

SOCIETY FOR THE ADVANCEMENT OF MATERIAL AND PROCESS ENGINEERING

NEW JERSEY CHAPTER

NOVEMBER NEWSLETTER & MONTHLY NOTICE

NOVEMBER 5, 2009 (1ST THURSDAY)

UV CURING TECHNOLOGY OVERVIEW AND APPLICATIONS IN COMPOSITE STRUCTURES

JIM WITTIG
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ACTEGA RADCURE, INC
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MEETING DETAILS

Place: Bridgewater Manor, Bridgewater, NJ; (908) 658-3000 Time: 5:30 Cocktails (Cash Bar); 6:15 Dinner; 8:30 Adjourn

Cost: \$10.00 Advanced Registration; \$15.00 at Door; Students - Free

This meeting is open to all SAMPE members, spouses, guests, and other interested parties

Reservations please contact John Osterndorf at 973-248-5885 or by email at sampejohn@yahoo.com by noon the Wednesday before the meeting.

Directions to Bridgewater Manor: From I-287 north, take exit 22A (206 south). Go thru two lights, Bridgewater Manor is on right. From I-287 south, take exit 22. Make right at end of ramp. Make next left, a jughandle to cross 202/206 to go south on 202/206. Go thru three lights, Bridgewater Manor is on the right.

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 suspended after 2006)





2009 – 2010 MEETING SCHEDULE

September 10, 2009 - NDE of Multilayered Composites,	March4, 2010 - TBD
Nicholas Gianaris, General Dynamics Land Systems, Sterling	
Heights, MI	
October 1, 2009 – Development and Testing of Prestressed	April 1, 2010 – TBD
Carbon Fiber Composite Overwrapped Gun Tubes, A. G.	
Littlefield, Benet Laboratories, Watervliet, NY	
October 19 – 22, 2009 41st International SAMPE Technical	May 6, 2010 – TBD
Conference, Wichita, KS, Sponsored by the New Jersey and	
Wichita Chapters	
November 5, 2009 – UV Curing Technology Overview and	May 17 – 20, 2010 – 54 th International SAMPE
Applications in Composite Structures, Jim Wittig- President-	Symposium & Exhibition, Washington State Convention
ACTEGA Radcure, Inc	Center, Seattle, WA Sponsored by Seattle Chapter
December 3, 2009 – PET Extrusion of Recycled Plastics for	June 3, 2010 – Nanotechnology 2010, An Update, Dr.
Railroad Ties and Bridge Beams, Tom Nosker- research	Louis A. Pilato, Pilato Consulting, Bound Brook, NJ
Professor – Rutgers University	
February 4, 2010 – High Performance Thermoplastics,	July 8, 2010 – 27 th Annual NJ SAMPE Golf
Larry Stanislow- Sales manager- Westlake Plastics	Tournament, Picatinny Arsenal, NJ

Notes The NJ Chapter sponsors a student chapter at Drexel University in Philadelphia.

OCTOBER MEETING

At the October meeting, Dr. Andrew Littlefield gave an excellent presentation entitled Development and Testing of Prestressed Carbon Fiber Composites Overwrapped Gun Tubes. The New Jersey Chapter wishes to thank Dr. Littlefield for the excellent presentation.

UPCOMING EVENTS

2010 SAMPE International Symposium and Exhibition, Washington State Convention Center, May 17 – 20, 2010, Seattle, WA.

The Seattle SAMPE Chapter is sponsoring the 2010 ISS&E.

2010 International SAMPE Technical Conference, Salt Palace Convention Center, Salt Lake City, UT October 11 – 14, 2010

The Utah Chapter is sponsoring the 2010 ISTC.





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ABSTRACT:

Ultraviolet light is used extensively in industrial applications to initiate polymerization of acrylate, epoxy, unsaturated rubbers, silicones and polyester resins. Applications include surface protection and modification, adhesive bonding both UV transparent and opaque materials, form in place gaskets, and fabrication of prototype parts. Advantages of the UV curing process are very low VOC generation during application and curing, reduced energy consumption, high processing speeds, lower waste generation and high performance properties. Examples of the different monomers and resins typically used to formulate UV curable products will be discussed. UV lamps systems used for curing including the latest developments in UV LED will be illustrated. End use examples in different market segments include printing and packaging, protective coatings for automotive parts, assembly adhesives for medical, electronic and industrial devices, wood finishing, and composite fabrication. Current and potential applications in the composites market will be discussed.

BIOGRAPHY:

Jim Wittig is the President of ACTEGA Radcure, a manufacturer of UV curable coatings and adhesives. Jim has 30 years experience in the formulation and application of UV products.





CORPORATE SPONSORSHIP

The New Jersey Chapter is inviting you and your company to be a Corporate Sponsor of the Chapter. By being a corporate sponsor, you and your company enables the chapter to continue its educational endeavors such as the Bridge Building Contest at the SAMPE Symposium and Exhibition and hold monthly technical meetings. The New Jersey Chapter sponsored the 2009 Fall Technical Conference with the Wichita Chapter in October 2009 in Wichita, KS. In addition, your contribution enables the chapter to publish the monthly newsletter, conduct one day seminars and sponsor international conferences and exhibitions. These activities have helped the chapter become one of the best chapters in SAMPE.

During the current fiscal year, the chapter has planned a variety of topics to be presented at our monthly meetings. These topics include: NDE of Multilayered Composites, Development and Testing of Prestressed Carbon Fiber Composite Overwrapped Gun Tubes, UV Curing of Polymers, PET Extrusion of Recycled Plastics for Railroad Ties and Bridge Beams and High Performance Thermoplastics. Also, the Chapter will hold its 27TH Annual Golf Tournament on July 8, 2010 at the Picatinny Arsenal Golf Course in New Jersey.

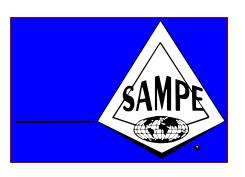
In addition, the Chapter has revised its newsletter to provide greater recognition of its sponsors. A sponsor's corner has been included for sponsors to highlight new product announcements, new business activities, processes and informative information concerning your company. Please submit any items for inclusion in the newsletter to me by email at sampejohn@yahoo.com.

The New Jersey Chapter of SAMPE is currently in the process of developing a web site. The web site is being planned as a service to the members to provide additional information including all Chapter Newsletters, the Chapter's History and By-laws.

Their will also be a page where the Chapter Sponsors can post expanded information concerning their company and product line. Additional information concerning this page will be available shortly.

If your company has any interesting topic or speaker for a future meeting, please notify me and the chapter will try to arrange the presentation in the near future.

If you have any questions, regarding you corporate sponsorship, please email me at sampejohn@yahoo.com.





INDUSTRY NEWS

McCLean Anderson, Milwaukee, WI

New to *McClean Anderson* is the Raptor - large scale, heavy-duty winder. The Raptor is custom designed for each customer. It has a modular Carriage Bed design (3m increments) to accommodate extremely long parts. It's custom design allows for the largest diameter filament wound products. McClean Anderson's Raptor offers many unique options from collapsible mandrels, part carts, and curing panels, to electronic slaved fiber tensioning systems, spray chop delivery, and sand systems. The Raptor is designed for 2 to 4 axes of unmatched computer controlled motion. The Raptor is digital servo control technology for ease of operation and comes with their user friendly, powerful windows based flexwind control that is customized per machine. Also included is McClean Anderson's highly advanced Composite Designer pattern development software. There web site is www.mccleananderson.com

NUSIL TECHNOLOGY, CARPINTERIA, CA

NuSil Technology a cutting-edge manufacturer of silicone-based materials for aerospace, aircraft, electronics and photonics industries, announces the launch of an extension to its line of adhesives and sealants. R-3930 is a fluorosilicone, one-part silicone elastomer designed to cure under ambient conditions. Tested alongside fuels, such as JP8 and DiEGME R-3930 is ideal for coating, sealing and bonding applications requiring fuel or solvent resistance. This unique elastomer is a room temperature

vulcanizing (RTV) silicone elastomer dispersed in tertbutyl (Tbutyl) acetate with a wide operating temperature range. Intended for spraying and dip-casting, this versatile material is uniquely designed for curing in thin elastomeric films. It is both easy to work with in the field and to apply on large surfaces, and the cure time may be accelerated with the slight addition of heat. R-3930 bonds aggressively to most surfaces without the need of a primer and is excellent for consideration as a coating to minimize ice adhesion. Theer web site is www.nusil.com





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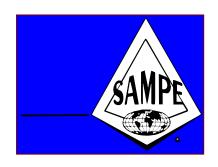
Raymond F. Wegman





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