

SENIOR SCIENCE SOCIETY NEWSLETTER

Volume 4, No. 2 February 2016

The next General Membership Meeting of the Society will be held on Monday, 15 February 2016 at 7:00 PM at the Harford Community College's Chesapeake Center, Dining Hall South. We will begin with some light refreshments and a brief business meeting, followed by our guest speaker. The topic will be "Way More Than a Plumb Bob and a Tape Measure: Modern Metrology to Support Military Testing". The speaker will be Mr. Chris Cosgrove, Manager of the Metrology Group for SURVICE Engineering".

<u>Abstract</u>: Metrology can be defined as the science of measurement in support of engineering. Advances in technology and computing power have ushered in a considerable array of new metrology equipment and techniques. The speaker will overview basic metrology equipment, both contact and noncontact measurement devices, plus give examples of their use, especially in military testing. Engineering applications such as geometric dimensioning and tolerancing, reverse engineering, as well as rapid prototyping. will be covered.

SSS ACTIVITY CALENDAR - LATE WINTER 2016

(Check out the full SSS calendar of events at www.seniorsciencesociety.org)

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Date/Time	Location	Activity	Point of Contact
Feb 8, 7:30 a	Bel Air Middle School	Module Demo: "Mechanical Advantage"	Dick Schwanke
Feb 11, 5:00 p	Roye-Williams Elem. School	STEM Night: "Mechanical Advantage" & "Cataclips"	Al Horst
Feb 15, 7:00 p	HCC Chesapeake Center	General Membership Meeting (see above article)	Dick Schwanke
Feb 22, 7:30 a	Bel Air Middle School	Module Demo: "Momentum & Impulse"	Bruce Burns
Feb 25, 5:00 p	Richland Ballroom	NE MD Technology Council's Visionary Awards Banquet	Dick Schwanke
Feb 26, 5:00 p	Oak Grove Classical Christian School	OGCCS Science Night (demonstrations TBD)	Clarence Fry
Mar 9, 6:30 p	Edgewood Library	Module Demo: "How Things Fly"	Peter Plostins
Mar 15, 6:30 p	Fountain Green Elem. School	Module Demo: "The Egg and I"	Skip Albert



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SENIOR SCIENCE SOCIETY LEADS SESSIONS AT THE HARFORD COUNTY PUBLIC SCHOOLS IN-SERVICE PROFESSIONAL DEVELOPMENT DAY, 23 NOVEMBER 2015, AT PATTERSON MILL MIDDLE & HIGH SCHOOLS

[This article was condensed from Bruce Burn's after-action report to HCPS.]

First, let me say that the Senior Science Society appreciated the opportunity to participate in this event, and that we look forward to continuing our relationship in next year's event or whatever forum is chosen to further develop the knowledge base for teachers in science and engineering. We found the teachers that participated in our module sessions to be very motivated and very interested in what we had to offer. As an example, when we conducted the double engineering session covering bridging, internal combustion engines, and electricity, we included a short break at a logical stopping point roughly midway through the double session: every teacher returned for the second half ... none gave up!

On the other hand, the number of teachers participating in the event was disappointing to us. The numbers that signed up were less than we had hoped for, and only about 2/3 of those who signed up actually showed up for the presentations. We, as you do, recognize that the future bodes much increased emphasis on science in particularly elementary school education, and we'd like to do what we can to continue to offer educational programs to teachers. The way we view the future for elementary schools is that either new science teachers will need to be introduced to the elementary schools in a substantive way, or elementary teachers will need significant training to be able to succeed in meeting that future challenge. We realize that the elementary school teachers that signed up for our modules last month represented somewhere around 1% of those teachers, which could indicate that a new approach for science and engineering education for those teachers might be in the cards.

The two mathematics-related modules we offered were way undersubscribed ... one had to be cancelled, and the other, based on the actual participation, should have also been cancelled. I would like to suggest that the presentation of these modules should have been aligned with mathematics professional development program rather than with the science program, for I would expect better interest for these modules in that latter venue.

We are always glad to talk with you about our programs and the possibility to expand our efforts with teachers, so please keep us in mind for the future!