to still support our members and offer scholarships. These were awarded in December 2020.

STUDENT CHAPTER SCHOLARSHIPS

Three scholarships of \$500 each were awarded to the following Penn State Erie Student Chapter SPE members:

Sam York is a sophomore from Akron, OH. He is an Honors program student and his goal is to alleviate recycling issues and improve plastics recycling.

David Peterson is a junior from Erie, PA. He interned at F&S Tool and is currently a student researcher at Behrend. David is interested in a career in sales.

Christian Young is a senior from Ford City, PA. He interned at Mine Safety Appliances and did a Co-Op with the ARC Group. His ideal job would combine processing and materials.

MEMBER SCHOLARSHIP

There was one applicant that qualified for the Member's Scholarship. We awarded a \$500 scholarship to **Brooke Lenhardt**. Brooke is on Co-Op in 2020 and will be a senior when she returns to campus in January. She is the daughter of NWPA SPE member Lucy Lenhardt.

The Scholarship Committee would also like to remind NWPA SPE members that this scholarship is available and would like to see more applicants.

Thank you letters were received from all of the scholarship recipients.

Danielle Bentley, Scholarship Committee Chair

PHOTO CONTEST





Put a smile on your face AND on your gift card

when you enter to win our 2021 NWPA SPE Photo Contest. Our website is in need of fresh new photos! Help us make it more in-

teresting by submitting your original photos that represent plastics in Northwestern Pennsylvania, particularly our three county area of Erie, Crawford and Warren counties.

These can be pictures of people, places or products. Your plants, pigments, parties or processes. Anything plastics related in any way—even if it does not begin with a P.

The top ten photos will be selected by committee, then placed on the website for voting.

Photo Contest Entry Rules:

- * Submit one photo at a time, but enter as often as you like.
- Photo must represent Plastics in our area. Format jpeg/gif/bmp/png.
- * Send ONE photo per entry email, and include a brief description.
- Submitting a photo means you agree to let us use it on our web site at no cost.
- * Email your photo to: nwpa.spe@gmail.com by the deadline of APR 28, 2021.
- Use Subject Line "NWPA SPE photo contest".

First Place: \$100 Amazon Gift Card Second Place: \$75 Amazon Gift Card Third Place: \$50 Amazon Gift Card

Email your photo to: nwpa.spe@gmail.com by APR 28, 2021.





SAVE THE DATE!

NWPA SPE GOLF OUTING Thursday August 12, 2021 Peek'nPeak Golf Resort

Time: 10am Registration, 11am Shot Gun Start, Grilled Lunch, Refreshments, Contests, Prizes, Raffles, Buffet Dinner

Cost: \$150 Per Person, \$600 Foursome, \$100 Sponsor

Sponsors and Donations requested Registration opens June 2021.

STUDENT SECTION



Nick Enos, Student Chapter Representative



As another semester begins, the community here at Behrend is determined to continue making the most of these unique circumstances. After a 4-week, fully online start to the semester, students and professors are all excited to finally get back into hybrid classes that allow for in-person meetings during labs and lectures. Penn State has done an excellent job distributing tests to everyone quickly so we all still feel safe gathering in-person. Even with the

guidelines we must follow behind masks and face shields, we all still have the same opportunities to work on senior projects, research, and get hands-on experience with lab equipment like any other semester. And on days where students are fully online, there's the added benefit of not needing to brush off a foot of snow from our cars to make it to campus.

Even though some things may be cancelled or look a little different, there is still much to look forward to. Behrend is still able to host the career fair online, which will be able to provide a great opportunity to meet employers. Many student have already found internships and secured post-graduation plans that will start in the coming summer. On top of that, there's hope that we can still participate in the Fasenmeyer conference and even graduate in-person at the end of the semester. We're optimistic things will continue to improve, and come Fall, things may finally be getting back to normal!



The current number of students in the Penn State Behrend Student Chapter of The Society of Plastics Engineers

DID YOU KNOW?

A PLET INTERNSHIP is for 3 months and a CO-OP is 6 months to a year.

Student Co-Op PENN STATE BEHREND

SDE NORTHWESTERN PENNSYLVANIA

Rebecca Olanrewaju, Apple Co-Op

Worked at Apple Jan20-Dec20 in Cupertino CA.

While at Apple, my position was a manufacturing design intern working specifically with the tooling team.

There were two projects I worked on. One was a texture development project. I worked in a lab space, and also corresponded with various vendors during my time on the project. Being on this project also sharpened my email writing skills a lot! (something I never thought could be achieved in one year).

My second project was a flow analysis validation. The purpose of this was to verify material models and the success of this project will result in increased simulation accuracy. This project was incredibly hands on, which I loved. I ran parts on the press, gathered data, and correlated it with the simulation results.



Apple.com

The thing that pleasantly surprised me the most was how Apple was able to adapt with the changes due to coronavirus. The resources they made available to their employees and their quick thinking made it easy to transition to a working from home arrangement. Unfortunately, we did have to go remote for the rest of the year. But, It made me realize how lucky I was to be working there last year. Many students lost their internship opportunities to COVID-19, and I felt relieved to still have income.

One thing that really liked was the free housing . California is an expensive area to relocate to, and as a student who hasn't graduated yet, even harder. The free housing gave me peace of mind, and I was able to save some money for the future. I also had great roommates. They were a ton of fun to quarantine with, too. I also made some really nice connections in the workplace. Connecting with team members was really important to me, and even though COVID-19 made it harder, I found that I was still in an environment that encouraged emotional, professional, and personal growth. Because of that, I was very comfortable with being myself.

Getting to travel around California was also nice. It's very different from Erie, PA. Different plants, always sunny, and very warm. Yosemite was by far my favorite. Even with COVID-19 limiting the activities I was able to safely do, it was a pleasant change in outdoor scenery. The only thing that "stunk" was the way the air smelled during the wildfires. Luckily, I did not have to evacuate!

This internship really helped solidify what I might want to do in the future. I am thinking of either going to graduate school, or if not then starting a career working more with design/flow analysis. Possibly even back at Apple.



spe INSPIRING PLASTICS PROFESSIONALS



COMMUNICATIONS INTERNSHIP

2021-2022 ACADEMIC YEAR

What we do:

Outreach events

Technical speaker series

Plastics engineering training

Plant tours

Industry networking

Research sponsorship

Job Responsibilities

Website development

Newsletter

Social networking

Photographer for special events

Unpaid internship

Find out more at nwpa.4spe.org

Apply by March 15th

Qualifications

Communications major

Experience in website design

Experience with Publisher

Email your resume to:

Nwpa.spe@gmail.com

POLYMER ENGINEERING AND SCIENCE

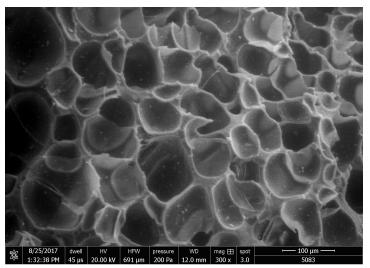


NEW MAJOR AT PENN STATE BEHREND

The B.S. in Polymer Engineering and Science is a unique degree that equips graduates with knowledge and skills that can be applied across a wide range of industries. Polymers are the most versatile and diverse materials encountered in everyday life and are critical in many high-performance applications. Students of Polymer Engineering and Science will learn why polymers have such fascinating properties and will be empowered to design polymer systems to meet specific requirements. Because of their deep un-

derstanding of the relationships between structure, processing and properties, Polymer Scientists and Engineers are in demand in every industry that uses polymers. Opportunities are varied and exciting.

Students pursuing the Polymer Engineering and Science degree will learn in the plastics lab and take coursework in physics, chemistry, and math, in addition to exploring sustainability and the circular economy—that is, using innovative polymers to reduce fossil fuel consumption and recycle waste into new materials or energy.



"Because of their deep understanding of the relationships between structure, processing, and properties, polymer scientists and engineers are in demand in every industry that uses polymers—and that's almost every imaginable industry," said Dr. Greg Dillon, professor of polymer engineering & science and chair of the program.

To learn more about the School of Engineering, including the new Polymer Engineering and Science major, visit https://behrend.psu.edu/school-of-engineering.

The Polymer Engineering and Science (PES) Program will be substantially different from the current Plastics Engineering Technology (PLET) Program.

CALL FOR BOARD OF DIRECTOR MEMBERS NORTHWESTERN





NWPA SPE welcomes all members with an interest in helping guide the Section to join us at any Board meeting. Come see the process behind the planning and see how you can take an active role in the leadership of our local chapter.

The Board of Directors is comprised of four executive officers and a number of chair positions as well as several general members. They are charged with the oversight and direction of the NWPA SPE Section 12. A brief description of the positions is listed below.

Executive Positions: President; Vice President (Chair-Elect); Past President; Treasurer – financial director

Councilor – liaison between NWPA SPE Section12 and National SPE, attend Council meetings & report.

Secretary – records Section's meeting minutes, verifies all voting, and issues statements from both the executive board and the Board of Directors.

Golf Outing Chair – directs aspects of the Section's annual golf outing.

Social Networking Chair – responsible for the social communications of the Section.

Special Events Chair – responsible for all aspects of special events held by the Section.

Technical Program Chair – establish and suggest a list of possible programs for the year.

Membership Chair - responsible for communication with members, maintaining membership roster and working to advance membership and benefits.

Advertising Chair – establish, recruit and place advertising.

General Board Member/Director – this general member is the perfect starting point for someone who wants to be more involved with the Chapter but might have concerns about leading a committee. General members provide input to specific committees and/or to the Board as a whole. Attend BOD meetings.

Committee work is addressed outside the Board meetings and the amount of work associated with each committee varies greatly. There are usually five Board meetings annually, with each committee reporting back, so you can expect a time commitment of attendance at those meetings, in addition to any committee work, if you choose. We need our members to help us lead this Section.

NWPA SPE is a volunteer organization and cannot fully function without the input of its membership. Please consider nominating a member, or yourself, to join the Board and accepting a nomination made for you. Email nwpa.spe@gmail.com if you can join us in the leadership of this section.

We need our members!

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