November 2024 Newsletter



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



Kliger to Present at November Meeting

NJ SAMPE welcomes members and friends to our second monthly meeting of the 2024 -2025 season, to be held at Evonik Corporation, Piscataway, NJ on Thursday, November 7 at 5:30 pm. Howard Kliger will present on the topic of "High Strength Composites for Civil Infrastructure."

The use of composite materials for strengthening and protecting civil structures is now an accepted technology within the civil engineering community. Specifications are in place for bridges, buildings, and highways. Multi millions of pounds of carbon and glass fiber are being used annually in the US infrastructure market.

This presentation will examine the technology from the SAMPE perspective – what fibers and resins are being used, why are they so attractive, and how are they used. Slides will demonstrate the actual application process on structures here in New Jersey.

Howard Kliger, now retired, still continues an active role in the advanced composites industry. His formal training is in composite materials structural design and analysis.

For the past 25 years, Kliger was heavily involved with the efforts to introduce FRP materials to the infrastructure market. He was the secretary of the ACI 440F committee through its development of the guideline for external concrete repair. He also provided independent testing and inspection services for contractors and DOTs needing QA testing of concrete repair applications. He remains active in both national and local aspects of SAMPE.

NJ SAMPE Distinguished Service: John Osterndorf

John Osterndorf is one of the longestserving members of NJ SAMPE, with a tenure spanning several decades. He earned his BS in Chemical Engineering from Manhattan College in May 1978 and quickly embarked on his professional career at the U.S. Army Research, Development, and Engineering Command Center located at Picatinny Arsenal. John joined SAMPE in March 1979 and has maintained an active role in both the industry and the organization ever since.

At Picatinny Arsenal, John worked in the Prototyping and Organic Materials Branch, where he was recognized as an expert in adhesives, especially in munitions applications. His work involved the evaluation of adhesives, surface preparation, testing, and selection for use. The specialized knowledge Osterndorf developed over his career made him a valuable resource within the U.S. Army and the broader field of material science, as his innovations helped ensure that military materials could withstand the extreme conditions and rigorous demands placed upon them.

Over the course of his career, John authored more than 40 technical papers and government reports on a wide array of materials-related subjects. He presented at numerous **SAMPE** events and other technical conferences.

His expertise was formally recognized when he served as the Ballistic Composite Session Chairman at the International SAMPE Technical Conference (ISTC) held in Wichita, KS, in October 2009.



John Osterndorf recognized for 45 years of service to SAMPE.

His most enduring and impactful contribution was as the Chapter's Treasurer, a role he held from 1991 to 2016. During his tenure, John was instrumental in maintaining the financial stability of the Chapter and ensuring its continued success. He also played a significant role as Finance Chairman for seven ISTC and International Society for Explosives Engineers (ISEE) symposia from 1989 to 2009, where NJ SAMPE was a sponsoring organization.

Beyond his formal duties, John also started the NJ SAMPE Golf Outing in 1984. This annual event continues to be a key social gathering for the Chapter, fostering camaraderie and engagement among its members. John's guidance has helped build lasting relationships within the organization and the Golf Outing continues to serve as a popular fixture in the Chapter's calendar.

John Osterndorf's long-term dedication

November's meeting will include networking, dinner, and the presentation. To register in advance, click <u>here</u> or scan the QR code.

Students are always welcome to attend at no cost, though an RSVP to megan@njsampe.org is required.



Additionally, John co-authored several patents, underscoring his contributions to the advancement of materials and adhesives technologies.

John's involvement with NJ SAMPE began in 1983 as Chapter Secretary. In 1986, he was elected Chair. to SAMPE, both professionally and socially, has made him an integral part of the NJ Chapter's history and ongoing activities. His leadership, expertise, and commitment have left a lasting impact on the organization, and he continues to be a guiding force even in retirement.

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Membership is undergoing a sea change, ushering in a new generation of young professionals. Page 2

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Are Professional Associations Withering or Thriving?

SAMPE, the Society for the Advancement of Material and Process Engineering, is a global professional member society dedicated to enabling growth and innovation in the aerospace, transportation, marine, construction, energy, and general industry sectors. It's all-encompassing and offers something for almost everyone in the scientific community.

Back in the late 1980s, when I was in graduate school, SAMPE was revered, and publishing your work in the SAMPE Journal (SAMPE J) was a significant accomplishment. I read SAMPE J cover to cover, appreciating that it was loaded with information and a great resource for landing my first industry job.

When I graduated, a technical article based on my thesis appeared in SAMPE J and this felt like a validation of my work. There it was, my name in a SAMPE J byline! I followed SAMPE's activities closely until I was invited to give a presentation at the New Jersey Chapter. I got to network with local professionals including quite a few industry veterans, with whom I formed lasting friendships. The value of local Chapter participation was immeasurable. Once I began attending national SAMPE conferences and CAMX shows, my knowledge of the industry increased, and continuous networking helped with the job as well as personal branding.

I became Chair of NJ SAMPE in 2013 and served for five years. Some use the position as a springboard for greater SAMPE ambitions, but I decided to focus on local students and young professionals, paying it forward, you could say. Monthly meeting attendance was small but steady. We began an annual Student Night, providing a platform for aspiring engineers and chemists to practice public speaking. We slowly attracted a group of young professionals that became our new Board members, allowing them to shape NJ SAMPE as they wanted.

Today, I serve in an advisory capacity to NJ SAMPE, and we are experiencing a sea change in membership. Older, established industry members don't attend much anymore.

The pandemic fueled this decline, but now it's sustained behavior. Are the presentations at monthly meetings no longer interesting? Is the dinner conversation no longer stimulating? Is it easier to log onto a webinar or join a social network? Not entirely sure, but we are working on figuring this out.

What's interesting though, is the fresh new wave of students. When local meetings take place on university campuses, turnout is healthy. Students are curious. Student Chapter formation is growing. Our latest Additive Manufacturing symposium attracted both students and young professional researchers.

So NJ SAMPE is evolving, and meetings will require extensive retooling. What will the future bring? Don't know yet, but students and young professionals are tuned in and thirsty, the same way I was over 30 years ago. No doubt that this behavior applies to all of the industry's peer organizations as well.

The more things change...

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SAMPE North America Announcements

Memorial to Dr. Scott Beckwith

Scott Beckwith passed away on February 7, 2024. He was perhaps the singular most enduring representative of a SAMPE materials engineer. A member of SAMPE for almost five decades, he was our Global Technical Director, editor of the SAMPE Journal, a SAMPE Fellow, a recipient of the Mort Kushner Lifetime Achievement Award and the SAMPE Distinguished Service Award.

There will be a special memorial session at the upcoming Indianapolis Symposium/ Exhibition in May 2025. If you will be

North America Executive Cabinet Treasurer Nominations Extended and Parliamentarian Applications Open

SAMPE North America is pleased to announce that nominations for the FY2025 Treasurer (elected) and applications for the Parliamentarian (appointed) positions are open until November 30, 2024.

These key roles within the North America Executive Cabinet (NAEC) offer a unique opportunity to contribute to the leadership and strategic direction of the region.

We encourage interested members to

Calendar

NJ SAMPE Events

November 7, 5:30 PM High Strength Composites for Civil

High Strength Composites for Civil Infrastructure, Presented by Howard Kliger, Retired Evonik Corporation, Piscataway, NJ

Register | Directions

December 5, 5:30 PM

Presentation by Michael Delancy, followed by lab tour and dinner Shimadzu Scientific Instruments, Somerset, NJ

Register | Directions

SAMPE Webinars

Ablation Technology Advances -Aerospace and Defense Applications Presented by Joseph H. Koo, Sc.D., Walker Dept. of Mech. Eng., The University of Texas at Austin and VP & CTO of KAI, LLC November 10, 10 - 11 AM PST (1 – 2 PM ET) Learn More | Register

there, please try to attend.

Student Chapter Grant Applications Due December 15

SAMPE Student Chapters are invited to submit an application to obtain funding from SAMPE North America to support their Chapter programs.

Learn More



consider these positions and take part in shaping the future of SAMPE North America.

Serving as a member of the SAMPE NAEC may further your professional development through leadership exposure, networking, and mentorship experiences.

Each role also provides an excellent opportunity to develop and practice project management, negotiation, communication, and strategic thinking skills.

More information about the positions can be found at the respective links:

- <u>Treasurer</u>
- Parliamentarian

Type V Composite Tank for Hydrogen Storage -Fabrication Approaches, Testing and Challenges

Presented by Ranji Vaidyanathan and Matt Villareal, Infinite Composites

December 18, 10 - 11 AM PST (1 - 2 PM EST)

Learn More | Register

Thermoplastic Composite Recycling: From Demonstration to Implementation

Presented by Hans Luinge, Co-Founder, Spiral RTC

January 15, 10 - 11 AM PST (1 - 2 PM EST)

Learn More | Register

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Sponsor of the Month: Schafran Associates LLC

Primed exclusively toward middle market fine and specialty chemical companies, Schafran Associates is a boutique sales, marketing, and business development advisory/consultancy that can jump-start your customer experience and establish priorities for sustainable, incremental growth by:

- Realigning business around customer needs for long-term, mutual success
- Introducing marketing best practices to deliver quality leads to your sales teams
- Refocusing your portfolio on highvalue product and service opportunities
- Building effective pipelines for your business development programs

Principal Borys Schafran (B.S. Chemical Engineering, M.S. Polymer Science & Engineering, executive education in Marketing and Digital Strategies) has developed a library of solutions from 40 years of leadership in the fine and specialty chemicals sectors, most notably with CABB, Evonik, and AkzoNobel.

Experienced in (a) fine chemical custommanufacturing for agriculture, pharmaceuticals, flavor & fragrance, electronics, transportation, infrastructure and (b) specialty chemicals for paints & coatings, road markings, concrete repair, cast polymers, structural adhesives, tooling, upcycling of waste plastics. For more information, contact:

Borys Schafran Schafran Associates 15 Chestnut Street #777 Suffern, NY 10901 845-300-6962 www.schafranassociates.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 10 SAMPE Fellows, 13 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 Programs Student Chapter Liaisons Director/Media Young Professional Representatives Advisor-at-Large Melissa Jaime, Aurorium Joe Abrantes, Evonik Megan Casey, TotalEnergies Cray Valley Open Amir Islam, Bally Ribbon Mills Behrad Koobor, Rowan University Shahab Zekriardehani, Eaton & Joe Abrantes, Evonik Borys Schafran, Schafran Associates Jaclyn McLaughlin, Rowan University & Joe Geiger, Bally Ribbon Mills Howard Kliger, Retired

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