February 2018

Society for the Advancement of

Material and Process Engineering



New Jersey Chapter

We are pleased to present the featured Guest Speaker for our February 1st Meeting:

Innovations in Composite Manufacturing /Automation

John Melilli, President Composite Automation, LLC

Abstract:

The need to reduce costs in the manufacture of composite parts has been the impetus for companies to develop novel technologies to achieve higher throughput, reduce waste, increase product quality and reduce reliance in human touch labor. These innovations span the gamut of the manufacturing floor with regard to composite manufacturing.

Mikrosam has launched an AFP machine with interchangeable heads that enable the processing of thermosets, dry fibers and thermoplastic insitu consolidation.

Spintech's Smartool is redefining how tooling costs can be dramatically reduced.

Cevotec's SAMBA patch technology machine came out of an Airbus program to disrupt the paradigm entirely using 2" patches to do additive manufacturing.

JETCAM's nesting and CrossTrack software automates the total material management component from receipt to finished part.

Movitherm's thermographic NDT changes the paradigm for the use of ultrasonics for detecting FOD, dis-bonds, voids, cracks, etc.

Biography

John Melilli is the President of Composite Automation, LLC which is a manufacturer's representative firm for multiple companies that provide solutions for composites processing. With over 35 years in the application of automation technologies in a variety of industries and over 14 years in composites, Mr. Melilli has the knowledge and experience to help both suppliers and customers to identify innovative solutions to challenging manufacturing processes in composites.

MEETING DETAILS

Place: Bridgewater Manor, Bridgewater, NJ; (908) 658-3000

Time: 5:45 – 8:30

Cost: \$20.00 at the door. Free for students. Cash, check and PayPal options are available. This meeting is open to all SAMPE members, spouses, guests and other interested parties. For reservations or questions, please contact Megan Casey at mbc872@gmail.com by noon Wednesday before the meeting. Meal options are available.

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

. .

February 2018

Society for the Advancement of

Material and Process Engineering

New Jersey Chapter



2017 – 2018 Meeting Schedule

September 7, 2017 – Akm Samsur Rahman, New York City Technology College

October 5, 2017 – Dan Kling, Foldstar Inc.

November 2, 2017 – Vinay Mishra, Dixie Chemical

December 7, 2017 – Steve Medlar, Rutgers Univ

December 11-14, 2017 - CAMX, Orlando FL, sponsored jointly by SAMPE and ACMA

February 1, 2018 – John Melilli, Composite Automation, LLC

March 1, 2018 – To be Announced

April 5, 2018 – Students Night

May 3, 2018 – To be Announced

May 21-24, 2018 – SAMPE Long Beach CA

June 2018 – Field trip – Date To be Announced

June 28, 2018 – 35th NJ SAMPE Golf Outing, Picatinny Arsenal



February 2018

Society for the Advancement of

Material and Process Engineering

New Jersey Chapter



Executive Board

CHAIR

Borys Schafran Evonik Corporation 973-929-8172 borys.schafran@evonik.com

TREASURER

Megan Casey Total Cray Valley 610-363-4117 mbc872@gmail.com

SECRETARY

Russell Caspe Gentex Corporation 570-282-8588 rcaspe@gentexcorp.com

PROGRAMS

Howard Kliger 732-469-7646 hskliger@comcast.net

MEMBERSHIP

Jane Arlauskas
Evonik Corporation
973-929-8165
jane.arlauskas@evonik.com

DIRECTOR

Louis A. Pilato
Pilato - Consulting
732-469-4057/fax: 732-764-9747
lapilato@optonline.net

LIAISON, SAMPE Technical Excellence Committee

Russell Caspe Gentex Corporation 570-282-8588 rcaspe@gentexcorp.com

ADVISOR-AT-LARGE

John F. Osterndorf 973-248-5885 jfo0956@gmail.com

LIAISON, Student and Young Professional Outreach

Joe Abrantes
Evonik Corporation
732-981-5246
joe.abrantes@evonik.com

February 2018

Society for the Advancement of

Material and Process Engineering



New Jersey Chapter

Past Chairs, SAMPE Fellows and Senior Honorary Members

CHAPTER CHAIRS

1977 – 1978 Raymond F. Wegman

1978 - 1979 William J. Russell

1979 – 1980 Michael Michno

1980 – 1981 Fred H. Ancker

1981 – 1982 Natalia Chujko

1982 – 1983 Robert J. Narsavage

1983 – 1984 Richard W. Reiter

1984 – 1985 Howard S. Kliger

1985 – 1986 John Burlage

1986 – 1987 John F. Osterndorf

1987 – 1988 Thomas J. Green

1988 – 1989 Harry S. Katz

1989 – 1990 Benjamin M. Rasmussen

1990 – 1991 Harry Tenney

1991 – 1993 Louis A. Pilato

1993 – 1994 John Burlage

1994 – 1995 Richard A. Walther

1995 – 1996 Frans van Antwerpen

1996 – 1997 Kathleen A. Froelich

1997 – 1998 Gail D. DiSalvo

1998 – 1999 Ash Chopra

1999 – 2013 Benjamin M. Rasmussen

2013 – 2018 Borys F. Schafran

SAMPE FELLOWS

Fred H. Ancker

Harry S. Katz

Dr. Howard S. Kliger

Dr. Frank K. Ko

Robert Pickney

Dr. Louis A. Pilato

Leonard Poveromo

Raymond F. Wegman

Charles Weizenecker

Dr. Carl H. Zweben

CHAPTER CHAIR EMERITUS

Benjamin M. Rasmussen

SENIOR HONORARY MEMBERS

Richard G. Adams

Gail DiSalvo

Edward A. Gallagher

Robert Golick

Harry Katz

Howard S. Kliger

Charles N. Muldrow

Louis A. Pilato

Benjamin M. Rasmussen

William D. Timmons

Raymond F. Wegman

Charles Weizenecker

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)

ISEC - 1994 (Parsippany)





February 2018

Society for the Advancement of

Material and Process Engineering

New Jersey Chapter



Chapter Sponsors

Airtech International, Inc.

Tony Constantino 5700 Skylab Road Huntington Beach, CA 95647 714-899-8100 Fax: 714-899-8179 tconstantino@airtechintl.com www.airtechintl.com

A&C Catalysts, Inc

Abe Goldstein 1600 W Blancke St Linden, NJ 07036 908-474-9393 agoldstein@ac-catalysts.com www.ac-catalysts.com

Ames Rubber Corporation

Ben Bordoloi 19 Ames Boulevard Hamburg, NJ 07419 Ben.bordoloi@amesrubber.com www.amesrubber.com

Bally Ribbon Mills

Dr. Amir Islam
23 North 7th Street
Bally, PA 19503
610-845-2211
amirislam@ballyribbon.com

Broadview Technologies, Inc.

Jason Tuerack
7-33 Amsterdam Street
Newark, NJ 07105
973-465-0077
jtuerack@broadview-tech.com
www.broadview-tech.com

Coast Line International

Patrick McMenanin 200 Dixon Ave Anityville, NY 1170 631-226-0500 patrickm@coast-lineintl.com

Composite Prototyping Center

Leonard Poveromo
121 Express Street
Plainview, NY 11803
631-875-2200
lpoveromo@compositepro.org
www.compositepro.org

Evonik Corporation

Borys Schafran 299 Jefferson Rd Parsippany, NJ 07054 973-929-8172 borys.schafran@evonik.com jayhawk.evonik.com

Fabric Development Inc.

Mary P. Shafer
1217 Mill Street
Quakertown, PA 18951
215-536-1420
mshafer@fabricdevelopment.com
www.fabricdevelopment.com

General Magnaplate

Edmund Aversenti 1331 US Route 1 Linden, NJ 07036 908-862-6200 eaversenti@magnaplate.com www.magnaplate.com

Gentex Corporation

Russell Caspe PO Box 315 Carbondale, PA 18407 570-282-8588 rcaspe@gentexcorp.com

IMR Test Labs

Bill DeLaurier 131 Woodsedge Drive Lansing, NY 14882 607-533-7000 sales@imrtest.com





February 2018

Society for the Advancement of

Material and Process Engineering

New Jersey Chapter



Chapter Sponsors (continued)

Northern Composites

Michael Leedie
102 Tide Mill Road
Hampton, NH 03842
860-550-3240
mleedie@northerncomposites.com
www.northerncomposites.com

Novoset LLC

Dr. Sajal Das 87 Main Street, Peapack, NJ 07977 908-470-4200 www.novoset.com

3HTi

Garry Hoffman 3000 Atrium Way #296, Mount Laurel, NJ 08054 609-953-2175 ghoffman@3hti.com www.3HTi.com

Technical Fibre Products Inc.

John Haaland 679 Mariaville Road Schenectady, NY 12306 518-280-8500 john.haaland@tfp-americas.com www.tfpglobal.com





February 2018

Society for the Advancement of

Material and Process Engineering





Technical Fibre Products (TFP) develops and manufactures high performance nonwoven materials. Our nonwovens find application in a wide variety of fields including surface engineering of composites, fire protection, thermal insulation, power storage and cryogenic super insulation. Our most popular Optimat, Optiveil, and Tecnofire ranges deliver properties including a superior quality surface finish, while providing functionality across areas spanning EMI shielding, electrical conductivity, fire protection, static dissipation and enhanced abrasion resistance.

At TFP, a key part of our ethos is working in partnership with our customers to develop solutions for their technically demanding challenges. Our expertise is drawn from an extensive knowledge of working with a wide range of polymers, particulates and speciality fibres. This experience, combined with the ultilisation of our in-house metal coated fibres production capability, ensures that we continue

our 30 year tradition of delivering customised material solutions for our customers.

At TFP we use a unique and proprietary wet-laid manufacturing process to manufacture our nonwovens. TFP's unique in-house metal coating capabilities offer the potential to coat individual fibres and particulates with a host of single and multi-layer metals and alloys. While all our materials share a common manufacturing process, a wealth of postprocessing options provides for an almost unlimited level of customization. This ranges from the form in which the material is supplied (rolls, sheets or custom shapes) to the secondary processing options available. We also offer extensive experience working with a broad range of fibre types, including quartz, silver coated nylon, silicon carbide, viscose, pure metal & metal alloys and welcome custom enquiries that involve these or other fibre options.

For information, please contact:

sampe

New Jersey

Technical Fibre Products Inc.

John Haaland 679 Mariaville Road Schenectady, NY 12306 518-280-8500

john.haaland@techfibres.com www.tfpglobal.com



