

## Of Special Interest

Look for the second public draft of NGSS later this fall for another round of public comment. Watch for updates at [www.nextgenscience.org/](http://www.nextgenscience.org/).

NSTA will be offering a series of webinars on the science and engineering practices throughout the year, go to [http://learningcenter.nsta.org/products/symposia\\_seminars/NGSS/webseminar.aspx](http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar.aspx) to register or watch the archive after the live events.



## Editor's Note

Welcome back to another school year, I hope everyone has had a wonderful summer and successful opening. This year promises lots of challenges between new evaluation systems, common core standards, STEM practices, the Framework for Science Education, and the final public comment period for the Next Generation Science Standards, and the release of the final version of the Next Generation Science Standards.

I had the opportunity to participate in a research program this summer called the Baltimore Excellence in STEM Teaching (BEST). This was a great experience, I highly recommend it to other teachers or other similar research experiences to reinvigorate your love of science and love of teaching.

My goal as editor of the e-rapper this year is to help lead you to resources and organizations in our state to help you incorporate all of these new initiatives into your classroom in a way that will help your students grow as lifelong learners and lovers of science.

Each issue I will focus on one of the science and engineering practices and try to give some ideas of ways that it can be applied to our classrooms.

Throughout the year if you have any suggestions for articles or would like to contribute to our newsletter please drop me an email. We are always looking for new people to get involved with the organization and one of the most rewarding aspects of teaching is sharing our successes with our colleagues.

I hope to meet many of you at our fall conference on October 19<sup>th</sup> at Urbana High School! Mark your calendars for a great day of sharing and consider submitting a proposal for a presentation.

Best Wishes,

Alison Hapka  
[ahapka@ccps.org](mailto:ahapka@ccps.org)  
Past President, MAST

## President's Message

While it is my hope that your summer has been full of relaxation and renewal, MAST is also getting ready for another school year. There are always feelings of excitement, anxiety, and sadness as summer ends and the school year starts.

With Labor Day over and September in full swing, it is time to think about how MAST can support you this year.

This year MAST plans to offer our science education community new resources and professional development opportunities to become even better science educators. We are constantly working on updating our website and creating a variety of resources for you as a science teacher. New this fall are FREE Webinar Series provided by NSTA concerning the science practices in the new NGSS. The first of this webinar series is taking place on September 11 from 6:30-8:00. Use the link located on the resources website to register through NSTA for these exciting and informative professional development opportunities. Continue to check throughout the fall semester to see how we are progressing at [www.emast.org](http://www.emast.org).

In cooperation with MSDE and the Maryland Science Supervisors

Association (MSSA) we are planning our annual fall conference for October 19, 2012 at Urbana High School in Frederick County. We are currently seeking proposals for presentations for our conference. This year's conference strands are STEM, 21<sup>st</sup> Century Science Classroom, and Environmental Literacy. If you have something great to share with other educators around the state please think about submitting a proposal for presenting.

New this year is a reformatting of our Mini-Grant and Awards program. If you are interested in applying for our \$500 Mini-Grants for your classroom, please go to our website and submit an application. Application Deadline is October 1, 2012. Mini-Grants will be awarded at our Fall Conference.

MAST wishes all of you a continued great start to the 2012-2013 school year. We hope to see many of you at this year's conference in October.

All the Best,

Carl Bilotta  
MAST President

## Save the Date!

Abstracts are being invited for presentation at the Scanning Microscopies 2013: Advanced Microscopy Technologies for Defense, Homeland Security, Forensic, Life, Environmental, and Industrial Sciences II **Special Session Microscopy for STEM Educators** to be held in Baltimore, MD April 29 – May 3, 2013

The session **Microscopy for STEM Educators** was initiated in 2012 with great success. Microscopy for STEM Educators is a general interest forum held with several speakers discussing their successful programs implementing microscopy in STEM education. In addition, a hands-on session is again planned with table-top microscopes. Abstract Due Date: 22 October 2012. For more information see [http://spie.org/app/program/index.cfm?fuseaction=conferencedetail&conference\\_id=1042518&event\\_id=1042005&list=1](http://spie.org/app/program/index.cfm?fuseaction=conferencedetail&conference_id=1042518&event_id=1042005&list=1) or contact Mary Satterfield, [Mary.Satterfield@nist.gov](mailto:Mary.Satterfield@nist.gov).

## MAST Mission Statement

The Maryland Association of Science Teachers (MAST), a local affiliate of the National Science Teachers Association, is a professional, non-profit organization dedicated to science education in the state of Maryland. It strives to make science accessible and enjoyable to the citizens of Maryland by promoting and supporting career education in science and technology, instruction for general science literacy, and science outreach programs in all geographic regions of Maryland.

### MAST PHILOSOPHY AND GOALS

The Maryland Association of Science Teachers, dedicated to scientific literacy, cares deeply about its mission and members engaged in science education.

Its members believe that science is a human endeavor employing careful observation and reasoning necessary for professional and personal problem solving and decision making in our increasingly more technological society. To support this MAST promotes science research, applied science, and science education as professional careers. It also understands that science literacy opens doors for all Marylanders to pursue alternative technology careers, and to understand and enjoy the world they live in.

To these ends, MAST has the following goals:

1) provide science educators at all academic levels in the state of Maryland with the opportunities for professional development

through the presentation and exchange of knowledge, strategies, and resources;

2) acknowledge the accomplishments of exemplary science teachers, students, and administrators;

3) encourage and utilize partnerships with business, professional organizations, and science resource centers;

4) broaden the base of support in MAST through increased membership throughout the five designated regions;

5) provide financial support for outstanding science-related educational programs.

## Fall Conference

Join us at the fall conference at Urbana High School at 3471 Campus Drive, Ijamsville, MD 21754. There are three strands this year: Pulling it All Together with STEM, Environmental Literacy in Maryland, and Science in the 21<sup>st</sup> Century Classroom. Registration is now available online at [www.emast.org](http://www.emast.org). We are looking for presenters and participants. Registration is \$20 for members. The schedule starts at 7:30 – 8:30 am with registration, networking, breakfast, and vendor displays, and ends with door prizes and wrap-up between 2:50 pm – 3:00 pm after a full day filled with a keynote address, three concurrent sessions, and a panel discussion on NGSS.

---

## Bookmark It!

### **Bio Digital Human**

This month's favorite website is actually an app you can add to your Google Chrome homepage. It is called Bio Digital Human, and it is a wonderful resource for biology or other life science classes to use to explore the human body, its structure, and its function. You can explore the body interactively within a fantastic graphical interface, dissect it to create custom cross sectional views to use in a presentation for students, or watch animations of the function of different parts of the body. And best of all, its free and runs well even on slower computers!

## A Good Read

Looking for a good read and want to improve your science content knowledge at the same time? How about Steve Ettlinger's "Twinkie, Deconstructed." Ettlinger describes his journey into the making of not just a Twinkie but of each of the ingredients that go into making a Twinkie. His writing style is light but informative. I found the descriptions of the processes used in the snack cake's production intriguing and at times surprising.

## Congratulations to the Maryland Nominations for the Presidential Awards for Excellence in Mathematics and Science Teaching

Last year nominations were accepted for science teachers of grades K-6. Congratulations to the three finalists who will be representing the state of Maryland! Good luck as you move forward in your application process!

**Ann Broeg**  
**Chevy Chase Elementary School**  
**Montgomery County**

**Timothy Emhoff**  
**Indian Head Elementary**  
**Charles County**

**Iesha Stevens**  
**Glenmount Elementary/ Middle School**  
**Baltimore City**



### **Bring The Zoo To You!**

Experience the wonder of wildlife by scheduling a ZOOMobile program from The Maryland Zoo in Baltimore! The ZOOMobile brings educational, entertaining, and interactive programs featuring live animals to you! ZOOMobile presentations cover a wide array of topics including endangered and threatened species, animal classification, habitat exploration, and more. Each ZOOMobile program includes an educational encounter with 3 to 4 animals. We offer 30 minute ZOOMobile programs for children ages 2 to 5, and 50 minute programs for children and adults ages 6 and above.

For more information about the ZOOMobile program, visit: <http://www.marylandzoo.org/edzoocation/outreach/>.

To schedule your ZOOMobile program, call (443) 552-5300, or e-mail [Outreach@marylandzoo.org](mailto:Outreach@marylandzoo.org). You can also schedule a ZOOMobile program by visiting: <http://www.marylandzoo.org/edzoocation/outreach/schedule-a-program/>.