



We are pleased to present the featured Guest Speaker for our May 4th Meeting:

An Overview of 3D Woven Textile for E-textiles and Composites Reinforcements

Amir Islam, Ph.D.

Bally Ribbon Mills
Bally PA

Abstract:

E-textiles may be defined as textiles with electronic properties. An E-textile is an application built within a textile. E-textiles are finding their use in wearable technology, sports and fitness markets, medical and health monitoring systems, sleep apnea monitoring systems, antenna applications, space, military, infotainment, fashion, and others. Many companies are working on wearable technology on a textile platform. Wearables cover textiles and accessories that

incorporate advanced electronic technologies. The integration of electronics requires a multidisciplinary approach.

This paper discusses various three dimensional (3D) fabrics, tapes, webbings, and 3D preforms for E-textiles and composite reinforcement applications.

Biography

Amir Islam has a Bachelor of Science in Textile Technology from the University of Calcutta, India, and a Post Graduation Degree in Textile Engineering from Japan. He has a Masters and a Ph.D. in Textiles from the University of Manchester, England on a Commonwealth Research Scholarship. He earned his Ph.D. in one year and nine months and he was invited by the Queen of England to Buckingham Palace.

He has 45 years of experience in textile industries, the last 25 years as Director of Research and Development at Bally Ribbon Mills. He designed, engineered and developed many new 3D textile composite structures for aerospace applications, NASA, medical textile products, E-textiles and industrial applications.

He has expertise on 3D weaves, 3D woven structures and methods of manufacturing. He has patents and presented many papers in national and international conferences. His papers have been published in various magazines and books.

MEETING DETAILS

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

Time: 5:45 – 8:30

Cost: \$20.00 Adv Registration; \$25.00 at Door; Students – Free
This meeting is open to all SAMPE members, spouses, guests, and other interested parties

Reservations 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:





2016 – 2017 Meeting Schedule

September 8, 2016 – Steve Medlar, Rutgers University

October 6, 2016 – Student Night, Presentations from Somerville High School

October 26 - 29, 2016 – CAMX, Anaheim CA, sponsored jointly by SAMPE and ACMA

November 3, 2016 – Ben Bordoloi, Ames Rubber Co.

December 1, 2016 – Paul Cylenica, SGL

February 2, 2017 – J.P. Masson, Nagase America Corp.

March 2, 2017 – Mike Jablon, Honeywell

April 6, 2017 – Student Night, NYU and Lehigh Univ Speakers Student

May 4, 2017 – Amir Islam, Bally Ribbon Mills

May 22-25, 2017 – SAMPE Seattle, Seattle WA

June 1, 2017 – Tour – New Tappan Zee Bridge

June 29, 2017 – 34th NJ SAMPE Golf Outing, Picatinny Arsenal

NEWSLETTER

May 2017

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General Magnaplate Corporation, Linden, New Jersey has been a supporter of NJ SAMPE since 1989. The “World Leader in providing Engineered Coatings solutions” has celebrated its 65th year in business. The company is instrumental in providing material engineering solutions to a variety of industries including food, packaging, oil/gas/fracking, military, energy, electronics and aerospace just to mention a few. Of note are the contributions to mission critical issues associated with the space program via JPL. On Apollo 13, the LEM’s fuel valve, coated with TUFRAM®, operated far beyond rated capacity and brought the astronauts home safely. General Magnaplate’s proprietary process, NEDOX®, is used as surface enhancement on all actuators of the International Space Station and, most recently, General Magnaplate coatings are used to provide wear and heat resistance for the Space X Dragon. The shaft and ‘cutter cups’ on the Mars Curiosity mission and the Mars Exploration Rover ‘decent-rate limiter’ are other examples of Magnaplate’s ties with space exploration.

General Magnaplate continues to be at the leading edge of engineered coatings by developing new surface enhancement solutions including advancements in nano-technologies and antimicrobial properties while being a one stop shop for all metal finishing needs. Edmund Aversenti, President/COO of General Magnaplate Corporation states “General Magnaplate is extremely proud of its relationship with NJ SAMPE. The organization over the years has been a valuable resource for keeping current on advancements and developments in the materials and processing fields. In addition, we have been given opportunities to give back to the community by sponsoring programs and giving tours of our facility”.



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