March
2025
Newsletter

New Jersey Chapter

Celebrating 48 Years of Service as a Professional Chapter of
The Society for the Advancement of Material & Process Engineering

Open Call for Chapter Officer Nominations

Interested in joining our Chapter Board and contributing to the future direction of NJ SAMPE?

Nominations are now being accepted for the following slate of officers:

Benjamin M. Rasmussen Chair
Supervise all Chapter activities

Vice-Chair
Oversee Chapter committees

Treasurer
Maintain permanent financial records

Secretary
Document meeting proceedings

Membership Chair
Lead member & sponsor engagement efforts

Programs Chair
Secure speakers for Chapter events

Voting Director
Represent us at SAMPE National Meetings

Media Chair
Manage external Chapter communications

Student Chapter Liaison
Coordinate local student initiatives

Young Professional Representative
Facilitate recent graduate engagement

Nominations are open until April 1.

Chapter members may either nominate themselves or other Professional members.

Submit all nominations to Chapter Secretary Raj Sundar via e-mail at raj@njsampe.org.

The candidate slate will be announced in the May newsletter and elections will be conducted via electronic survey. Elected officers will be announced in June and their term of service will begin on July 1.

March 6th Meeting Details

Location:
Evonik - 2 Turner Place, Piscataway NJ

Agenda:

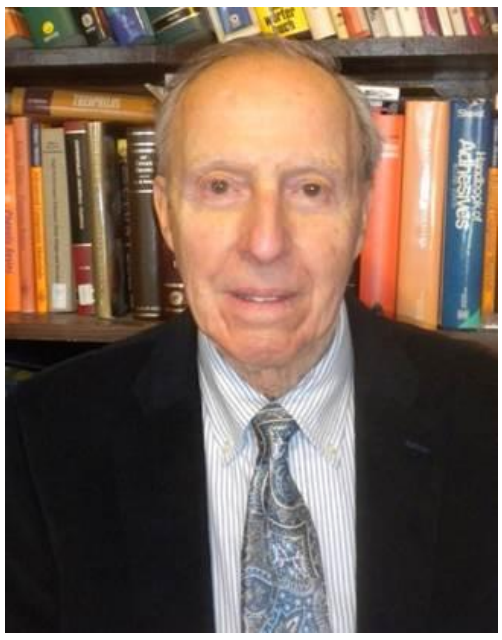
5:30 PM – Networking & Dinner

6:30 PM – Presentation by Louis Pilato

The presentation will also be streamed live via Microsoft Teams, starting at 6:30 PM.

Virtual Meeting Link

"Lignin: Chemistry and Sustainability" A presentation by Dr. Louis Pilato



Following last month's meeting at Rowan University in Glassboro, NJ SAMPE returns to Evonik's Piscataway, NJ location for our March 6th meeting. Members and friends are invited to join us for professional networking, dinner, and a presentation.

The evening's featured speaker will be Dr. Louis Pilato, FSAMPE.

Professionals can register and pay in advance at njsampe.org by clicking here.

As always, students are welcome to attend the meeting at no cost, though an RSVP to megan@njsampe.org by Monday, March 3rd is required.

Abstract:

Lignin is a large, renewable biomass material second only to cellulose in abundance as an organic material on earth. When recovered via recognizable wood pulp to paper processes such as the kraft and sulfite methods, a vast majority of commercial lignins are considered technical grades with variable purity and reproducibility. They contain sulfur, ash, and carbohydrate impurities and are characterized by a broad molecular weight distribution (MWD) which limits their use in value added areas. This presentation will describe newer isolation processes that lead to high purity lignin suitable for medium to high value market areas.

Lignins are macromers that possess hydroxyl, aromatic, isoprenoid, etc. type functionality and undergo a plethora of reactions (phenolation, esterification, epoxidation, depolymerization, etc.). Some of these specific functionalities and reactions will be illustrated in describing use of lignin as polymer reactant, carbon fiber precursor, polyurethane polyols for thermal insulation, bio-based phenol, aerogels, and others. These examples will demonstrate lignin sustainability in introducing lignin in these market areas displacing portions of petrochemical based materials.

Speaker:

Dr. Louis Pilato received his B.S. in Chemistry from St. John Fisher College, (Rochester, NY) and Ph.D. in Organic Chemistry from the University of Notre Dame (IN).

Pilato's experience covers a range of topics such as nanostructured and multifunctional materials for ablation, flammability, electrically conductive, and thermally conductive applications. He consulted for CIMV, a French start-up company, engaged in Organosolv recovery of their trade-mark product, Biolignin™, from 2012 to 2020. His current endeavors include a collaboration with Professor Joseph Koo, Department of Mechanical Engineering, University of Texas, Austin.

Pilato has numerous publications in polymer, composite, and materials research areas involving thermosetting resins, especially phenolic resins. He is considered an expert in Phenolic Resin Technology, having authored 3 books on the subject.

Dr. Pilato is a long-time member of both the American Chemical Society (ACS) and SAMPE (he is a Fellow of the latter). He was inducted into the St. John Fisher University Science and Technology Hall of Fame in 2019.

Ask About Free SAMPE Student Memberships!

NJ SAMPE is pleased to offer a limited number of free Student Memberships to support university students who desire to get more involved in SAMPE.

Contact Joe Abrantes, our Educational Outreach Chair, at joe@njsampe.org for more information.

This opportunity was made possible by our generous Chapter Sponsors. We are especially grateful to Kaneka North America, who allocated additional funds specifically for this purpose.

NJ SAMPE Scholarship Program Now Accepting Applications

NJ SAMPE offers a scholarship to support students pursuing higher education in the fields of science, technology, engineering, or mathematics (STEM).

Applicants must either be members of one of our 3 local student chapters or relatives of NJ SAMPE Chapter members having a minimum of one year of membership with the Chapter as of the application deadline. An eligible Chapter member may also serve as sponsor for a deserving candidate's application (ex: neighbor, intern, etc.).

Submit applications to joe@njsampe.org no later than March 15.

Winners will be notified before our April Student Night meeting, where the scholarship awards will be presented.

Scholarships are offered annually for full-time study at an accredited university or vocational school of the student's choice. The Program is administered by the NJ SAMPE Board of Directors, and all awards are granted without prejudice.

For complete information on eligibility, the application and awarding process, please visit our website.

April Student Night Preparations Underway

Each April, NJ SAMPE features local students during a Student Night meeting. Speakers either present their research or highlight their Student Chapter projects.

Those interested in participating in this long-time tradition are invited to reach out to joe@njsampe.org.

Navigating Performative vs. Productive Work Cultures

In the ever-evolving specialty chemical industry, the distinction between performative and productive work cultures plays a crucial role in shaping the trajectory of companies aiming for sustainable growth and innovation. As a professional with three decades of experience in sales, marketing, and the digital realm, I've observed how these cultures influence decision-making, employee satisfaction, and ultimately, a company's success.

Performative work culture, at its core, emphasizes appearances and the perception of productivity over actual outcomes. In such environments, employees might be more inclined to engage in activities that are visibly recognized rather than those contributing substantively to the organization's goals. Common indicators of a performative culture include excessive meetings, prioritizing quantity over quality in outputs, and a focus on metrics that reflect activity rather than impact.

In the specialty chemical industry, where innovation and precision are paramount, a performative culture can hamper progress. For example, investing time and resources in flashy topics, content and posts that garner attention but lack a solid foundation in product efficacy and customer needs can lead to short-term gains but long-term misalignment. Furthermore, decision-making driven by external validation rather than own strategy often results in misaligned priorities.

Conversely, a productive work culture prioritizes meaningful outcomes over mere activity. Here, the focus is on achieving strategic goals, enhancing efficiency, and fostering an environment that values innovation and continuous improvement. Productive cultures are characterized by clear objectives, empowered teams, and a supportive environment that encourages risk-taking for thoughtful, well-reasoned initiatives.

In specialty chemicals, productive cultures drive significant advancements. For instance, investments in R&D that lead to sustainable product development and improved formulations highlight a focus on genuine progress. Moreover, aligning sales strategies with technological advancements and customer insights can result in solutions that meet market demands more effectively, ensuring longevity and success.

Digital transformation plays a pivotal role in distinguishing performative and productive cultures. In a digitalized environment, it's easy to gather and analyze data to inform decisions and verify the effectiveness of initiatives. Productive cultures leverage digital tools to streamline operations, improve customer interactions, and foster data-driven innovation.

For instance, using digital platforms to track and respond to customer feedback in real time can bridge the gap between product development and market needs, ensuring that efforts are grounded in consumer demand rather than perceived trends.

On the other hand, organizations rooted in performative actions may adopt technological solutions for the sake of appearances, without fully integrating these tools into their strategic framework.

While a productive work culture is ideal, elements of performativity can be beneficial when managed correctly. Public recognition and celebration of achievements can motivate teams, and maintaining visibility in a competitive market remains necessary. The key lies in balance: ensuring that performative actions support and do not overshadow productive goals.

Leaders in the specialty chemical industry must advocate for transparency and accountability, fostering environments where innovation and true productivity are rewarded. By aligning resources and focus with overarching business objectives, organizations can thrive, setting a benchmark for effectiveness and growth.

In conclusion, navigating the line between performative and productive work cultures enables companies in the specialty chemical industry to leverage their inherent strengths, fostering environments that are not only competitive but also forward-thinking and resilient.

Written by Chris Jones. Reprinted with permission from Schafran Associates LLC.

Calendar

NJ SAMPE Events

March 6, 5:30 PM
"Lignin: Chemistry and Sustainability"
Presented by Louis Pilato, FSAMPE
Evonik, Piscataway, NJ
Register | Teams Meeting Link (6:30 PM start)

April 9 (Tentative Date)
Student Night

SAMPE Webinars

February 26, 1 PM EST
"Solutions for High-Rate Manufacturing of Composites in Advanced Air Mobility"
Joint panel event with SAMPE & SME
Learn More

March 19, 10 AM PST (1 PM EST)
"Advanced Automated Fiber Placement Strategies for Thermoplastics"
Presented by Waruna Seneviratne, Director - ATLAS, NIAR
Learn More

April 16, 10 AM PST (1 PM EST)
"Life Cycle Analysis of Carbon Fibres"
Presented by Ignaas Verpoest, Prof. Emeritus, U Leuven, Belgium
Learn More

SAMPE 2025

May 19 - 22
Indianapolis, IN
Early Bird Registration ends March 31

Sponsor of the Month:

Coast-Line International

Coast-Line supplies engineered materials for the composite, aerospace, marine, automotive, armor, glass, and industrial industries. They specialize in everything under the bag to the tool!

Their products are manufactured with the highest quality standards by the leading manufacturers of technologically advanced and proven products.

Some of these manufacturers include: Airtech, Hexcel, 3M Aerospace Sealants, Zip Chem, General Plastics, Mask-Off, Valutek, Wichitech, Busch Pumps, and more...

Personnel at all Coast-Line stocking locations in NY, GA, MA, are available to provide technical assistance and recommendations on abrasives, adhesive film, aerospace sealants, breather and bleeder cloths, clean room products, connection valves, core material, cutting tools, disconnects, epoxy resins, flow mediums, fuel tank sealants, health & safety products, hoses, hot bonders, packaging material, pre-preg, pressure sensitive tapes, release film, release liquids, repair sealants, technical fabrics (fiberglass, Kevlar, aramid, hybrids), tooling products, vacuum bagging films, vacuum pumps, and more.

For more information, contact:

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patrickm@coast-lineintl.com

Thank You to Our 2024 - 2025 Corporate Sponsors

We are the New Jersey Chapter of SAMPE

Chartered in 1977, NJ SAMPE is one of the oldest Chapters in the SAMPE network. We serve the greater NJ/NY/CT/PA area by focusing on our membership, as well as student and young professional outreach. NJ SAMPE includes ten SAMPE Fellows, thirteen Senior Honorary Members, one SAMPE George Lubin Award Winner, and one SAMPE Young Professionals Emerging Leadership Award Winner. NJ SAMPE was designated as SAMPE's first Center of Excellence for Additive Manufacturing in 2018.

We welcome you to participate and network, either for business opportunities, recruitment, or keeping up with industry trends in the region. As the only technical society encompassing all fields of endeavor in materials and processes, SAMPE provides a valuable forum for scientists, engineers and academics. We especially invite students and young professionals to engage in dialog with industry members, explore career options, make presentations at monthly meetings, and join our local student chapters.

Benjamin M. Rasmussen	Chair
	Vice-Chair
	Treasurer
	Secretary
Director/Membership	Melissa Jaime, Aurorium
Programs	Joe Abrantes, Evonik
Student Chapter Liaison	Megan Casey, TotalEnergies Cray Valley
Media & Communications	Raj Sundar, AGC Chemicals Americas
Young Professional Representatives	Amir Islam, Bally Ribbon Mills
Advisors-at-Large	Behrad Koohbor, Rowan University
	Joe Abrantes, Evonik
	Sarah Minhas, Bally Ribbon Mills
	Jaclyn McLaughlin, Rowan University & Joe Geiger, Bally Ribbon Mills
	Howard Kliger, Retired & Borys Schafran, Schafran Associates