

CONNECTICUT SCIENCE CONNECTION

July/August 2016

THE CONNECTICUT BUILDING A PRESENCE FOR SCIENCE NETWORK IS SUSTAINED THROUGH THE ADVOCACY OF THE CCAT, CONNECTICUT SCIENCE SUPERVISORS ASSOCIATION, AND THE CONNECTICUT SCIENCE TEACHERS ASSOCIATION

State Coordinator..David Lopath lopath@comcast.net
 List Moderator..Eloise Farmer eloisef302@gmail.com

NAMES AND E-MAIL ADDRESSES OF OUR POINTS OF CONTACT AND KEY LEADERS ARE NOT SHARED WITH ANY OTHER ENTITY

Resources

CSDE's science curriculum web site.

Visit the NGSS@NSTA Hub : IT now offers a dynamic version of the Next Generation Science Standards.. Nextgenscience.org

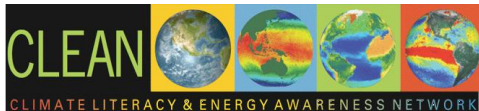
Subscribe to Green Teacher at <http://greenteacher.com/subscribe/>



Connecticut Green LEAF Schools

www.ctgreenleaf.org

Would you like a complete list of grants that has been provided by the National Science Teachers Association? To view this list, please visit: [NSTA GRANTS](#)



www.CLEANet.org has more than 640 units, lessons, videos, and diagrams While their focus is on Middle and High school, there are some middle school activities that would be appropriate for both. <http://serc.carleton.edu/k12/index.html>



You can find all our newsletters at the Just ASK a Teacher website

justaskateacher.com/

We are sharing assessment items for lessons most used by K-6 teachers. Please share your own assessment items with us at

matthewscc@umsl.edu



The CIC is growing and has two exciting new positions.

This was the CIC's 33rd year with 246 schools, over 700 teachers and nearly 17,000 students in grades K to 8 participating and learning in the CT Invention Convention program. We also sent 55 students to the National Invention Convention and Entrepreneurial Expo in Washington DC.

Next year will be even bigger and better and so we will need help to support teachers and enhance students' educational experience and better prepare them for success in school and their careers

beyond. Do you or someone you know want to join our team and help us as we help them in this life-changing experience?

Administrative Assistant

The Administrative Assistant will have overall responsibility for providing administrative support to CIC's Directors and Associate Directors.

Click on the link to find out more about this position.

To apply, please send a cover letter and resume to

office@ctinventionconvention.org

and put Administrative Assistant in the subject line of the email.

Associate Director of Outreach

The Associate Director of Outreach will assist the Outreach Director to identify and implement strategies addressing the top three areas of CIC program growth, namely, train teachers new to the CIC program, enhance the current CIC teachers' knowledge of the CIC program, and identify and recruit more schools to increase participation in underrepresented areas.

Click on the link to find out more about this position.

To apply, please send a cover letter and resume to

office@ctinventionconvention.org

and put Associate Director in the subject line of the email.

A great place to hang out! Hubble Hangouts can also be found on HubbleSite:

http://hubblesite.org/get_involved/hubble_hangouts/

IF YOU TEACH ABOUT MATTER, HERE IS A RESOURCE www.mysteryofmatter.net

The Mystery of Matter: Search for the Elements. The three-hour NSF-funded series CAN BE USED BY TEACHERS. (When you get to the site, click on **<For Teachers>** in the top menu bar.)

NEW MATERIALS AND PROJECTS FROM NASA!

<https://www.nasa.gov/audience/foreducators/index.html>

Are you a high school teacher looking to give your environmental class a great challenge? Check out the new Our Town Microgrid Challenge for great NGSS engineering connections beyond the usual “....compare and contrast renewables and nonrenewables.” What are microgrids and why would you want one? This unit leads students to understand and apply the answers to that question. The unit includes a multiple step process, with industry and policy readings, investigation of town maps and properties, consideration of emergency needs in the event that electric power is lost, and design of a system that will meet that need. Students hold a "public hearing" with their peers to discuss and fine-tune their ideas, and a capstone presentation to town leaders to discuss their solutions in a real-world context. The unit is supported with readings and background information, suggested "building" and energy "generator" cards, and a suggested process to lead students to an understanding of the unit question. This lesson is listed at CT Energy Education www.ctenergyeducation.com

Do you like uncovering evidence to solve mysteries? Do you like the idea of **UConn’s Kids Are Scientists & Engineers Too:** A whole series of summer activities. Check at <http://www.cac.uconn.edu/mnhcurrentcalendar.html>

Just a reminder! If you have not yet submitted your proposal to present at this year’s upcoming Connecticut Science Teachers Association Annual Conference the deadline, July 15, is fast approaching! We are still looking for presenters in all subject areas and level! Come show others the magic you do in your classroom everyday!

YOUR SCIENCE ORGANIZATIONS ARE CALLING ON YOU FOR YOUR EXPERTISE! SHARE WITH YOUR COLLEAGUES AND BECOMES PRESENTERS AT THE FALL CONFERENCE. READ THE SMALL PRINT BELOW TO SEE HOW TO GET INVOLVED.

Connecticut Science Educators Annual Conference
November 19, 2016
8 am - 3 pm
Hamden Middle School, 2623 Dixwell Avenue,
Hamden CT



Call for Presenters!
Do you have a great idea that you would like to share with K-12 educators?
Have you been making 3-D connections?
All disciplines and grade levels are accepted - Present alone or as a team!
First time presenters are welcome!
Sign up by July 15 to present at our Fall Conference.
CSTA-US.org
<http://bit.ly/1W5l3jz> - link for presenter's form
Email questions to Heather Toothaker heather.toothaker@new-haven.k12.ct.us
Diane Hart dhart@torrington.org
Louise McMinn lou.mcminn@gmail.com



Save the Date!

Best Practices in Sustainable Education Conference
October 28, 2016

At Goodwin College, East Hartford
This will be a “bring a team” event- we encourage you to include academic, health/nutrition, and facilities staff from your school/district,
More details to follow
Please send suggestions on what you would like to see at this year’s conference to kohl@easterntct.edu
We look forward to seeing you there!

THIS SUMMER< WHY NOT VISIT YOUR LOCAL NATURAL HISTORY MUSEUM AT UCONN? GREAT PROGRAMS!

Below is the list of titles with details on a few sample programs...go to the web site for details on dates and times for activities at the Connecticut State Museum of Natural History and Connecticut Archaeology Center at UConn. Advance registration with full payment to FOSA is required prior to trip. To request a registration form, contact David Colberg at david.colberg@uconn.edu or 860.486.5690.

SUMMER 2016 PROGRAMS:
<http://www.cac.uconn.edu/mnhcurrentcalendar.html>

Goddard Space Flight Center, Greenbelt, MD will host 1-day Educator Professional Development workshops to connect educators with NASA-unique research, technology and real-world STEM application. Workshops, free of charge, will include segments with NASA subject matter experts in science, engineering and technology. Participants will also collaborate on ways to use the information in classroom settings and will learn how to access NASA's unique work to spur cause and effect creative thinking among learners. Appropriate for educators, Gr. 5-12 Registration is on a first-come, first served basis. Max. participants (50) with waitlist
MUST BE A US CITIZEN TO ATTEND.
Register at:
<http://education.gsfc.nasa.gov/2016workshops/>
If you have additional questions about the workshops, contact, Kim West at (202) 861 1260, x5566

See the 2016 CASE Summer Bulletin V31, N2. In this issue:

- Rising to the Urban School Challenge: Helping Young Scientists Begin to Win
 - Connecticut Medal of Technology Awardee Cato T. Laurencin
 - News from the National Academies:
 - o Concussions: "An Urgent Need" for More Precise Information
 - o Role of Fatigue in Crash Risk for Bus, Truck Drivers
 - o Raising Awareness of Ethics in Engineering
 - o Estimating the Role of Climate Change in Extreme Weather Events Using "Extreme Event Attribution"
 - o Forging the Research Foundations for the Next-Generation Electric Grid
 - In Briefs: Science and Technology News from Around the State
- Please click on: http://www.ctcase.org/bulletin/31_2/31_2.pdf

For Administrators and Teachers...NEED MENTORS? EdConnective pairs teachers with a virtual coach who will analyze videos of them teaching and provides feedback, plans, twice weekly with webchats. No one but the teacher gets to see the results.

Bloom Board is an app that offers coaching sessions where mentors insert questions and comments on teaching videos supplied by the subject teacher. Learn more by clicking on: <http://slate.me/218adHk>

Cell City Mystery is a game you can use for middle school students learning about cell parts and function. <http://bit.ly/25F0hNe>

Would your Biology students have fun breeding dragons? Try it out at: <http://bit.ly/1R1iHR8>

For physics students and teachers...information about gravity waves. <http://bit.ly/1UBcZGL>

Problem-solving videos for high school Chemistry students, and lots of Chem information on this site: www.chemstem.com

Interest-generating phenomena in science at: <http://bit.ly/1oCgezn>

PROGRAMS FOR STUDENTS:

Use the coloring book craze to help students really look at nature! More than 500 coloring book pages of different natural categories are available to print out at: www.coloringnature.org

There may still be openings at the Green Street Girls in Science Summer Camp. For more information, contact Sarah McSorley at : 860-685-7871 gsac@wesleyan.edu :

.....
A program being piloted in 14 countries that accompany the PBS Design Squad series where student teams compete in design of engineering solutions. Go to <http://pbskids.org/designsquad>



Free, Online Access to **JASON Learning's Award-Winning Programs**

Available to Public School Educators in CT. Through generous support from the Connecticut Department of Economic and Community Development, JASON Learning is providing complimentary access to JASON's gated website to all public school educators in CT through August of 2017. Each comprehensive JASON program highlights a diverse group of STEM role models, their research and real-world phenomena to engage students and motivate deeper interest in learning. JASON's online platform includes reading selections, hands-on labs and field assignments, videos, digital simulations and learning games for students; and lesson plans, implementation tips, and a powerful classroom management tool for

educators. Live, interactive events throughout the year connect JASON participants with inspirational STEM role models. Educators will have access to a host of downloadable resources from all 7 JASON Learning curricula. Sign-up today by visiting www.jason.org : Logon and create teacher account.



JOIN YOUR STATE SCIENCE ORGANIZATIONS AND SHARE YOUR EXPERTISE. WE ALL LEARN FROM ONE ANOTHER AND SUPPORT THE ADVANCEMENT OF SCIENCE EDUCATION IN CONNECTICUT. GO TO THE CONNECTICUT SCIENCE TEACHERS ASSOCIATION WEBSITE <https://www.csta-us.org/>

WHY JOIN JUST ONE GROUP? TEACHER LEADERS AT ALL LEVELS ARE GREAT CANDIDATES TO JOIN THE CONNECTICUT SCIENCE SUPERVISORS ASSOCIATION! LEARN HOW TO SUPPORT YOUR COLLEAGUES AND BE A LEADER IN YOUR SCHOOL! JOIN CSSA AT [HTTP://WWW.CSSAONLINE.ORG/](http://www.cssaonline.org/)



What Is Science Matters? Science Matters is an initiative by the National Science Teachers Association (NSTA) to bring content, news, and information that supports quality science education to parents and teachers nationwide. Science Matters builds on the success of the Building a Presence for Science program, first launched in 1997 as an e-networking initiative to assist teachers of science with professional development opportunities. Building a Presence for Science—now Science Matters—reaches readers in 34 states and the District of Columbia. Why does Science Matter? Science is critical to understanding the world around us. Most Americans feel that they received a good education and that their children will as well. Unfortunately, not many are aware that international tests show that American students are simply not performing well in science when compared to students in other countries. Many students (and their parents!) believe that science is irrelevant to their lives. Innovation leads to new products and processes that sustain our economy, and this innovation depends on a solid knowledge base in science, math, and engineering. All jobs of the future will require a basic understanding of math and science. The most recent ten year employment projections by the U.S. Labor Department show that of the 20 fastest growing occupations projected for 2014, 15 of them require significant mathematics or science preparation to successfully compete for a job. This is why Science Matters. Quality learning experiences in the sciences—starting at an early age—are critical to science literacy and our future workforce. Feel free to publish this information in school newsletters and bulletins, and share it with other parents, teachers, and administrators.