



# SENIOR SCIENCE SOCIETY NEWSLETTER

Volume 7, No. 3  
Apr 2019

**Scott McGill  
Ecotone Inc.**

**20 May 2019, 6:45 P.M.  
Harford Community College  
2<sup>nd</sup> floor Darlington Hall**

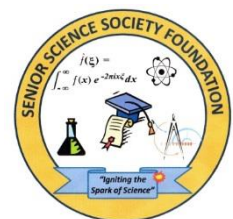


The next General Membership Meeting of the Senior Science Society will be held on Monday, 20 May 2019 in Darlington Hall on the Harford Community College campus. Join us on the 2<sup>nd</sup> floor lobby area at 6:45 PM for an informal “meet and greet” before we head into Room 210 at 7:15 for the start of the business meeting. The feature presentation will start shortly thereafter. All members, spouses, potential members, and students are invited.

Our speaker will be Scott McGill, President and CEO of Ecotone Inc. in Forest Hill. Mr. McGill will speak about ecological restoration project designs such as stream construction, stormwater pond retrofit, and wetland restoration. Harford County and regional examples will be discussed, such as the Plum Tree Run daylighting and headwaters restoration project.

## **SSS CHARTER REVISION**

At the November 2018 General Membership Meeting, the first SSS Charter revision since the onset of the Society was undertaken. The revision was necessary due to the reorganization of the officers of the Society, which replaced the obsolete stated duties of the Registrar with the newly-defined position of Secretary and established the position of Treasurer. The latter was necessary to maintain general purpose funds to purchase goods and services in support of the Society’s mission. The Charter revision also enabled the opportunity to formalize operational procedures that have matured since the official formation of the Society in November 2011. The revised charter was unanimously approved.



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## Charles Nietubicz receives this year's NMTC Visionary Award as Innovator

The Northeastern Maryland Technology Council (NMTC) recently awarded their 2019 Visionary Award in the category of Innovator to Charles (Charlie) Nietubicz, a current Director of the Senior Science Society (SSS) of Harford County. NMTC annually recognizes community volunteer efforts toward building a STEM-educated workforce at their Annual Gala, this year held at the Richlin Ballroom on 28 February.

An internationally acclaimed expert in high performance computing technology, Charlie has an extensive history supporting student learning, stretching back to the early 1980's, when he held programming classes at the Good Shepherd School in Perryville, through many years as a leader in the field while working at the Ballistic Research Laboratory/Army Research Laboratory, to his current volunteer work as Vice-President of the APG Discovery Center ([www.discovery.com](http://www.discovery.com)) and on the SSS Board of Directors.

Focusing on his work at the SSS, he provides both valuable leadership and guidance in establishing programs addressing our goal of "Igniting the Spark of Science" but also serves "in the field", providing numerous demonstrations primarily in the field of aerodynamics at elementary and middle school STEM events. Past SSS Visionary Awards winners include Dennis Hiebert, Rob Lieb, Deidre DeRoia, Bruce Burns, Greg Fox, Dick Schwanke, and Al Horst, underscoring the importance of SSS efforts to STEM learning our community. Congratulations once again to Charlie for his important role in this effort!



U.S. Army  
Photo by  
Dave  
McNally,  
ARL



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## In case you missed it ...

Most Senior Science Society General Membership Meetings feature a single topic and speaker(s). However, at the November 2018 meeting, we tried something new and with great success. As highlighted below and on the next, five SSS members gave 10 to 15 minutes each on modules not seen by most members.



Each week Greg Fox is at the Edgewood Boys and Girls Club doing a school year long program. It is operated like a “science club” with student regular participation required. Multiple topics are covered, as Greg explained in his presentation. One area demonstrated that the SSS meeting was computer programming using Scratch (from MIT Media Lab). Specific student projects including creating a video game built from scratch in Scratch.



Rob Lieb has recently expanded the Newton's Cradle tabletop demonstration to include more pieces for students to use. The original cradle is still in use, but requires frequent “tuning” to get the ball positioned just right.. Another apparatus has been added to the demo (on left side of photo) that shows the harmonics when the balls are on different length strings.





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## In case you missed it ... (cont.)

For many years a master of demonstrations on multiple topics has been Joe Domanico. He was a key developer in HCC's "drone technology" program. The use of VR goggles and rapidly improving electronic controls have significantly changed drone control in the past couple years as Joe is demonstrating.



Bob McKenzie has a demonstration called "Elephant Toothpaste". Bob mixes some hydrogen peroxide and yeast. Using potassium iodide as a catalyst, the hydrogen peroxide is decomposed. The soap that has been mixed in, then foams out the top of the container in a dramatic result.



Earlier this year the SSS list of demonstration modules got a major update in an effort lead by Bruce Burns then prepared and posted on the SSS website by Bruce Amrein. The listing may be viewed in either pdf or word format, for either computer or mobile viewing. Here Bruce Burns explains the process and his bridge building module.

