CONFERENCE PREVIEW

# 

AREA CONFERENCE ON SCIENCE EDUCATION

**NOVEMBER 12-14, 2015** 

REVOLUTIONARY SCIENCE















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touch a real (plastinated) human brain.

Visit www.fi.edu for more information.



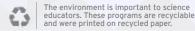
## "I want to geek out with my science teacher friends from around the country!"

"As a department chair and coordinator of a medical STEM program at an urban girls school I am always searching for resources on a budget. The NSTA conference is a treasure trove of ideas, resources, and contacts."

"I love the exhibit hall swag but mostly I need more confidence with NGSS."

"I am the only science teacher in my district attending this year. It's my responsibility to bring back great ideas and best practices to share with my district."

"I am really excited to learn about flipped classrooms, STEM, and implementing NGSS in my classroom!"



## PHILADELPHIA SPEAKERS

#### **KEYNOTE SPEAKER**

#### Good News on Energy and the Environment: The Fruits of STEM Education



#### Richard B. Alley

Evan Pugh Professor of Geosciences, and Associate, Earth and Environmental Systems Institute, Penn State, University Park, Pa.

Richard Alley is Evan Pugh Professor of Geosciences and associate of the Earth and Environmental Systems Institute at Penn State. He has traveled from Antarctica to Greenland to help learn the history of Earth's climate and to study the great ice sheets to aid in prediction of future changes in climate and sea level.

With more than 240 scientific publications, Richard has been asked to provide advice to the highest levels of government, and has been recognized with numerous awards, including election to the National

Academy of Sciences (U.S.) and the Royal Society (U.K.), the Arthur L. Day Prize, the Tyler Prize for Environmental Achievement, The Heinz Award, the American Geophysical Union's Roger Revelle Medal, the Seligman Crystal of the International Glaciological Society, and more.

Richard hosted the recent PBS miniseries *Earth: The Operators' Manual*, and has been compared to a cross between Woody Allen and Carl Sagan for his enthusiastic efforts to communicate the excitement and importance of the science to everyone.

#### FEATURED PRESENTATION

Implementing NGSS: Opening the Black Box





**Stephen L. Pruitt @DrSPruitt** Senior Vice President for Content, Research and Development, Achieve, Inc., Washington, D.C.

Join Stephen as he shares ideas regarding the development of instruction using all the different components and tools of *NGSS*. There will be a focus on using phenomena as a method to plan instruction on how knowledge from all disciplines helps students to fully understand that phenomena and apply it to new phenomena. For the past four years, Stephen has been leading the development of the *NGSS*. Between 2003 and 2010, he held various roles at the Georgia Department of Education, culminating with him being named chief of staff

to the state school superintendent. He also served on the National Academies of Science's Committee on Conceptual Framework for New Science Education Standards, which developed the *Framework*.

Check out more than 400 sessions and other events with the Philadelphia Session Browser/Personal Scheduler (www.nsta.org/phillybrowser).

#### FEATURED PRESENTATION

#### Scientific Literacy and the Survival of Our Species



#### Damon C. Bradley

DSP Technology Group Leader, NASA Goddard Space Flight Center, Greenbelt, Md.

Damon Bradley is a research engineer at the NASA Goddard Space Flight Center. In 2008 he founded the Digital Signal Processing Technology Group within the Instrument Electronics Development Branch at NASA Goddard. The group has recently received the NASA Applied Engineering Technology Directorate Win New Work Award, having achieved 10 Internal Research and Development wins over a four-year period with only five group members.

Damon will share his own experiences growing up in the dangerous neighborhoods of South Philadelphia, and how, through learning discipline and hard work from his family, he became a research engineer at NASA. From these experiences, he will present some ideas for keeping students and adults engaged and helping to raise the overall scientific consciousness of American society...and why this is imperative for our own survival.

#### **STRAND** Revolutionizing Engineering for the Future

Engineering recognizes and defines problems posed around human needs and wants. Engineering solutions are designs that require the application of disciplinary core ideas (physical, life, Earth/environmental, space, engineering, and technology). By focusing on engineering, teachers can assist students with developing skills in critical thinking, creativity, and science and engineering practices. This strand will provide participants with a deeper knowledge of the teaching and learning practices for the application of engineering (reflected in both the NGSS and/or state standards), as well as techniques and strategies to better infuse engineering concepts into the classroom.

#### **EVENING SPEAKER**

#### An Evening of STEM, Energy, and Hip-Hop Presented by Master Scientist Grand Hank



**Tyraine "Grand Hank" Ragsdale** @ **Grandhank** Grandmaster of Science and President, Grand Hank Productions, Inc., Philadelphia, Pa.

This high-energy, interactive presentation will provide you with tools and strategies on how to use exciting STEM and energy demonstrations combined with the superpower of hip-hop music to pique the interest of "hard-to-reach" and even "harder-to-interest" students. This creative out-of-the-box approach will show you firsthand how to use music and movement to turn students on to STEM and energy.

This special session is presented by internationally renowned, award-winning Master Scientist and Rap Educator Grand Hank,

whose engaging multimedia production garners praise by teachers and students globally. Tyraine Ragsdale (aka Grand Hank) is a former research chemist for the Johnson & Johnson Family of Companies. Grand Hank cofounded the *Science of Philadelphia* and *Science Lab of Grand Hank* television series in collaboration with The School District of Philadelphia's PSTV Network.

#### FEATURED PRESENTATION

#### Promoting Disciplinary Literacy in Science



Donyall D. Dickey @DonyallD

Chief Academic Support Officer, The School District of Philadelphia

Donyall Dickey was named chief academic support officer of The School District of Philadelphia in 2014. His professional experience includes serving at every level—as an elementary teacher, high school teacher, and middle school assistant principal and principal before serving as an assistant superintendent responsible for leading a preK–12 network of 30 schools.

An authority on curriculum, instruction, organizational development, and administration of schools, Donyall's ideas for closing the achievement gap and accelerating learning are used in schools

across the nation, making the goals of academic achievement attainable for millions of children. During his talk, Donyall will explore a research-driven strategy and next generation tools for integrating literacy skills into daily science instruction for grades 6–12.

#### **STRAND** Integrating Literacy Strategies to Revolutionize Science Instruction

The CCSS highlights the need for literacy at all grade levels in science and technical subjects. By integrating literacy skills in science, students are able to construct strong content knowledge, communicate effectively, and comprehend and critique scientific works. This strand will demonstrate how science supports literacy and literacy supports science, what strategies can be utilized that support common cognitive processes in literacy and science, and why teachers should incorporate best practices in literacy.

#### FEATURED PRESENTATION

#### Beyond Googling-Building the Conditions for Structured Inquiry



#### Chris Lehmann @chrislehmann

Founding Principal, Science Leadership Academy, Philadelphia

Chris Lehmann is the founding principal of the Science Leadership Academy, an inquiry-driven, project-based, 1:1 laptop school in Philadelphia that is considered to be one of the pioneers of the School 2.0 movement nationally and internationally. During his talk, Chris will discuss how we've become aware of how inquiry is a process. The five core values of Inquiry, Research, Collaboration, Presentation, and Reflection are at the heart of the inquiry process...and it is an iterative process that we engage in. Also at the heart of the inquiry process is that the person engaging in the inquiry—the learner—actually cares about the questions they are asking.

Chris is coeditor of *What School Leaders Need to Know About Digital Technologies and Social Media* and author of the education blog "Practical Theory."

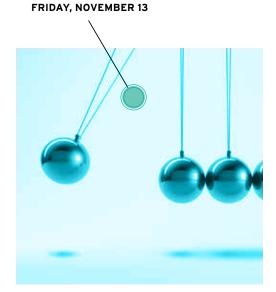
#### STRAND Technology: Teaching Revolutionary Science in the Digital Age

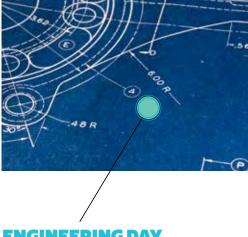
Every day, students are spending countless hours engaged with digital technology outside of the classroom. We need to revolutionize the classroom culture by including the use of digital technology in innovative and creative ways. This strand will address the challenges that teachers experience with utilizing digital technologies in the classroom as well as strategies for meeting and overcoming these challenges in order to achieve successful learning experiences.

(	SAMPLE CONFERENCE SCHEDULE				Ą			
Make your own conference schedule using the Philadelphia Session Browser/Personal Scheduler (www.nsta.org/phillybrowser). Browse events by day, format, subject, grade level, conference strand, sponsor, or keyword. Please note that the conference runs Thursday through Saturday, November 12–14.				Earth and Space Science	Engineering and Technology	nformal Science Education	PRESENTATION	<b>МО</b> ВКЅНОР
	Thu., 8:00–9:00 AM—STEM Is Elementary: Engaging Students with	Life Science	Physical Science	m.	•	=	Ь	•
	Engineering Investigations  Thu., 12:30–1:30 PM—How Is a Scientist Like a Poet? Connecting					•	•	
	Literacy and Science  Thu., 2:00–3:00 PM— Developing Engineers Through Children's Literature				•			•
	Thu., 3:30–4:00 PM—Using Math Manipulatives for Creating Models to Introduce or Reinforce Life Science Concepts	•					•	
ntary	Fri., 8:00–9:00 AM—Power Your Classrooms with STEM Energy		•				•	
Elementary	Fri., 11:00 AM–12 Noon—Let's Get Physical—From Force and Friction to Water and Weather		•					•
	Fri., 2:00–3:00 PM—Water Science for Elementary Students			•			•	
	Sat., 8:00–9:00 AM—Science Comes Alive in Stories, Video, E-Books: Integrating STEM, Literacy, Creativity, and Media	•					•	
	Sat., 9:30–10:30 AM—Create Your Own NASA Portal to <i>NGSS</i> with NASA Wavelength			•				•
	Sat., 12:30-1:30 PM—Texting and Walking					•		•
	Thu., 8:00–9:00 AM—Inquiry in Action: Identify Liquids by Their Physical Properties		•					•
	Thu., 12:30–1:30 PM—Photosynthesis Through Inquiry	•					•	
	Thu., 2:00–3:00 PM—Spark Students' Curiosity with Chemistry!		•				•	
	Thu., 3:30–4:30 PM—Facilitating a Successful Science and Engineering Fair					•	•	
Level	Fri., 8:00–9:00 AM—Data-based Science in Middle School	•						•
Middle Level	Fri., 9:30–10:30 AM—Coral Reefs: Fragile Wonders Under Threat			•			•	
Mic	Fri., 3:30–4:30 PM—Game On! Using Game Design to Engage Students in Natural Science and Literacy					•	•	
	Fri., 5:00–6:00 PM—Literacy Approaches Enrich and Extend STEM at St. Ann School				•			•
	Sat., 8:30–9:00 AM—Earth and Mars: Evidence of Tectonic Movement on Other Planets			•			•	
	Sat., 9:30–10:30 AM—Building Underwater Robots (ROVs) in the Classroom				•		•	
	Thu., 8:00–9:00 AM—Simulate STEM Online Through Virtual Clinical Trials					•	•	
	Thu., 12:30-1:30 PM—Climate Change			•			•	
	Thu., 2:00–3:00 PM—Redefining HIV/AIDS Education Using Molecular Science–based Curricula				•			•
lege	Thu., 3:30–4:30 PM—An Interactive Exploration of Hurricane-associated Storm Surge Using Google Earth			•				•
II-Col	Thu., 5:00–6:00 PM—Teaching Chemical Reactions Through a Variety of Modalities		•					•
High School-College	Fri., 8:00–9:00 AM— Mitosis Lab Instruction Using Smartphones and Tablets	•					•	
High	Fri., 9:30–10:30 AM—Chytrid and Frogs: Ecology or Immunology?	•					•	
	Sat., 8:00–9:00 AM—Reinforce STEM with Medical Mysteries Web Adventures					•	•	
	Sat., 9:30–10:30 AM—Inventing Photography: Making Pictures and Measuring Light				•		•	
	Sat., 12:30–1:30 PM—Experiencing Online Simulations in Physics		•				•	

## PHILADELPHIA SPECIAL EVENTS

#### **PHYSICS DAY**





ENGINEERING DAY FRIDAY, NOVEMBER 13

#### CHEMISTRY DAY FRIDAY, NOVEMBER 13





### the Philadelphia conference...

STARTS

NOVEMBER 12

a 8.00 AM



NOVEMBER 14 **a** 1:30 PM

## EDUCATIONAL TRIPS

From America's first urban refuge to some of the best museums in the country, Philadelphia has it all! Visit www.nsta.org/phillybrowser for complete descriptions of these off-site educational trips and to purchase tickets. (Tickets Required)

#### **Urban Wildlife Refuge (T-1)**

Date: Thursday, November 12, 12:30-3:30 PM Ticket Price: \$22 advance; \$27 on-site

John Heinz National Wildlife Refuge at Tinicum, America's first urban refuge, was established in 1972 for the purpose of preserving, restoring, and developing the natural area known as Tinicum Marsh, to promote environmental education and to provide visitors with an opportunity to study wildlife in its natural habitat. Participants will hike on refuge trails with a walk leader identifying plants and animals, and learn the history of the location with an emphasis on its urban setting. The refuge EE specialist will be on hand to discuss the urban EE program and the variety of resources that are available to teachers.

*Note:* Participants must be able to walk considerable distances. Be sure to wear comfortable hiking shoes and dress for being outdoors.

## Dinosaurs, Butterflies, Mummies, and Reptiles: Visit One of America's Oldest Natural History Museums (T-2)

Date: Thursday, November 12, 12:45-3:15 PM Ticket Price: \$35 advance; \$40 on-site

Founded in 1812, the Academy of Natural Sciences of Drexel University is a leading natural history museum dedicated to advancing research, education, and public engagement in biodiversity and environmental science. Visitors to the Academy have the opportunity to get face-to-face with towering dinosaurs, meet live animals, and explore a tropical garden filled with live butterflies. Participants will visit Dinosaur Hall; see dioramas showcasing animals indigenous to North America, Africa, and Asia; see a real mummy in Egyptian Hall; visit a live butterfly garden and the "Outside In," a children's nature museum; as well as view the newest exhibit—"Reptiles: The Beautiful and the Deadly."







-Photo courtesy of The Franklin Institute

#### Visit a 19th-Century Victorian Natural History Museum (T-3)

Date: Thursday, November 12, 12:45-3:15 PM Ticket Price: \$42 advance; \$47 on-site

The Wagner Free Institute of Science is a Victorian natural history museum and educational institution dedicated to providing free public education in science. A highlight of our visit to the Wagner's 19th-century exhibit hall is the Saber-Toothed Cat Type Fossil, discovered in 1866 on a Wagner-sponsored expedition to Florida. This two-hour guided tour will include a presentation in the historic lecture hall, highlights of the building and collections, and time to explore the museum gallery with light refreshments provided. The exhibit hall is on the second floor of the building, so stairs are unavoidable at the Wagner. For more information, visit www.wagnerfreeinstitute.org.

## Visit to Fairmount Water Works, America's First Major Urban Water Supply System (F-1)

Date: Friday, November 13, 9:45-11:45 AM Ticket Price: \$18 advance; \$23 on-site

Designed and constructed to provide safe clean drinking water to a city on the cusp of remarkable growth, the Fairmount Water Works is a National Historic Landmark, a Civil Engineering Landmark, and a National Mechanical Engineering Landmark. This is the place to go for promoting and sharing new concepts in urban-related water projects recognized for innovation and sustainability. On this trip, participants will learn about the new three-year watershed curriculum project; take a tour of the facility, including the lab; and go behind the scenes for a tour of the pool area and other areas not accessible to the general public.

## University of the Sciences: Where Health Care and Science Converge (F-2)

Date: Friday, November 13, 10:15 AM-3:30 PM Ticket Price: \$10 advance, by preregistration only

The mission of University of the Sciences in Philadelphia is to educate students to become leaders and innovators in the sciences, the health professions, and emerging related disciplines. We invite you to join us on our campus for lunch and to tour our research and education facilities, see our research instrumentation in action, and hear about the programs and majors we offer. We'll then visit a variety of laboratories to see and use a wide range of sophisticated laboratory equipment (high-end microscopy, NMR, Mass-Spec, etc.) and learn about undergraduate research opportunities at University of the Sciences. *Note:* Group will meet to walk as group to trolley. Trolley fare is \$2.25 each way.

#### Storm Water Management: How the Natural and Human-made Environments Interact (F-3)

Date: Friday, November 13, 12 Noon-4:45 PM Ticket Price: \$43 advance; \$48 on-site

This educational trip has three parts—a nature walk, an indoor lecture, and a tour of several sites' storm water projects. First, we'll visit Tacony Creek Park, a narrow natural urban refuge along Tacony Creek in Philadelphia, and take a stream-monitoring walk, relating water quality to what is going on in the surrounding landscape. Participants will do stream monitoring, such as collecting algae, determining dissolved oxygen, determining how fast the creek is flowing, and other water chemistry tests. After the stream-monitoring walk, we'll head inside Friends Hospital to learn more about storm water runoff, invasive plants, macro-invertebrates, wasteful water usage and riparian buffers, and local agencies working with watershed education. We'll then board a bus to visit "The Big Green Block," a coalition of local nonprofits and community groups working on storm water projects that are designed to manage runoff in an urban setting. *Note:* Wear waterproof boots! We will be getting into the (shallow) stream to do stream monitoring. This trip will take place rain or shine.

### Learn About Climate Change at One of America's Oldest Science Museums (F-4)

Date: Friday, November 13, 12:45-3:45 PM Ticket Price: \$35 advance; \$40 on-site

Founded in honor of America's first scientist, Benjamin Franklin, The Franklin Institute is one of the oldest and premier centers of science education and development in the country. This trip includes a private tour of the "Changing Earth" exhibit, led by The Franklin Institute's environmental scientist Raluca Ellis. Attendees will get a chance to try out the 20+ interactive activities in the exhibit, and learn about the way our Earth has always been changing and the role that humans play within it. Participants will also take part in a 40-minute hands-on workshop developed for the Climate & Urban Systems Partnership that explores community-level solutions to local climate change impacts. For more information, visit www.cuspproject.org and www.fi.edu.



-Photo courtesy of Wagner Free Institute of Science

## SHORT COURSES

All short courses are filled on a first-come, first-served basis, so act now! For complete descriptions and to purchase tickets, visit www.nsta.org/phillybrowser. (Tickets Required)

#### Meeting the CCSS and NGSS Through Outdoor Studies (SC-1)

Date: Thursday, November 12, 1:00-4:00 PM Ticket Price: \$45 advance; \$50 on-site

Turn the outdoors into a hands-on laboratory...where students can learn for the rest of their lives. Emphasis in this short course will be placed on presenting science in a way that helps students learn science concepts and the inquiry process through using common organisms. The methods shared are designed to foster the type of teaching and learning proposed in STEM, as well as the *Common Core State Standards* and *Next Generation Science Standards*. A wealth of more than 150 labs, projects, and inquiry ideas using organisms common to most environments (flies, ants, dandelions, beetles, spiders, grasses, etc.) will be presented. Science reading and writing activities will be presented along with numerous resource books. Take home a CD with resources.

#### Argumentation in the Secondary Classroom (SC-2)

Date: Thursday, November 12, 1:00-4:30 PM Ticket Price: \$20 advance; \$25 on-site

This short course will explore argumentation and argument-driven inquiry (ADI) as a new type of lab instruction for the science classroom. ADI provides a more authentic lab instruction while giving students the opportunity to engage in the practices of science, such as scientific thinking. Participants will experience an ADI activity and then examine it as a teaching practice. They will also explore how to scaffold argumentation activities for their students as they begin to introduce this practice into their classrooms. Bring materials to record notes and ideas.

## Phenomenon-Based Learning: Fun, Hands-On Cooperative Learning of Science and ELA (SC-3)

Date: Friday, November 13, 2:00-6:00 PM Ticket Price: \$75 advance; \$80 on-site

Experience the kind of learning that propelled Finland to international leadership in education—not by memorizing facts but by using scientific exploration, discovery, and literacy. Phenomenon-Based Learning (PBL) promotes both science practices and content knowledge, while also developing literacy skills. With PBL, you teach broader concepts and useful thinking and performance skills (as with the *NGSS* and *CCSS*) rather than asking students to simply memorize facts and formulas. Participants will engage in hands-on activities and will leave with a copy of one of the NSTA Press® PBL books along with one or two of the fascinating gizmos that go with the book.



—Photo courtesy of Bob Krist for the Philadelphia Convention & Visitors Bureau

## GRADUATE CREDIT OPPORTUNITY

Graduate Credit Sponsored by Shippensburg University

Philadelphia conference attendees can earn one graduate-level credit in professional development through Shippensburg University, part of the Pennsylvania State System of Higher Education. Costs include \$15 application fee and a total of \$150 in tuition and fees for one (1) graduate-level credit. For additional information, including registration and payment instructions, please visit <a href="https://www.ship.edu/pcde/nsta/philadelphia">www.ship.edu/pcde/nsta/philadelphia</a> or visit the PSTA Booth at the conference. <a href="https://www.ship.edu/pcde/nsta/philadelphia">Note:</a> Credit is by pass/fail option only.

For complete information, visit www.ship.edu/pcde/nsta/philadelphia.

# PHILADELPHIA CONFERENCE COMMITTEE LEADERS

#### **Ambra Hook**

Conference Chairperson STEM Educator Hill Freedman World Academy Philadelphia, Pa. ahook@philasd.org

#### **Christine Anne Royce**

Program Coordinator Chair and Professor, Dept. of Teacher Education Shippensburg University Shippensburg, Pa. caroyce@aol.com

#### **Margaret M. Monahan**

Local Arrangements Coordinator School-based Teacher Leader and Science Educator The School District of Philadelphia Philadelphia, Pa.

mmonahan@philasd.org

VISIT NSTA'S SCIENCE STORE

#### **STORE HOURS:**

Wednesday 4:00-7:00 PM

Thursday 7:30 AM-5:30 PM
Friday 7:30 AM-5:30 PM
Saturday 8:00 AM-12:30 PM

- Award-winning books filled with best practices, science content, teaching tips, and lesson plans.
- T-shirts, totes, and other science gifts to take back to your classroom.
- All attendees get member pricing—20% off all NSTA Press® products.



## NSTA PRESS SESSIONS IN PHILADELPHIA

NSTA Press® books offer new classroom ideas and standards-based strategies, from Earth science to nanoscience and from preK to college. Join NSTA Press authors for these sessions linked to the topics of their books. For details, visit us online at www.nsta.org/phillybrowser.

## PHILADELPHIA EXHIBITORS

#### Exhibitors as of press date.

3D Molecular Designs

The Academy of Natural Sciences of Drexel University

Accelerate Learning-STEMscopes

Activate Learning

Adam Equipment Inc.

Aldon Corp.

American Chemical Society

Amplify

ANATOMY IN CLAY® Learning System

Animalearn

Arbor Scientific

Bedford, Freeman & Worth

Bio-Rad Laboratories, Inc.

Cape Cod Sea Camps

Carolina Biological Supply Co.

Carolina Curriculum

Chemglass Life Sciences

The Cornell Lab of Ornithology

CPO Science/School Specialty

Delta Education/School Specialty

Dinah-Might Adventures, LP

Educational Innovations, Inc.

Edvotek Inc.

Enovative Technologies, LLC

ExploreLearning

Fisher Science Education

Flinn Scientific, Inc.

The Franklin Institute

Frey Scientific/School Specialty

Grand Classroom, Inc.

It's About Time

Kendall Hunt Publishing Co.

Lakeshore Learning Materials

LaMotte Co.

MakerBot

The Markerboard People, Inc.

Minerals Education Coalition

The MiniOne™ Electrophoresis

Nasco

NGSS@NSTA

NOAA Office of Education

Nutrients for Life Foundation

OHAUS Corp.

PASCO scientific

Penn State STEM Outreach: Center for Science and the Schools

Penn State World Campus of The Pennsylvania State University

Pennsylvania Earth Science Teachers Association

Pitsco Education

Project Learning Tree

Renaissance Learning, Inc.

School Specialty

Science First®/STARLAB®

SeaWorld Parks & Entertainment,

inc.

Shell Science Lab Challenge

Simulation Curriculum

Society for Science & the Public

Southern Science Supply

Swift Optical Instruments

Texas Instruments

Toshiba/NSTA ExploraVision

University of the Sciences in

Philadelphia

Vernier Software & Technology

Virginia Commonwealth

University/Life Sciences
Western Governors University

With more than 150 of the leading science education companies and organizations in the world, the NSTA Exhibit Hall has the newest products to show and share with educators.

#### **EXHIBIT HOURS**

Thu., Nov. 12 11:00 AM-5:00 PM Fri., Nov. 13 12 Noon-2:00 PM Sat., Nov. 14 9:00 AM-12 Noon

#### **EXCLUSIVE EXHIBIT HALL HOURS:**

Thu. 11:00 AM–12:30 PM Fri. 12 Noon–2:00 PM Sat. 10:30 AM–12 Noon

#### **EXHIBIT LOCATION**

The exhibits are located in Hall A of the Pennsylvania Convention Center.

#### www.nsta.org/phillyvirtualshow

Preview and create your own list of Philadelphia exhibitors before the conference using this link.



-Photo courtesy of Jacob Slaton

## REGISTRATION AND TRAVEL





The fastest way to register 24 hours a day—register online at www.nsta.org/confreg with a credit card (see rates on next page).



Fax your registration form\* with purchase order information to 703-243-3924.



Mail your registration form\* and payment to:

NSTA Conference Department PO Box 90214 Washington, DC 20090-0214

\* Registration form is available as a PDF at www.nsta.org/confreg.



#### HOUSING

#### Philadelphia Housing Deadline: Oct. 12, 2015 www.nsta.org/phillyhousing

Make your hotel reservations now and save! NSTA has negotiated special discounted room rates with hotels near the Pennsylvania Convention Center.



Visit the website listed above and have your credit card and arrival/departure information ready.



Call 877-352-6710 (toll free) or 801-505-4611 (international) between 7:00 AM and 6:00 PM Mountain Time, Monday—Friday. Be prepared to provide all the information on the housing form\*\*.



Mail CHECKS ONLY—
Download housing form\*\* and mail with check (one form per room request) to:

Do not mail form to NSTA. Orchid Event Solutions—NSTA/Philadelphia 175 South West Temple, Suite 30 Salt Lake City, UT 84101

\*\*Housing form is available as a PDF at www.nsta.org/phillyhousing.





NSTA has made arrangements with several major airlines to offer discounted fares to NSTA conference attendees. For complete details on these discounts as well as the best way to get around town, visit:

www.nsta.org/phillytravel

#### PHILADELPHIA PRICE LIST

	EARLYBIRD	ADVANCE	ON-SITE
	SEPT. 25	OCT. 16	After OCT. 16
FULL REGISTRATION			
NSTA Member	\$180	\$190	\$225
Affiliate members***	\$180	\$190	\$225
Nonmember	\$275	\$285	\$315
Retired NSTA Member	\$125	\$125	\$150
Full-time Student	\$90	\$100	\$120
ONE DAY ONLY (THU OR FRI)			
Nonstudent (member or nonmember)	\$160	\$165	\$185
Full-time Student	\$65	\$70	\$85
ONE DAY ONLY (SAT)			
Nonstudent (member or nonmember)	\$95	\$100	\$110
Full-time Student	\$35	\$45	\$65
NONTEACHING SPOUSE/GUEST	\$85	\$90	\$110

Save on your registration fees by taking advantage of special earlybird and advance rates! Also, become an NSTA member and save \$90-\$95 on your registration fees!

For a description of the categories listed above, please visit www.nsta.org/confreg.

#### \*\*\*Affiliate members include:

- AAPT Members (American Association of Physics Teachers)
- ACS Members (American Chemical Society)
- ASEE Members (American Society for Engineering Education)
- PSTA Members (Pennsylvania Science Teachers Association)



FOR INFORMATION AND UPDATES, VISIT, www.nsta.org/nashville

