



***February 2022 Newsletter***  
***Virtual Meeting February 3rd at 12 pm***

*featuring*  
**Howard Kliger**

**Composites Issues in Sports  
and Recreational Products**



SAMPE NJ Chapter



@NJSAMPE

Web: <http://njsampe.org>

## ***Meeting Details and Abstract***

Virtual meeting log-in details will follow in an email announcement the week of the meeting.



## **Presentation Abstract:**

For the past 40 years, the use of carbon fiber composites in sports and recreational product has continued to grow. Starting with golf shafts and tennis racquets, it's now used in bicycles, hockey sticks, vaulting poles, fishing rods, etc. But along with growing usage, comes the liability of failure and injury due to flawed fabrication and design. This presentation will explore these issues and show many examples of poor fabrication through the use photomicrographs and SEM images.

Howard has acted as an expert witness for a number of composite bicycle cases and will offer his experiences. However, the major portion of this presentation was initially presented by Scott Beckwith at the 2015 CAMX exposition, and we thank him for the use of his slides.

**Howard Kliger**, now partially retired in 2022, still continues an active role in the advanced composites industry with formal training in composite materials structural design and analysis. As an independent consultant, he was heavily involved with the efforts to introduce FRP materials to the infrastructure market and since 2002, has provided independent testing and inspection services for contractors and DOT's needing QA testing of concrete repair applications.

As an Adjunct Professor, Dr. Kliger continues to teach a Mechanics of Solids course and a graduate level composites course at Rutgers University. He also leads a seminar course in Engineering Ethics for senior level civil engineering students. Howard continues to be active with SAMPE. He sits on the national Finance Committee and is the Program Chairman for the NJ chapter.

He became a SAMPE Fellow in 1999. He's just a nice guy.

## ***OUR SCHEDULE THIS YEAR***



***February 3<sup>rd</sup> – 12pm (Virtual)***

***Howard Kliger***

***March 3<sup>rd</sup> – 12pm (Virtual)***

***Jason Tuerack – Broadview Technologies***

***April 7<sup>th</sup> – Location and Format to be Announced***

***Student Night***

*NJ SAMPE invites any students wanting to share their research, SAMPE Student Membership, or K-12 STEM experiences to contact Joe Abrantes ([joe.abrantes@evonik.com](mailto:joe.abrantes@evonik.com)) to reserve a speaking time.*

***May 5<sup>th</sup> – Location and Format To be Announced***

***June 2022 – Location and Format To be Announced***

***New Jersey Additive Manufacturing Symposium***

*Please contact Vinay Mishra if you are interested in participating as a speaker or event sponsor.*

*[vinay.mishra@jayhawkchem.com](mailto:vinay.mishra@jayhawkchem.com)*

*620-202-2421*

## *Announcements*



Check out SAMPE's new virtual networking site, SAMPE 365!

This is year-round platform connects innovators of the advanced materials and composites community from the private sector, government, and academia.

Anyone can create an account, but certain premium content will only be accessible to SAMPE members.



[Click here for more information](#)

*Thank you to our sponsors!*



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#### **For more information, contact:**

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### **SAMPE Best Chapter Award Winner:**

1990, 1991, 1992, 1993, 1995, 1996, 1997, 1998, 1999, 2000, 2001

### **SAMPE Chapter Service Excellence Award Winner:**

2002, 2003, 2004, 2005, 2006 (award retired after 2006)

### **SAMPE Chapter Sponsored Conferences:**

ISSE – 1990 (Anaheim), 1994 (Anaheim), 1996 (Anaheim), 1998 (Anaheim), 2002 (Long Beach)

ISTC – 1981 (Mt. Pocono), 1989 (Atlantic City), 2006 (Dallas), 2009 (Wichita), 2012 (Charleston)

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## New Jersey Chapter



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