November 2016

Society for the Advancement of

Material and Process Engineering

New Jersey Chapter



We are pleased to present the featured Guest Speakers for our November 3rd Meeting:

FORMULATING LOW-SURFACE ENERGY NANO-COMPOSITE MATERIALS FOR SUPERIOR ICE-PHOBICITY APPLICATIONS

Ben Bordoloi, Ames Rubber Corp.

Abstract:

An understanding of the principles for formulating superior ice-phobic coatings will be presented. Materials investigated would include (I) low surface energy Polymers, eg. Silicones, Fluoro-silicones and Fluoro-elastomers, (II) various types of Fillers, eg. Silica, Polypropylene, Nano-PTFE and Graphene; (III) Cryoprotectants, eg. Glycerol and Polyvinyl Alcohol, and (IV) various coating types of VOC, Non-VOC and Solventless. Methodologies would include, high shear mixing, air-assisted spray coatings, viscosity measurements, AFM and SEM of coating surfaces, contact angle measurements, "Ice-Pin" push out test, and erosion test. Formulation strategy and some of the performance results will be discussed. These coatings find commercial applications in the aerospace industry.

<u>Biography</u>

Ben Bordoloi is a graduate of New York University – Tandon School of Engineering (formerly Polytechnic), where he did his Ph.D. (Polymer Sci. & Eng.). He also did his MBA from the University of California, Los Angeles. He was a Visiting Lecturer for 5 years at the Department of Materials Sci. & Eng, UCLA. His professional work experience included both consumer and healthcare industries over 25 years. These included Avery Dennison Corp. Pasadena, CA, Baxter Healthcare Corp, Deerfield, IL, Johnson & Johnson, Somerville, NJ. While he has been currently at Ames for about 3 years, he is also an entrepreneur, and his personal website (www.BordoloiBiotech.com) would give some further details.

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 <u>mbc872@gmail.com</u> 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.

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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 Celenica, SGL

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

March 2, 2017 – TBA

April 6, 2017 – Student Night, SAMPE at NYU Student Chapter and guests

May 4, 2017 – TBA

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

June 1, 2017 – Lab tour TBA

June 26, 2016 – 34th NJ SAMPE Golf Outing, Picatinny Arsenal

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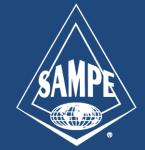
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SAMPE Chapter Service Excellence Award Winner: 2002, 2003, 2004, 2005, 2006 (award retired after 2006)

SAMPE Chapter Sponsored Conferences:

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Sponsor of the Month: Novoset LLC

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For information, please contact

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