# The Blue Ridge Chemist

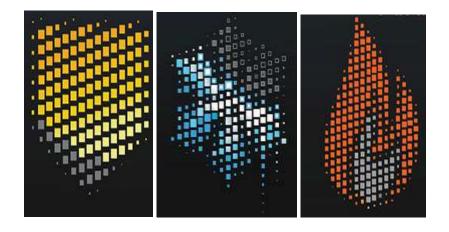
The Blue Ridge Chemist, Since 1947 the Official Local Section Publication of the Virginia Blue Ridge Section, American Chemical Society



**VOLUME LXIX** 

**September 13, 2016** 

No. 5



### Department of Chemistry and the College of Science at Virginia Tech Host the November Meeting

The VBRS thanks the Virginia Tech Chemistry Department and the Virginia Tech College of Science for their support of this meeting.

# VIRGINIA BLUE RIDGE SECTION AMERICAN CHEMICAL SOCIETY

# 679<sup>th</sup> SECTION MEETING Virginia Tech

## Tuesday, September 13, 2016

#### **PROGRAM:**

5:30-6:00 Social Time, Hahn Hall South Atrium 6:00-7:00 Dinner, Hahn Hall South Atrium 7:00-8:00 Lecture, 281 Davidson Hall

The social time with registration will take place in Hahn Hall South Atrium (next building north of Davidson Hall on West Campus Drive). Barbecue buffet dinner (with vegetarian entree option) is catered by Professional Catering of Blacksburg and is also in Hahn Hall South Atrium. The dinner is \$15.00, with students and retired ACS members being half price.

The lecture will take place in 281 Davidson Hall. Jennifer H. Lalli, President of NanoSonic, Inc. will give the lecture "Transitioning Multifunctional Materials into Dual-Use Products at NanoSonic". Dr. Lalli's presentation is intended for a general audience, including students at all levels. Reservations for the dinner must be made by THURSDAY, SEPTEMBER 8, SIX DAYS before the meeting, by contacting Paul Deck at 540-231-3493 (office and voice mail), or by e-mail to <a href="mailto:pdeck@vt.edu">pdeck@vt.edu</a>.

The Blue Ridge section is grateful for the financial support provided for this meeting by both the Department of Chemistry and the College of Science at Virginia Tech.

Dr. Jennifer H. Lalli

#### **President**

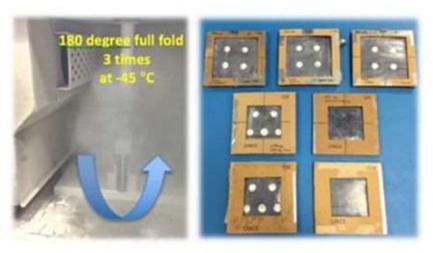
#### NanoSonic, Inc.



Dr. Lalli received her Ph.D. and M.S. in Polymer Chemistry from Virginia Tech. The emphasis of her dissertation was on metal complexing polymers and inorganic/organic hybrid thermally conductive nanocomposite adhesives. Prior to her doctoral work, Lalli developed novel, emulsion polymerized, pressure sensitive adhesives at Avery Dennison. At NanoSonic, her focus is on advanced polymers and functionalized nanoparticles to generate nanocomposites large-area, 3-D and self-assembled, She responsible for multifunctional structures. is Rubber<sup>TM</sup>, development of Metal Shape Memory-Metal Rubber<sup>TM</sup>. RadFab<sup>TM</sup>. and Rubber<sup>TM</sup> Thoraeus shielding As President, she directs NanoSonic's material materials. transition and platform integration with defense primes. She has more than 40 scientific publications, a patent on Metal Rubber<sup>TM</sup>, and has served as PI on 70 SBIR programs for NASA, DOD, DOE, NSF, NIH, and DARPA.

# Transitioning Multifunctional Materials into Dual-Use Products at NanoSonic

NanoSonic is a small business that designs, manufactures, and transitions multifunctional materials into products for military, space, and civilian applications. A current focus is on environmentally friendly yet flame-retardant, mechanically cryoflexible, radiation and EMI shielding, and self-healing materials. Located in Giles County's Wheatland Ecopark, roughly 15 miles west of Virginia Tech, NanoSonic has the unique opportunity to collaborate with the University. In this talk, Jennifer will provide an overview of NanoSonic's Metal Rubber™ and HybridSil® core product lines, each offering multiple properties that are inherently mutually exclusive. She will also provide perspective to new ACS scientists on the analytical tools and research experience acquired in graduate school that are frequently required in industry to bring new products to market.



NanoSonic's Cryogenically Flexible, Space Radiation Durable, Self-Healing Composites

# Virginia Blue Ridge Section elections are approaching: Are you interested in serving as an officer or on a committee?

Our section elections are held annually at the November meeting. Anyone interested in serving as an officer or on a committee should contact Kim Lane, the current section Chair *ktlane@radford.edu*. Officers and committees are as follows:

Chair

Chair Elect

Secretary

Treasurer

Councilor

Newsletter Editor

Recorder

**Awards Committee** 

Membership Committee

**Secondary Education Committee** 

**Public Relations Committee** 

National Chemistry Week Committee

For a full description of the offices and committees roles, please visit <a href="http://acs-vbrs.org/OJM-2005.pdf">http://acs-vbrs.org/OJM-2005.pdf</a>.

## **Upcoming meetings:**

### **Fall of 2016**

Oct 19 at Ferrum College: Laura Grochowski — Forensics

Nov 14 at Liberty University: Matt Brynteson — Lasers

### Spring of 2017

January at Hollins University

February at Roanoke College

March at the Roanoke Valley Governor's School

April at Radford University, with Awards and Poster Session.

The May 2017 meeting will be a tour – to be announced.

#### **Directions to the Virginia Tech Chemistry Department**

From I-81 follow US-460 West to Price's Fork Road and turn right, toward Downtown Blacksburg. Follow Price's Fork Road to West Campus Drive and turn right. The first three buildings on the left, about 1/4 mile down the hill, that are facing West Campus Drive are Hahn Hall North, Hahn Hall South, and Davidson Hall. Maps of campus and a parking map may be found at www.maps.vt.edu . Guests may park without a permit after 5 PM in C/G or F/S lots as long as they are not marked "24 hours." (Note that guests need a visitor permit to use angle parking along Drillfield Drive because those spaces are "24 hour" parking.) The closest useable parking lots (see the "Parking Map" at the above link) are the Hahn Lot F/S, Davidson Lot F/S, Wright House Lot F/S, and the large C/G lot between Price's Fork Road and Perry Street. The social hour and the dinner will be in Hahn Hall South and the presentation will be in 281 Davidson Hall. The southfacing (Drillfield-side) entrances to Davidson Hall are closed.

## Map of Virginia Tech

