September 2013

Society for the Advancement of

Materials and Process Engineering

New Jersey Chapter

SAMPE

We are Pleased to Present the Featured Guest Speaker for our September 5th Meeting:

Natural Fiber Composites Louis A. Pilato

ABSTRACT

Strong consumer interest in "green technologies" such as bio-based monomers and natural fiber reinforcements are in vogue today. Research in Natural Fiber Composites has existed since the early 1900s but has not received much attention until late in the 1980s. Composite fiber component is primarily glass but can include natural fibers and are found in many consumer products: boats, skis, automobiles, and other materials. One of the goals of Natural Fiber Composites is to alleviate the need to use relatively costly glass fiber (~ \$2/lb.) due to high density (2.55g/cm3), dependence on nonrenewable sources and an energy intensive process. The auto and construction industries are leading the way into the use of Natural Fiber Composites for a variety of reasons such as

weight savings, less costly, use of a renewable source, ease of recycling, decreased abrasion of equipment, reduced irritation of workers due to air-borne glass dust, and biodegradability of components. More recently sports equipment and aircraft components areas are considering Natural Fiber Composites. Various natural fibers will be discussed and compared with glass fiber, suitable matrix resins, both thermoplastic and thermosetting, will considered as well as some of the challenges that remain in the full utilization of these renewable materials in the composites industry.

BIOGRAPHY

Dr. Louis Pilato is a member of the Society for the Advancement of Material and Process Engineering (SAMPE) and is one of the Directors of the NJ SAMPE Chapter He was installed as a Fellow of the Society in 2001. He is also a member of the American Chemical Society. Dr. Pilato consults in a variety of Chemical and Materials Science disciplines such as Resin Matrix Systems, Phenolic Resin Technology, and Nanotechnology. He has presented many SAMPE tutorials related to Nanotechnology and Resin Matrix Systems. He is the author of 4 books. The most recent book is titled, "Phenolic Resins: A Century of Progress," and was published in May, 2010.

MEETING DETAILS

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

Time: 5:45 – 8:30

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 jfo0956@gmail.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[.]



September 2013

Society for the Advancement of

Materials and Process Engineering

New Jersey Chapter



2013 – 2014 Meeting Schedule

September 5, 2013 – Natural Fiber Composites, Louis Pilato, Pilato Consulting

October 3, 2013 – Len Poveromo, Northrup

Grumman Corp

October 21 – 24, 2013 – 45th ISTC, Wichita, KS.

November 7, 2013 - TBD

December 6, 2012 – David Jhaveri, TFP Americas

February 6, 2014 – Jim Toth, Evonik Corp

March 6, 2014 – Deep Solanki, Structural Corp.

April 3, 2014 – TBD

May 1, 2014 – TBD

June 2-4, 2014 – 58th ISEE, Seattle WA

July, 2014 – 31st NJ SAMPE Golf Tournament, Picatinny Arsenal



September 2013

Society for the Advancement of

Materials and Process Engineering

New Jersey Chapter



CHAIRMAN

PROGRAM

Borys Schafran Evonik Degussa Corporation 973-929-8172/fax: 973-929-8161 <u>borys.schafran@evonik.com</u>

TREASURER John F. Osterndorf 973-248-5885 (cell) jfo0956@gmail.com

SECRETARY

Megan Casey Lonza Inc. 201-316-9489 Megan.casey@Lonza.com Howard Kliger 732-469-7646 hskliger@comcast.net

MEMBERSHIP

Jane Arlauskas Evonik Degussa Corporation 973-929-8165/fax 973-929-8161 jane.arlauskas@evonik.com

DIRECTORS

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





September 2013

Society for the Advancement of

Materials and Process Engineering

New Jersey Chapter

Past Chairmen, SAMPE Fellows and Senior Honorary Members

CHAPTER CHAIRMEN

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 <u> 1984 – 1985 Howard S. Kliger</u> 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

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

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:

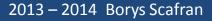
1990, 1991, 1992, 1993, 1995, 1996, 1997, 1998, 1999, 2000, 2001

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)



September 2013

Society for the Advancement of

Materials and Process Engineering

New Jersey Chapter



Chapter Sponsors

Airtech International, Inc.

Peter Grantham 5700 Skylab Road Huntington Beach, CA 95647 714-899-8100 Fax: 714-899-8179 pgrantham@airtechintl.com www.airtechintl.com

Curtiss-Wright IMR

Russell Shaffer 222 Cameron Dr Phillipsburg, NJ 08865 908-235-8767 rshaffer@curtisswright.com

Evonik Corporation Borys Schafran

299 Jefferson Rd Parsippany, NJ 07054 973-929-8172 Fax: 973-929-8161 borys.schafran@evonik.com www.evonik.com

Engineered Fibers Tech

Robert E. Evans 25 Brook Street Shelton, CT 06484 203-922-1810, X335 Fax: 203-922-1814 <u>efiberstec@aol.com</u> www.EFTfibers.com Fabric Development Inc. Mary P. Shafer 1217 Mill Street Quakertown, PA 18951 215-536-1420 mshafer@fabricdevelopment.com www.fabricdevelopment.com

Fiber-Line Inc.

Tony Constantino 3050 Campus Drive Hatfield, PA 19440 267-885-7144 tcconstantino@fiber-lineinc.com www.fiber-lineinc.com

General Magnaplate Edmund Aversenti 1331 US Route 1 Linden, NJ 07036 908-862-6200 Fax: 908-862-6110 eaversenti@magnaplate.com www.magnaplate.com

GTD Consulting

Gail DiSalvo 127 Rippling Brook Way Bernardsville, NJ 07924 908-953-0849 Fax: 908-766-6373 gail.disalvo@att.net

IMR Test Labs

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

September 2013

Society for the Advancement of

Materials and Process Engineering

New Jersey Chapter



SAMPE

Kenrich Petrochemicals

Salvatore J. Monte 140 East 22nd St., POB 32 Bayonne, NJ 07002 201-823-9000 Fax: 201-823-0691 sjmonte@4kenrich.com www.4kenrich.com

Loctite Corporation

Robert W. Bryan Business Dev Manager Henkel Corporation 32100 Stephenson Highway Madison Heights, MI 48071 248-577-5984 248-565-6191 robert.bryan@us.henkel.com www.loctite.com

Lonza Inc.

Megan Casey 25 Commerce Drive Allendale, NJ 07401 <u>megan.casey@lonza.com</u> www.lonza.com

Mektech Composites Inc. Aram Mekjian 40 Strawberry Hill Road Hillsdale, NJ 07642 201-666-4880 Fax: 201-666-4303 mekmail@prodigy.net

Northern Composite Michael Leedie 102 Tide Mill Road Hampton, NH 03842 860-550-3240 <u>mleedie@northerncomposites.com</u> www.northerncomposites.com

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

Saati Americas Corp Paul Cylenica 247 Rt 100 Somers, NY 10589 914-767-9333 pcylenica@saati.com www.saatiamericas.com

Stiles Machinery Inc Adam Lopuk 3965 44th Street SE Grand Rapids, MI 49512 Cell 336-906-1977 alopuk@stilesmachinery.com www.stilesmachinery.com

September 2013

Society for the Advancement of

Materials and Process Engineering

New Jersey Chapter

Spotlighting Local Chapter News



We announce our new officers and
chairs for the 2013-2014 season.Definition
been sl
are high
SampeChairman: Borys SchafranWe exp
future aTreasurer: John OsterndorfWe exp
future aMembership: Jane ArlauskasSecretary: Megan Casey

Program: Howard Kliger

Director: Louis Pilato

Ben Rassmusen, after surgery, has been slowly recuperating and his spirits are high. He continues to follow NJ Sampe activities.

We expect him to be back in the near future at one of our meetings.