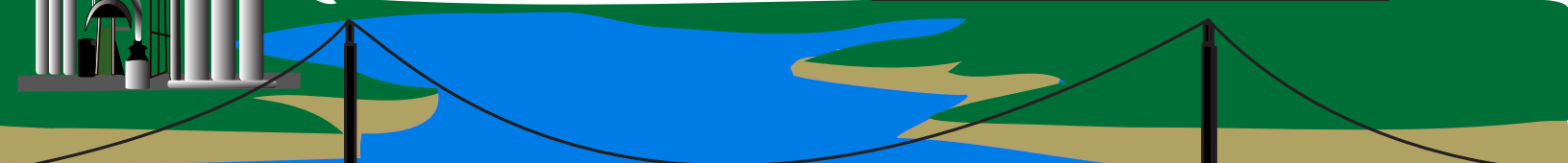
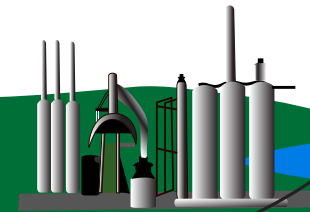


# SPEC SHEET



PALISADES  
MIDATLANTIC



Bridging the Lehigh Valley and Palisades-New Jersey Regions



## EVENT LOCATION:

Lehigh University  
Bethlehem, PA 18015

## SCHEDULE:

**Board Meeting** 4:30-6:00

Campus Pizza, 22 E Fourth Street  
Bethlehem, PA

**Networking** 6:15-6:30

Whitaker Lab, 5 East Packer Avenue

**Presentations** 6:30-7:30

Room 270, Whitaker Lab

Presentations are free but RSVP is needed.  
RSVP for the meeting by March 9 to [info@spe-pnj.org](mailto:info@spe-pnj.org) or Pete Hayles, 732-569-2368.

## COVID SAFETY GUIDELINES:

For the meeting on Lehigh's campus, we will follow the University's guidelines as follows: All visitors must complete a symptom checker on the day you are arriving and wear a mask indoors (per the [current campus health and safety protocols](#)). Please perform the symptom screening [using the website](#) (print out the confirmation page or save it to your device) or through the [Hawkwatch app](#). Masks are required indoors in public spaces for unvaccinated and vaccinated individuals (*Surgical, KN-95, or KF-94 masks encouraged when possible*).

## UPCOMING DATES

### 2022

April 18-22 National Week of  
Plastics Processing

April 20 Virtual Plastics  
Processing Conference

April 21 Section Meeting  
*Tentatively in person at Rutgers University*

May 19 Awards Night  
*Olde Mill Inn (Basking Ridge, NJ)*

## SPE PALISADES-MIDATLANTIC SECTION MEETING

Thursday, March 10, 2022

In-person at Lehigh University, Bethlehem, PA

### Presentations:

Multifunctional Biodegradable Additives for Biopolymers  
by Caroline Multari, scientist at Trucapsol  
COP26 Conference Report  
by York College student Spencer Smith

### *Development of Multifunctional Biodegradable Additives for Improving the Sustainability of Biopolymers*

*Caroline Multari, scientist at Trucapsol*

Biopolymers have attracted increased attention as the world moves towards more sustainable technologies and societies aim to reduce plastic waste in the environment. One approach towards this goal is searching for ways to replace petroleum-based plastics with biodegradable polymers or composites. Our approach utilizes multifunctional biodegradable microencapsulated additives to improve the sustainability of products through tailoring the mechanical properties of existing biopolymers while simultaneously enhancing their degradation rate.

Our multifunctional biodegradable additive particles simultaneously improve ductility and biodegradation behavior of poly(lactic acid) (PLA), a brittle polymer that is only compostable under limited conditions. This approach explores the use of encapsulation technology to create degradation-promoting additives while limiting any breakdown of the matrix during melt extrusion and service life. In addition to promoting biodegradation, such encapsulated particles are designed to enhance toughness of the matrix. Particle properties were examined and the accompanying tensile behavior and compostability of the composite investigated in an extrusion-based additive manufacturing model system. Elongation at break was improved over neat PLA with limited

CONTINUED ON NEXT PAGE

loss of yield strength, and the degradation rate in compost is accelerated and decoupled from environmental conditions. These multifunctional particles have the potential to broaden the uses of biopolymers by tailoring their mechanical properties to approximate those of existing petroleum-based plastics.

#### ABOUT THE SPEAKER

Caroline Multari received her bachelor's degree from Case Western Reserve University in Biochemistry, her M.S. in Materials Engineering from Cal State Northridge, and her doctorate from Lehigh University in Materials Science and Engineering with Prof. Ray Pearson. At Lehigh, she developed a multifunctional biodegradable additive to simultaneously enhance the compostability and toughness of poly(lactic acid) for additive manufacturing. She is currently a senior scientist at Trucapsol, LLC in Bethlehem, PA, where she develops biodegradable micro- and nanoencapsulation technologies for polymers, nutraceuticals, and personal/home care to improve the sustainability of a wide range of products. She is passionate about utilizing natural materials to create biodegradable polymeric technologies with properties that allow them to replace petroleum-based plastics.

#### COP26 Conference Report

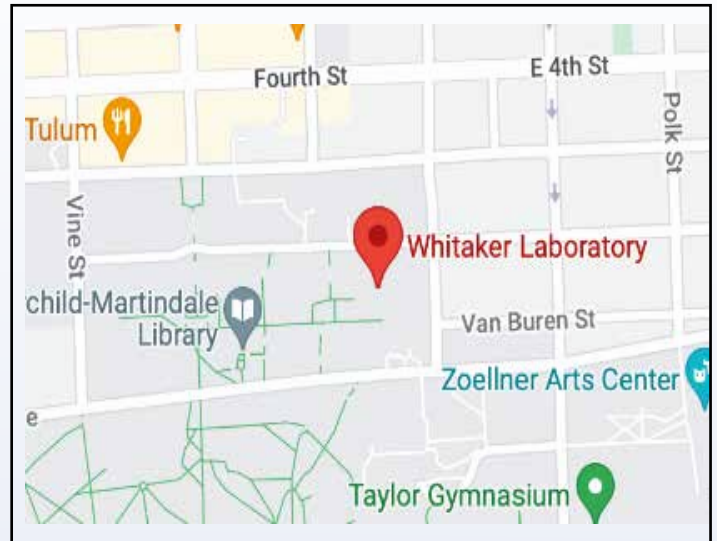
Spencer Smith

The Palisades-Midatlantic SPE Section was one of Spencer Smith's sponsors for the United Nations Climate Change Conference (COP26) held in 2021 in Glasgow, Scotland. Spencer's presentation will focus on what he saw and his experiences while attending COP26. He will also speak about the outcomes from the conference.

#### ABOUT THE SPEAKER

Spencer Smith is a senior Civil Engineering student at York College of Pennsylvania. His minor is in Environmental Studies. He has been active in sustainability programs at the College and participated in The Council of Partners COP26 last fall in Glasgow, Scotland. Also, last fall he interned at Waste Not Technologies, LLC in Tobyhanna, PA where he got hands on experience in using recycled plastics to make useful consumer products.

#### PARKING INFORMATION AND DIRECTIONS:



Whitaker Lab is located at 5 E. Packer Ave., Bethlehem, 18015. It is on Lehigh's Asa Packer Campus [Click here for maps, directions, and a PDF printable version of the Asa Packer Campus map.](#)

The closest parking is metered street parking (meters take charge cards, quarters, or the Park-Mobile app). The Zoellner parking garage is two blocks away (420 E Packer Ave, Bethlehem, PA 18015). You can park on the first floor of the Zoellner parking garage and pay at the kiosk. There is also another public parking garage at 324 New Street.

Once you enter the front door of Whitaker Lab, walk straight ahead through a hallway that is an overpass. Once you get to the end of the hallway at the "Success" sign, take a left. A stairway is at the end of the hallway on your right. Go down one floor and room 270 is on your right (*just next to the stairway*).

For networking and presentations in Room 270, Whitaker Lab, remember to wear a mask and bring evidence of your completed symptom screening [using the website](#) or through the [Hawkwatch app](#)

## 2022 SCHOLARSHIP APPLICATION NOW OPEN

The Palisades-Midatlantic Section of the Society of Plastics Engineers (SPE) is proud to offer academic scholarships to associated members who have demonstrated excellence in various fields of study. Listed below are the available scholarships and criteria. If you, or a family member, are interested in applying, please submit the required documents by April 20, 2022. If you would like to learn more about our scholarships, which honor our Section members, you can read the history [here](#).

If you are not a current member of SPE but you are interested in joining or becoming affiliated with the SPE Palisades-Midatlantic Section, please contact us at [info@spe-pnj.org](mailto:info@spe-pnj.org) or visit [www4spe.org](http://www4spe.org)

Scholarship Name	Scholarship Award	Number Available	Academic Criteria	Palisades-Midatlantic Section Criteria
Alva Whitney Graduate Scholarship	\$4000.00	1	Graduate study in any field. Applicant must be in good academic standing	Full, affiliate, or student SPE member, OR child/grandchild of an active Palisades Midatlantic Section Member
John Manson-Les Sperling Graduate Scholarship	\$2000.00	1	Graduate study in Physical/Chemical or Materials Science/Engineering Applicant must be in good academic standing	Full, affiliate, or student SPE member, OR child/grandchild of an active Palisades Midatlantic Section Member
Jack Ryan-Kris Mathur Undergraduate Scholarship	\$4000.00	1	Undergraduate study in any field. Applicant must be in good academic standing	Full, affiliate, or student SPE member, OR child/grandchild of an active Palisades Midatlantic Section Member
J. Stephen Duerr and John Manson-Les Sperling Undergraduate Scholarship	\$2000.00	2	Undergraduate study in Physical/Chemical or Materials Science/Engineering Applicant must be in good academic standing	Full, affiliate, or student SPE member, OR child/grandchild of an active Palisades Midatlantic Section Member
Richard Bradley Undergraduate Scholarship	\$2000.00	1	Undergraduate study in any field. Applicant must be in good academic standing	Full, affiliate, or student SPE member, OR child/grandchild of an active Palisades Midatlantic Section Member
Francis McAndrew and Sal Monte High School Scholarships	\$2000.00	2	Enrollment at 2 or 4 year college/university. Planned study in any field	Graduating High School Student at Time of Award. Child/grandchild of an active Palisades Midatlantic Section Member
Palisades-Midatlantic Scholarships	Varied	TBD	Graduate or undergraduate study in any field. Applicant must be in good academic standing	Full, affiliate, or student SPE member, OR child/grandchild of an active Palisades Midatlantic Section Member

To apply for a scholarship, please submit the documents listed below. Transcripts are confidential and not viewed by anyone outside of the evaluation team. Submit essays and any membership information by email to [mark.lavach@arkema.com](mailto:mark.lavach@arkema.com). If not using validated transcript service, submit official transcripts to Mark Lavach, Arkema, Inc., 900 First Avenue, King of Prussia PA 19406.

### Required documents:

- Official transcript (Submitted by mail or validated transcript service)
- A one to two page essay describing your contributions to your chosen field of study or how the scholarship award might help you to achieve your future goals.
- Your SPE membership number, or the name and membership number of the member to whom you are related.

The deadline for submissions is April 20, 2022, with awards announced in May 2022.

The SPE Palisades-MidAtlantic Section are pleased to announce the [SPE National Week of Plastics Processing Conference](#).

### WEDNESDAY (4/20) CONFERENCE TRENDS AND INNOVATION IN PLASTICS PROCESSING AND RECYCLING

The technical program will focus on topics including:

-  Current Trends in Plastics Processing and Compounding Technology
-  Advances in Plastics Processing
-  3D Printing
-  Sustainability & Recycling
-  And more!

To become a sponsor and/or exhibit, contact [Peter Hayles](#)

The call for presentations is open until March 15. To submit an abstract and a biography, contact [Paul Brigandi](#).

### WORKSHOPS, TUTORIALS, & PRESENTATIONS

Monday (4/18) 10:00 AM- 11:00 AM  
Introduction to Polymers & Plastics Processing

Tuesday (4/19) 10:00 AM - Noon  
Plastic Processing Tutorials  
(Extrusion & Injection Molding)

Thursday (4/21) 10:00 AM - Noon  
Plastic Processing Tutorials  
(Additive Manufacturing)

Friday (4/22) Access to 2021  
Plastics Processing Conference Presentations

### REGISTRATION COSTS

Wednesday conference:

SPE Members \$99/non-members \$299

Workshops, tutorials, and presentations:

SPE Members No Charge/non-members \$49

### VINYLTEC® 2022: CHARTING THE COURSE FOR A SUSTAINABLE FUTURE SEPTEMBER 27-29, 2022 HOLIDAY CROWN PLAZA, KING OF PRUSSIA, PA

The Vinyl Division Technical Program Committee is soliciting papers and Keynote Speakers in the following areas:

- Resin and Additives
- Sustainability and Recycling
- Megatrends (Climate Change, Data analytics & Digital Connectivity, Decentralized Financing, Globalization, Health and Wellness, Populations Shift, Resource Constraints, Social Responsibility, Transparency, Workforce Resilience)
- Vinyl Industry Association Updates

Please Contact: TPC Chair, Peg Schipper  
[peggy@performanceadditives.us](mailto:peggy@performanceadditives.us)  
with proposed talk title and author.



Check out our [Facebook page](#)

And our Website  
<https://spe-pma.org>

## CONGRATULATIONS TO DR. ARYA TEWATIA ON EARNING HIS PH.D FROM RUTGERS UNIVERSITY!



His dissertation title was *"Structure, properties, and processing of graphene reinforced thermoplastic polymer composites formed in-situ by a high-shear process,"* directed by Professors Richard Lehman and Thomas Nosker.

## Ken-React® Titanates & Zirconates - Different Than Silanes.



Figure 1 Untreated E-Glass (Silane Sized) Fibers in ETFE (ethylene tetrafluoroethylene).

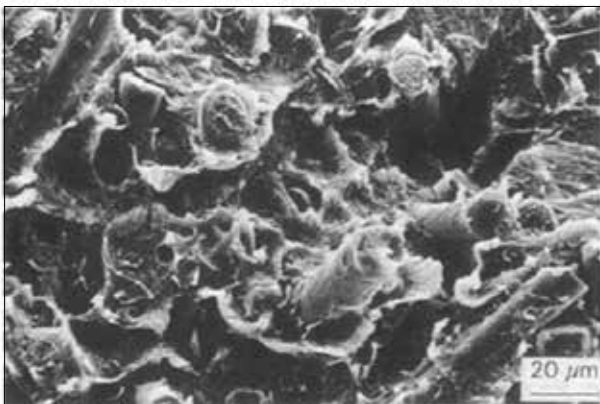


Figure 2 Ken-React® NZ® 44 Zirconate Treated E-Glass (Silane Sized) Fibers in ETFE .

**No HYDROLYSIS Needed**



[www.4kenrich.com](http://www.4kenrich.com) · [sjmonte@4kenrich.com](mailto:sjmonte@4kenrich.com)

EXTRUDED TUBING

## EXPERTISE

Nordson MEDICAL has the broadest, most versatile medical tubing in the industry that includes simple to complex tight-tolerance extruded tubing in a wide range of materials, including polyimide, PTFE, and fluoropolymers. With a full range of single-lumen, multi-lumen, and multi-layer tubing, we can partner with you to take your solutions further.

[nordsonmedical.com](http://nordsonmedical.com)



**BASF**  
We create chemistry

## IrgaCycle™

Enhancing the value of recycled plastics to create a sustainable and circular future

New addition to the **VALERAS™** portfolio

IrgaCycle™ additive solutions are specifically designed to improve the quality of mechanically recycled plastics.

Visit us at [www.irgacycle.basf.com](http://www.irgacycle.basf.com)

Learn more about BASF Plastic Additives at [www.plasticadditives.basf.com](http://www.plasticadditives.basf.com)

## ARKEMA PVC ADDITIVES MEAN PRODUCT PERFORMANCE

**DURASTRENGTH**  
BY ARKEMA

**PLASTISTRENGTH**  
BY ARKEMA

Selling to the extrusion and injection molding industry for over 50 years, with the continuing innovation and quality products you've come to expect from Arkema.

Durastrength® and Plastistrength® are registered trademarks of Arkema

[additives-arkema.com](http://additives-arkema.com)

**ARKEMA**  
INNOVATIVE CHEMISTRY

With over 50 years supporting North America, and now as a member of the Peter Greven Group, we offer a global reach.



Offering customizable solutions in:

Lubrication • Stabilization • Optimization



**NORAC**  
**ADDITIVES**

[noracadditives.com](http://noracadditives.com)  
870-572-9061

## BOARD OF DIRECTORS AND COMMITTEE LIST

Contact any person on this page by emailing [info@spe-pnj.org](mailto:info@spe-pnj.org)

### 2020-21 OFFICERS

President	Arya Tewatia	Rutgers University	908-565-1231
1st Vice President	Paul Brigandi	Dow	610-244-7067
2nd Vice President			
Treasurer	Francis McAndrew	Retired	908-273-3152
Secretary	Stu Kapp	Leistritz	908-685-2333
Councilor	Maggie Baumann	G.H. Associates	908-832-2207
Past President	Peggy Schipper	Performance Additives	484-846-0086

### 2021-22 DIRECTORS

Joe Duska	Mainetti	732-778-1599
Bob Kappus	R Kappus, LLC	908-619-5858
Mark Lavach	Arkema	610-878-6985
SPE Rutgers Student Chapter President	TBD	

### 2022-23 DIRECTORS

Rob Decker	Norac	215-696-2008
Andres Ginez	Lanxess	732-266-6238
Gregory Treich	Evonik	732-981-5014

### 2023-24 DIRECTORS

Art Finkle	The Finkle Consultancy	203-572-8923
Patrick Kelley	WasteNot Technologies	570-202-4503
Ray Pearson	Lehigh University	610-758-3857

### EMERITUS DIRECTOR

Jay Kotak	Retired
Michael Fisch	Retired

### COMMITTEE CHAIRS

Awards:	Sharan Thathand	
Education Chair:	Mark Lavach	610-878-6985
Endowment Fund:	J. Stephen Duerr	908-500-9333
Finance:	Art Finkle	203-572-8923
House:	Pete Hayles	732 569-2368
Membership:	Binay Patel	704-929-1272
Program:	Stu Kapp	908-685-2333
Publications:	Jennifer Markarian	908-638-5669
Social Media Mgr.	Peggy Schipper	484-846-0086
Special Events:	Jim Williamson	610-662-7779
Sponsorship:	Pete Hayles	732 569-2368