

CONFERENCE  
PREVIEW

**ATLANTA**  
MARCH 15-18  
**2018**

Science  
on  
My  
Mind



**NSTA**  
**NATIONAL**  
**CONFERENCE**

#NSTA18

**NSTA** National  
Science  
Teachers  
Association

# BACKYARD WILDERNESS

Sneak  
Peek

Special 3D Screening  
Georgia Aquarium  
Thursday, March 15, 2018

Register: [hhmi.org/backyardwilderness](http://hhmi.org/backyardwilderness)

An  
**SK Films**  
Release

hhmi | Tangled  
Bank Studios

ARISE MEDIA

ARCHIPELAGO  
FILMS

## Movie Nights

Presented by hhmi | BiolInteractive

# THE FARTHEST VOYAGER IN SPACE

Special Screening  
Georgia World Congress Center  
Friday, March 16, 2018

Register: [hhmi.org/farthest](http://hhmi.org/farthest)

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iffb  
IRISH FILM BOARD

Crossing | the Line  
Productions

**“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!”**



The environment is important to science educators. These programs are recyclable and were printed on recycled paper.

**– PAST NSTA CONFERENCE ATTENDEES**

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## SPONSORS





Follow your favorite speaker on Twitter! See our featured speakers' Twitter handles on these pages or search on #NSTA18.

## Keynote Speaker



### Teaching Through Adversity: Facing Challenges and Making a Difference

**Ron Clark** /// @ronclarkacademy

Founder of The Ron Clark Academy, Atlanta, Ga.

A 2000 Disney American Teacher of the Year awardee, Ron Clark will share his journey from teaching in a low-wealth rural area in North Carolina to the inner-city streets of Harlem in New York City. Ron will use stories from his experiences with his students and examples of award-winning projects they conducted to show how to motivate and inspire disinterested students. In 2006, he founded

The Ron Clark Academy, an inner-city school serving students from across metro Atlanta. The privately funded institution is unique for its innovative teaching methods and curriculum based on worldwide travel. Each year the students, grades 5–8, apply their in-class lessons to international adventures. He has also authored several books, including *The Essential 55: An Award-Winning Educator's Rules for Discovering the Successful Student in Every Child*.

#### FEATURED PRESENTATION

### 3-D Science Assessment: How Do You Still Make Construction a Priority?



**Stephen Pruitt** /// @DrSPruitt

Commissioner of Education, Kentucky Board of Education

Before being tapped as commissioner for Kentucky, Stephen Pruitt served as senior vice president at Achieve, Inc. During his tenure with Achieve, Stephen coordinated the development of the *Next Generation Science Standards*. He began his career as a high school chemistry teacher in Georgia, where he taught for 12 years. In 2003, he joined the Georgia Department of Education as program manager for Science. Until 2010, he held various roles in the agency, culminating with him being named chief of staff to the state School Superintendent, coordinating the work of the agency.

#### STRAND

#### Focusing On Evidence of 3-D Learning

States continue to develop and adopt standards that build on a three-dimensional approach, which calls on students to use disciplinary core ideas, science and engineering practices, and crosscutting concepts to explain real-world phenomena and solve authentic problems. Three-dimensional learning allows students to connect science to their everyday lives and helps prepare them for future careers. This approach is fully realized only when instruction leads to tangible evidence of three-dimensional learning through authentic student products. This strand will help teachers, whether they are 3-D novices or experts, expand their understanding of three-dimensional teaching, learning, and assessment. Sessions in this strand will target participants with a beginning, intermediate, or advanced level of familiarity with three-dimensional learning.

## FEATURED PRESENTATION

## Science Is to STEM as Coffee Is to Starbucks: Real World, Relevant, and Grounds for the Perfect Integration



**Jo Anne Vasquez** /// @stemlessons

1996–1997 NSTA President, and STEM Education Consultant and Professional Learning Provider, Rocks to Rainbows STEM Education Consulting, LLC, Gilbert, Ariz.

Science provides the main “ingredient” to help students learn about the world around them—to answer questions, solve problems, and construct explanations. Science is the anchor for developing interdisciplinary STEM instruction. Join Jo Anne to explore together how easy it is to use science as the main ingredient in the STEM instructional recipe. Jo Anne’s various job titles include classroom teacher, district science specialist for Mesa Public Schools, adjunct professor of science education at Arizona State University, and director of professional development and outreach at ASU’s Center for Research on Education in Science, Mathematics, Engineering and Technology (CRESMET). Currently, she is a STEM education consultant.

## STRAND

### Imagining Science as the Foundation for STEM

STEM education has become a priority for many states as we seek to provide today’s students with the real-world, innovative skills that they will need to be successful in tomorrow’s world. STEM instruction that builds on the foundation of core science ideas provides students with opportunities that equip them to make sense of the world in which they live, hone their critical-thinking skills, and spark their sense of innovation.

## FEATURED PRESENTATION

## Engaging All Students in Science



**Okhee Lee** /// @Lee0116

Professor of Childhood Education, Steinhardt School of Culture, Education, and Human Development, New York University

There is broad consensus on the vision of academically rigorous science learning with all students to be ready for college and careers in STEM fields. This vision coincides with the rapidly growing student diversity in the nation...hence, “all standards, all students.” As the NGSS begin to take hold in schools and classrooms across the nation, it is critically important that science educators are prepared for classroom implementation. Okhee will present NGSS-focused instructional materials for diverse student groups, including English language learners.

## STRAND

### Reflecting On Access for All Students

Research has identified the unique challenges of a number of underserved groups, including students from urban and rural areas, English language learners, students with low socioeconomic status, those with special needs, gifted and talented students, and students from diverse cultural backgrounds. Cultivating a culture of equity and inclusion for all students not only aligns with the NSTA mission statement and the vision put forth by *A Framework for K–12 Science Education*, but also prepares students for future career opportunities in a global society

## FEATURED PRESENTATION

# Reframing Reading as an Inquiry Practice of Science



## Cynthia L. Greenleaf

Co-Director, Strategic Literacy Initiative, WestEd, Oakland, Calif.

What if science teachers did not have to choose between engaging students in science practices and building their literacy skills? Cynthia's talk will offer compelling reasons to read in science classes, as well as science-supportive ways to do so. She will show examples of curriculum and videos of science classrooms that illustrate how reframing reading as an investigation can help students gain both science and literacy practices. Cynthia has co-authored the books *Leading for Literacy: A Reading Apprenticeship Approach* and *Reading for Understanding*.

## STRAND

### Comprehending the Role of Literacy in Science

A great number of personal and societal issues require citizens to draw upon a foundation of scientific knowledge, technological understanding of problem solving, and the ability to design scientific solutions to obtain, evaluate, and communicate information in order to make informed decisions. Engaging ALL students in science, beginning in the early years, is the way to develop students' skills in thinking creatively, expressing themselves, and investigating their world. As college- and career-ready students investigate natural phenomena, they should be able to communicate their argument-driven claims based on data-driven evidences. Science core ideas can be developed by using current technology and media to create, refine, and collaborate through reading, writing, listening, and speaking. This strand will allow educators to become advocates of literacy in preK–12 science and engineering, to see the connections between science and literacy, and to learn literacy strategies that encompass active student engagement.

## MARY C. McCURDY LECTURE

# Cultivating Every Child's Curiosity in the Natural World



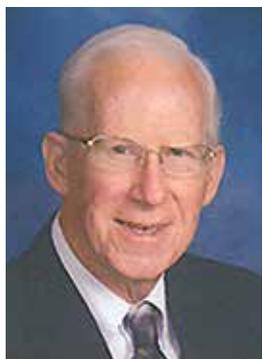
## Carla Zembal-Saul /// @czem

The Kahn Professor of STEM Education, Penn State, University Park, Pa.

Young children are naturally curious about how the world works and are capable of sophisticated thinking and reasoning. In the age of an ambitious framework and the *Next Generation Science Standards*, there is a compelling focus on young children—nurturing their wonder about phenomena and equipping them to engage in scientific discourse and practices for investigating the natural world. Carla will share the approaches that elementary teachers are using to leverage children's natural curiosity in early grades to support three-dimensional learning in science. Special attention will be given to approaches intended to engage English language learners. A former middle school science teacher with a background in biology, Carla is co-author of the book, *What's Your Evidence? Engaging K–5 Students in Constructing Explanations in Science*.

## ROBERT H. CARLETON LECTURE

## My Teaching Career—The Good, the Bad, the Ugly

**Edward Ortleb**

1978–1979 NSTA President and Science Consultant, Saint Louis, Mo.

Join Ed for highlights of his teaching career as an elementary teacher, science supervisor, adjunct university professor, and textbook author. He will take attendees on a trip down memory lane with the comical and not-so-comical events of his wondrous 40 years in education. For decades, Ed has lectured, taught, and written prolifically on science education. His many roles include classroom teaching at the primary and intermediate levels, model teaching, curriculum leadership positions, university faculty member, author, and science education consultant. He has written over 100 publications for teachers and students, including textbooks for major publishing companies along with authoring or co-authoring eight science research articles that appeared in juried publications.

## NSTA/ASE HONORS EXCHANGE LECTURE

## Literacy and Success in Science

**Linda Needham** /// @NeedhamL56

Chair, The Association for Science Education (ASE), Herts, U.K.

A native of Leeds, West Yorkshire, Linda Needham is chair of The Association for Science Education in the United Kingdom. She will address the universal issue facing science teachers everywhere of too much lesson plan content (schemes of work in England) and too little time, as well as the emphasis on developing mathematical and literacy skills to ensure student success in science examinations. She will share ideas to strengthen students' use of literacy to make them better scientists. Linda holds a degree in biological sciences from The University of Lancaster and a post-graduate certificate in education from Loughborough University. She also is a Chartered Science Teacher (CSciTeach), a professional recognition for excellence in science teaching and learning.

*NSTA wishes to thank The Association for Science Education (ASE) for sponsoring this speaker.*

## PAUL F-BRANDWEIN LECTURE

### Citizen Science: How Ordinary People Are Changing the Face of Discovery



**Caren Cooper** /// @CoopSciScoop

Associate Professor of Forestry and Environmental Resources, North Carolina State University, Raleigh; and Assistant Head, Biodiversity Research Lab, North Carolina Museum of Natural Sciences, Raleigh

Around the world, in fields ranging from astronomy to zoology, millions of people are choosing to participate in the scientific process through citizen science. In schools, citizen science can help prepare young people for future STEM career paths and, as important, to become well-rounded adults in which science is a lifelong hobby and a form of civic engagement. Citizen science challenges old notions about who can conduct research, where knowledge is acquired, and even how solutions to some of our biggest societal problems might emerge. An ecologist with broad interest in conservation and natural resource management, Caren has authored the book *Citizen Science: How Ordinary People Are Changing the Face of Discovery*.

*NSTA wishes to thank Brandwein Institute for sponsoring this speaker.*

## AGU-NESTA SPONSORED LECTURE

### Chasing Coral Bleaching: A Present and Growing Ecological Disaster



**C. Mark Eakin** /// @MarkEakin

Coordinator, NOAA Coral Reef Watch, National Oceanic and Atmospheric Administration, Silver Spring, Md.

Coral reefs have shown us that climate change is impacting nature and people now—it's not just some far-off problem we can worry about later. Mass coral bleaching is only a 35-year-old problem and it has been increasing in frequency and severity; a gruesome picture painted during the recent three-year global coral bleaching event. The focus of this talk will be on describing this growing problem and its haunting future while attempting to leave you hopeful that we still can save coral reefs before they are all gone. NOAA resources will be shared to understand this essential marine ecosystem, how we study them, and how we can help save them. We'll also explore a new film, *Chasing Coral*, that takes students—and everyone else—on a journey to document and understand coral reefs and the problems they face.

*NSTA wishes to thank the American Geophysical Union and the National Earth Science Teachers Association for sponsoring this speaker.*

## Community Connections Forums

The Community Connections Forums build awareness of the abundance of existing high-quality out-of-school (informal) science education methods, resources, and opportunities available to enhance science teaching and learning. Both out-of-school and in-school science educators meet and interact to share best practices in informal science, learn about exciting collaborations happening among informal and formal science organizations, network with colleagues, and dialogue around ideas and innovations. Informal organizations participating in the Community Connections Forums include zoos, museums, media, after-school programs, universities outreach, and others that provide or support out-of-school science education.

Thursday, 3:30–4:30 PM	Exploring Strategies for Culture-Inclusive Student Engagement ( <i>see speaker on facing page</i> )
Friday, 10:00 AM–12 Noon	Featured Presentation and Panel <i>Spare Parts: Re-Inventing Engineering Education for the 21st Century</i> ( <i>see details below</i> )
Friday, 12:30–2:30 PM	Community Connections Share-a-Thon
Saturday, 12:30–2:30 PM	Learn How to Better Advocate for Science and Science Education

### COMMUNITY CONNECTIONS FEATURED PRESENTATION AND PANEL

## Spare Parts: Re-Inventing Engineering Education for the 21st Century



**Fredi Lajvardi** /// @falconmaster

Nationally Recognized STEM Educator and Subject of the Critically Acclaimed Documentary, *Underwater Dreams*, and Major Motion Picture, *Spare Parts*

Fredi Lajvardi will open this two-hour featured presentation and panel with an engaging story about how he led a group of high school teenagers to achieve the impossible—defeating leading universities in an underwater robotics competition. Then we will hear from engineering education pioneer Woodie Flowers, who co-founded FIRST Robotics Competition along with Dean Kamen. Completing our panel will be Craig Forest, founder of the acclaimed Georgia Tech Invention Studio;

Lonnie Johnson, former NASA spacecraft engineer and inventor of the Super-Soaker; and Danielle Newman, executive director of Kell Robotics. The moderator will be Ed Barker, the 2011 NSTA Faraday Award recipient.

Honored with numerous awards for his spirited passion for teaching, Fredi continues to serve as a prominent advocate about the importance of STEM education nationwide. With humor and compassion, Fredi brings audiences on his inspiring journey, illustrating the need to embrace diversity and invest in people to help others realize their potential. His incredible real-life tale equips you with encouragement to maximize your own potential and to work together to solve complex problems.

## Exploring Strategies for Culture-Inclusive Student Engagement



### Eric Jolly

President and Chief Executive Officer, The Saint Paul & Minnesota Community Foundations

This session will aid educators by exploring strategies for uncovering students' natural curiosity and joy in learning. Eric Jolly will examine language metaphor and cultural issues that can open STEM disciplines to all students. In his role as president and chief executive officer of The Saint Paul & Minnesota Community Foundations, Eric continues his lifelong work to educate, elevate, and give voice to people in his communities. Eric began leading the foundations in August 2015 and has declared his intention to create a philanthropic arc to serve donors at all stages of life who are committed to strengthening their communities. He was appointed by President Obama to the Institute of Museum and Library Services board and he is a life member of the Society for Advancement of Chicanos and Native Americans in Science.

# CALLING ALL MIDDLE SCHOOL EDUCATORS

Friday, March 16, 2018 | 10:15 AM–4:30 PM  
Rooms A311–314, A411/412b, GWCC

*\*MUST BE REGISTERED FOR THE CONFERENCE TO ATTEND\**

Join us for a special “Meet Me in the Middle Day,” designed just for middle school educators, at **NSTA’s 2018 National Conference in Atlanta!**

The day’s events will include a networking session, more than a dozen presentations specifically for middle school educators, and an afternoon share-a-thon featuring more than 100 presenters. You’ll walk away with ideas you can put to use in your classroom next week!

Organized by the National Middle Level Science Teachers Association (NMLSTA)

Sponsored by



#NSTA18

[www.nsta.org/Atlanta](http://www.nsta.org/Atlanta)



Attend for a chance to win a variety of incredible door prizes!

# ELEMENTARY EXTRAVAGANZA

**Friday, March 16, 2018**

8:00–10:00 AM • Exhibit Hall B-1  
GWCC

- Hands-on activities
- Preview science trade books
- Learn about award and grant programs
- Walk away full of ideas and arms filled with materials
- Door prizes and refreshments
- 100+ presenters

Sponsored by:



Organizations participating in the Elementary Extravaganza include the Association of Presidential Awardees in Science Teaching, the Council for Elementary Science International, the NSTA Committee on Preschool–Elementary Science Teaching, *Science & Children* authors and reviewers, and the Society of Elementary Presidential Awardees.



## FIRST NSTA CONFERENCE?

### First-Timer Conference Attendees' Orientation

Thursday, March 15, 8:00–9:00 AM  
B102, Georgia World Congress Center



Join NSTA Board and Council members for this session for conference first-timers and those who haven't come for a while. Get tips on navigating and how to make the most of the amazing opportunities!

[www.nsta.org/atlanta](http://www.nsta.org/atlanta)



# The Best Place to Explore Three-Dimensional Teaching and Learning

Take a deep dive into the *Next Generation Science Standards (NGSS)* with two special events free to all conference attendees!

## NGSS@NSTA Forum

**Friday, March 16 • Maple C, South Tower, Omni at CNN Center**

This year's NGSS@NSTA Forum focuses on instructional materials. The opening session describes tools you can use to evaluate resources and then there are six separate sessions highlighting instructional units designed to address 3-D standards. Participate in one or more presentations:

- 8:00–9:00 AM—Looking for NGSS-Focused Instructional Materials?
- 9:30–10:30 AM—What's the Matter with Addie, and What Should We Do with CRISPR? Next Generation Storylines That Connect Science to Student Interests and Concerns
- 11:00 AM–12 Noon—A Model-Based Educational Resource for High School Biology
- 12:30–1:30 PM—Disruptions in Ecosystems: An NGSS-Designed Middle School Unit and PD Model
- 2:00–3:00 PM—*Interactions: A Free 3-D Science Curriculum for Ninth-Grade Physical Science*
- 3:30–4:30 PM—How Can Light Help Me See and Communicate with Others? A Storyline Designed to Support 3-D Learning in an Early Elementary Classroom

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## NGSS@NSTA Share-a-Thon

**Saturday, March 17 • 9:30–10:30 AM  
B102, Georgia World Congress Center**

At the NGSS@NSTA Share-a-Thon, get even more tips and tools to implement three-dimensional standards from NSTA's NGSS Curators, NGSS writers, and other education experts. Leave with plenty of handouts and ideas you can use in your classroom right away!



# Professional Learning Institutes

Professional Learning Institutes (PLIs) are focused, content-based programs that explore key topics in science/STEM education in depth. Presented by experts in science and STEM education, professional learning, standards implementation, assessment, curriculum, and resources/materials development, PLIs are scheduled on Wednesday, March 14, 9:00 AM to 4:00 PM.

For complete descriptions and to purchase tickets, visit [www.nsta.org/atlantabrowser](http://www.nsta.org/atlantabrowser).  
(Tickets Required)

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## District-Level Administrators: You are the Fourth Dimension in Implementing 3-D Teaching and Learning! (PLI-1)

**Ticket Price: \$125, by preregistration only**

When facing paradigm shifts in STEM education policy, district-level administrators and instructional leaders often face challenges in providing professional learning aligning curriculum and implementing new science standards. NSTA empathizes with your needs and has developed this PLI especially for you. Come share solutions with your peers while walking away with tangible resources, tools, and ideas from leading NSTA authors and experts.

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## Analyzing Instructional Materials for Next Generation Science (NextGen AIM) (PLI-2)

**Ticket Price: \$125, by preregistration only**

NextGen AIM is a suite of tools and processes for the evaluation, selection, and implementation of instructional materials designed for the NGSS. NextGen AIM serves as a professional learning opportunity for teachers to deepen their understanding of NGSS as they evaluate instructional materials and helps to prepare teachers to use the materials effectively in their classrooms. In this session, participants will use a common set of instructional materials and work as a “mock” materials selection committee to learn, via active learning experiences, about the five components of the NextGen AIM tools and processes. Emphasis will be placed on the Paper Screen component, which utilizes visual representations of data collected from the materials and rubrics to assess quality.

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## Connecting STEM Education to the Workplace (PLI-3)

**Ticket Price: \$125, by preregistration only**

Jeff Weld, author of *Creating a STEM Culture for Teaching and Learning*, will provide an overview about connecting secondary STEM education to the workplace before attendees take a deep dive in practical applications with one of the most innovative work-based learning programs in the country, Waukee Aspiring Professional Experience (APEX). APEX pairs students with businesses to work on professional and technical skills through value-added learning projects. This interactive session will explore and answer your many questions about how to develop and maintain business relationships for an entire work-based learning program and/or to personalize learning in an individual course. Bring your questions as this session will be customized specifically for the attending audience.

## STEM Curriculum Topic Study: A Process for Linking Standards, Research, and Learning (PLI-4)

**Ticket Price: \$125, by preregistration only**

Curriculum Topic Study (CTS) is a systematic process that helps STEM educators build a bridge between curricular topics and effective teaching and learning, informed by standards and research on commonly held ideas in science. This PLI will introduce participants to the new, updated CTS tools and processes that can be used with NGSS or any set of curricular or state standards. Participants will be introduced to the CTS process, experience how to use CTS in a collaborative PD setting, and plan how they will use CTS in their own contexts both individually and with their colleagues.

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## Picture-Perfect Powerful Practices: STEM and Literacy Integration (PLI-5)

**Ticket Price: \$125, by preregistration only**

Join the authors of *Picture-Perfect STEM* and the *Powerful Practices* book series for a dynamic exploration of integrated STEM investigations. Learn how to use picture books to engage students in meaningful STEM learning. Apply questioning, investigating, and authentic assessment design techniques to deliver thoughtfully prepared and customized units that will improve engagement and student performance.

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## A Shell One-Day Institute: Embracing an Equitable Mindset: Developing Culturally Proficient Leaders (PLI-6)

**Cost: No fee, completion of survey is required after conference registration**  
**Educators are encouraged to attend in teams of 2–4; individuals welcome**

This session will bring together individuals wanting to further their journey toward becoming culturally proficient leaders, helping to ensure high levels of success for all students. Throughout the day, participants will address personal and professional bias, gaps in equitable services, and issues of access. Attendees will share experiences, learn about tools used in developing cultural proficiency, and review data and effective programs, identifying possible next steps as well as creating alliances with other science educators.



—Photo courtesy of Wendy Binder

# Networking Event

Join your colleagues at this networking event. To purchase tickets, visit [www.nsta.org/atlantabrowser](http://www.nsta.org/atlantabrowser). (Tickets Required)

## NSTA Teacher Awards Gala (M-1)

Date: **Friday, March 16, 6:00–8:45 PM**

Registration Fee: **\$75 advance; \$80 on-site**

Come enjoy a fabulous evening celebrating with this year's teacher award recipients! ALL of the teacher awards will be presented in one grand evening. Join your colleagues in recognition of this year's winners. Evening attire is requested to honor our teacher award recipients. A limited number of tickets are available for this social event.



# Visit the NSTA Science Store



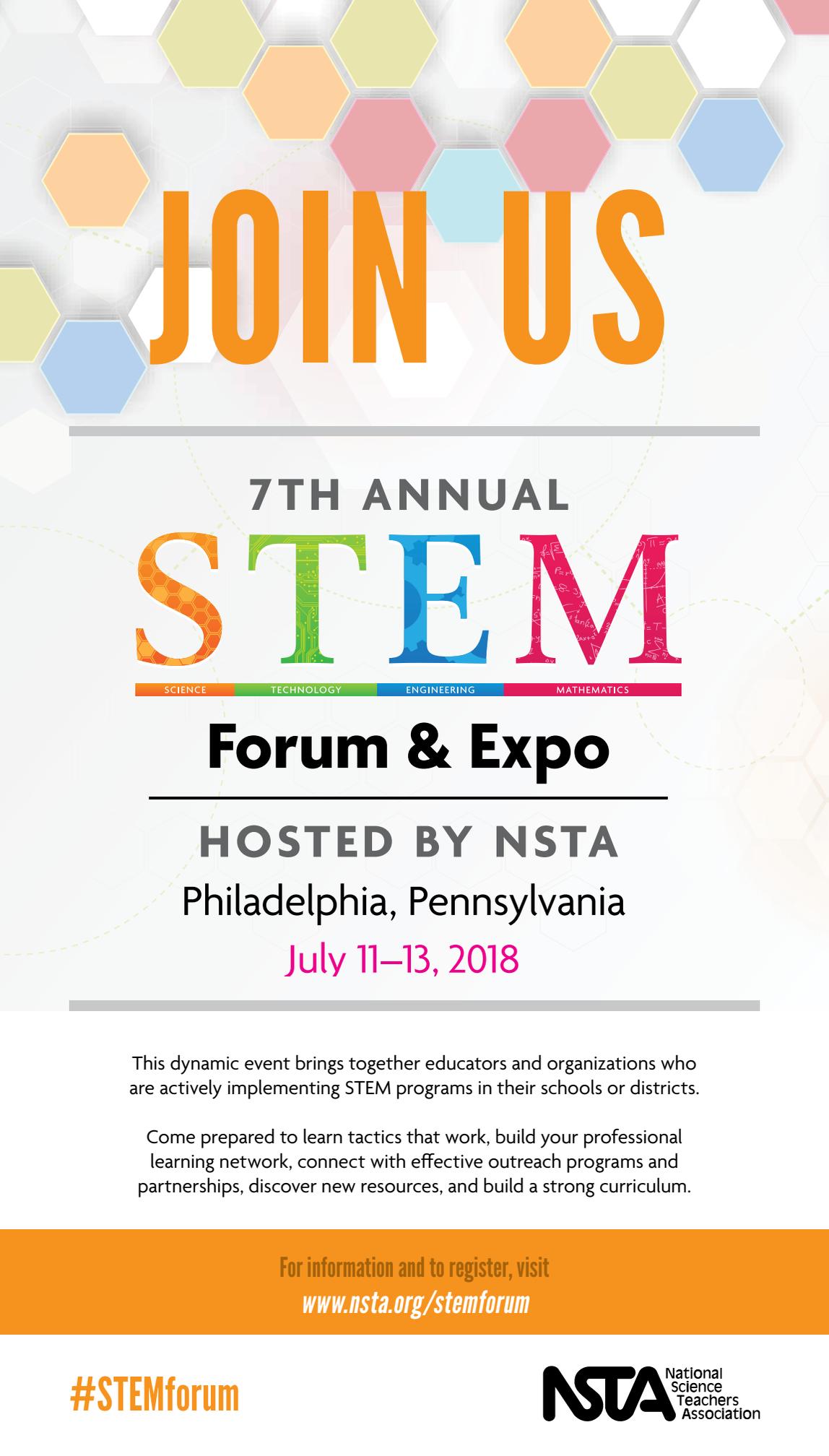
Wednesday	4:00–7:00 PM
Thursday	7:30 AM–5:00 PM
Friday	7:30 AM–5:00 PM
Saturday	7:30 AM–4:00 PM
Sunday	8:00 AM–12 Noon

- ◆ 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



NSTA Press® offers 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. Visit us online at [bit.ly/2y8drCZ](http://bit.ly/2y8drCZ) for a complete list of NSTA Press sessions.



# JOIN US

7TH ANNUAL

**S** **T** **E** **M**

SCIENCE

TECHNOLOGY

ENGINEERING

MATHEMATICS

## Forum & Expo

HOSTED BY NSTA  
Philadelphia, Pennsylvania

July 11–13, 2018

This dynamic event brings together educators and organizations who are actively implementing STEM programs in their schools or districts.

Come prepared to learn tactics that work, build your professional learning network, connect with effective outreach programs and partnerships, discover new resources, and build a strong curriculum.

For information and to register, visit  
[www.nsta.org/stemforum](http://www.nsta.org/stemforum)

**#STEMforum**

**NSTA** National  
Science  
Teachers  
Association

# Sample Conference Schedule

Make your own conference schedule using the Atlanta Session Browser/ Personal Scheduler ([www.nsta.org/atlantabrowser](http://www.nsta.org/atlantabrowser)). Browse events by day, format, subject, grade level, conference strand, sponsor, or keyword.

		Life Science	Physical Science	Earth and Space Science	Engineering and Technology	General Science Education	Informal Science Education	PRESENTATION	WORKSHOP
Elementary	Thu., 8:00–9:00 AM—Exploring the Science of Sound		●						●
	Thu., 2:00–3:00 PM—Birding in Three Dimensions	●							●
	Thu., 3:30–4:00 PM—3-D Learning Through Interdisciplinary Teaching in Elementary School					●		●	
	Thu., 5:00–6:00 PM—Developing Scientifically Literate Students with STEM-Manities!					●			●
	Fri., 9:30–10:30 AM—Protecting the Outer Space Environment			●				●	
	Fri., 2:00–3:00 PM—Using NASA Data to Enhance Earth Science and Make STEM Connections			●					●
	Fri., 5:00–6:00 PM—“The Sheep Are in the Jeep”: Forces and Motion		●					●	
	Sat., 11:00–11:30 AM—How to Develop an Amazing After-School Science Enrichment Program						●	●	
	Sat., 12:30–1:30 PM—Milkweed in the Classroom	●							●
	Sat., 4:00–4:30 PM—Family Learning Opportunities and Research in Engineering and Science (FLORES) Education				●			●	
	Sun., 8:00–9:00 AM—Just Build It!				●				●
Middle Level	Thu., 8:30–9:00 AM—STEMing-Up Life Science	●						●	
	Thu., 3:30–4:30 PM—Soil: A Nonrenewable Resource?			●					●
	Thu., 5:00–6:00 PM—Illuminating Evidence of 3-D Learning		●					●	
	Fri., 9:30–10:30 AM—3-D Learning Through NASA Orion Missions			●				●	
	Fri., 11:00 AM–12 Noon—Unpacking Sources of Variation in Ecological Data	●							●
	Fri., 12:30–1:30 PM—Engineering Design Journals: Trials and Tribulations		●						●
	Sat., 3:30–4:30 PM—Citizen Science in the K–12 Classroom						●		●
	Sat., 5:00–5:30 PM—Integrating Robotics for All Middle School Students				●			●	
	Sun., 8:00–9:00 AM—Drop, Stop, Don’t Pop! A Daredevil Engineering Adventure				●				●
	Sun., 9:30–10:30 AM—Global Collaboration in STEM Projects					●			●
High School–College	Thu., 8:00–8:30 AM—Touching Triton	●						●	
	Thu., 12:30–1:30 PM—Planning and Carrying Out Erosion and Deposition Investigations			●					●
	Thu., 2:00–3:00 PM—Weaving Biotechnology Throughout Your Biology Curriculum	●							●
	Thu., 3:30–4:30 PM—Deflategate: Critical Thinking and the Ideal Gas Law		●						●
	Fri., 10:00–10:30 AM—A Few of Our Favorite Chemistry Things		●					●	
	Fri., 12:30–1:00 PM—STEM on Station			●				●	
	Sat., 9:30–10:30 AM—Exploring Sound and Music with Arduinos				●				●
	Sat., 12:30–1:30 PM—Experience Question Formulation!						●		●
	Sat., 2:30–3:00 PM—Using 3D Printers to Support Deeper Content Knowledge				●			●	
	Sun., 8:00–9:00 AM—Improving Scientific Literacy in a STEM Lesson					●			●
	Sun., 11:00 AM–12 Noon—Developing High School Peer-Reviewed Research Journals					●		●	

# Educational Trips

Discover what Atlanta has to offer on one of our ticketed educational trips. To purchase tickets, visit [www.nsta.org/atlantabrowser](http://www.nsta.org/atlantabrowser). (Tickets Required)

## Global Conversations: Welcome to My Elementary Classroom (W-1)

Date: **Wednesday, March 14, 8:00 AM–12 Noon**

## Global Conversations: Welcome to My High School Classroom (W-2)

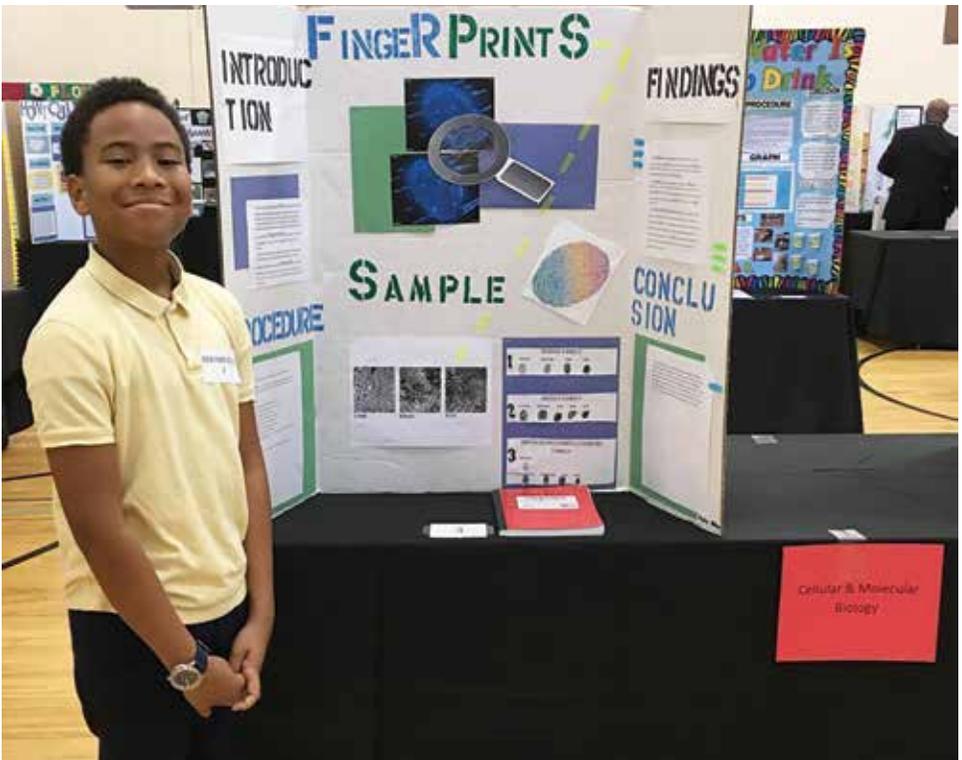
Date: **Wednesday, March 14, 8:00 AM–12 Noon**

Ticket Price: **\$25; by preregistration only**

Welcome to My Classroom is a program sponsored by NSTA's International Advisory Board and is intended primarily for international participants to view science classrooms. This year, trip participants will visit Beecher Hills Elementary School or Benjamin E. Mays High School. Participants will be split into groups where half will visit the elementary school, and the other half will visit the high school. Time has been set aside for participants to observe and interact with teachers and students at their selected location.

Those with W-1 tickets will visit Beecher Hills Elementary School, a preK–5 Authorized IB World School located in the scenic Beecher Hills Community in Southwest Atlanta. Beecher Hills is part of the Atlanta Public School System.

Those with W-2 tickets will visit Benjamin E. Mays High School, a public school located in southwest Atlanta serving grades 9–12. Part of the Atlanta Public School System, the high school is a Georgia School of Excellence.



—Photo courtesy of Beecher Hills Elementary School



—Photo courtesy of Atlanta Botanical Garden

### **Botanical Garden Self-Guided Tour (T-1)**

Date: **Thursday, March 15, 8:30–11:30 AM**

### **Botanical Garden Self-Guided Tour (F-2)**

Date: **Friday, March 16, 8:30–11:30 AM**

### **Botanical Garden Self-Guided Tour (S-1)**

Date: **Saturday, March 17, 8:30–11:30 AM**

Ticket Price: **\$22 advance; \$27 on-site**

Enjoy a self-guided tour at the Atlanta Botanical Garden. Pick a tour on either Thursday (T-1), Friday (F-2), or Saturday (S-1). In addition to the outdoor gardens, you can explore the Venus flytraps in the Soggy Bog and learn about honeybees in the observation hive. Walk through the treetops on the 600-foot Kendeda Canopy Walk, learn about new plants, and discover seasonal edibles in the Edible Garden. Many critters and native birds make their home in the Garden, including various quails that live in the Tropical Rotunda and the rarely seen Saffron Finches. Stop by the Conservatory terrarium and look for the orange poison dart frogs. Light snacks and refreshments are available for purchase. Visit [atlantabg.org/visit/day-planner](http://atlantabg.org/visit/day-planner) to preplan your trip.

*NSTA wishes to thank the Atlanta Botanical Garden for providing complimentary admission for participants.*

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### **Stones and Stories: A City Earth Science Walk (T-2)**

Date: **Thursday, March 15, 9:00 AM–12:30 PM**

### **Stones and Stories: A City Earth Science Walk (S-2)**

Date: **Saturday, March 17, 9:00 AM–12:30 PM**

Ticket Price: **\$15 advance; \$20 on-site**

Tag along with two geologists/retired K–12 educators to see the beautiful building stones and folded natural rock layers of Midtown Atlanta, on a tour from Symphony Hall to Rhodes Hall. Pick a tour on either Thursday (T-2) or Saturday (S-2). Bill Witherspoon, co-author of *Roadside Geology of Georgia*, teams up with Georgia Mineral Society leader Bill Waggener to interpret the stories that rocks tell. Wear comfortable shoes. Must be able to walk moderate distances.



—Photo courtesy of Dunwoody Nature Center

### Watershed Activities at Dunwoody Nature Center (T-3)

**Date:** Thursday, March 15, 12:30–5:00 PM

**Ticket Price:** \$35 advance; \$40 on-site

Move through the meadow and trails at Dunwoody Nature Center while led by environmental educators for a hands-on experience that reinforces and brings to life the STEM concepts that are taught in the classroom. Engage in Project WET, Urban Watershed, and Getting Little Feet Wet activities. Dunwoody Nature Center features four distinct habitats—meadow, stream, wetlands, and forest—that are ideally suited to enhance the fundamentals of environmental science in a controlled setting. Dress for the weather and wear comfortable hiking shoes. Must be able to walk moderate distances. For more information on the activities, visit [www.projectwet.org](http://www.projectwet.org). Travel time is approximately one hour each way.

### Fernbank Science Center: Where the Stars Shine Over Atlanta (T-4)

**Date:** Thursday, March 15, 6:00–9:30 PM

**Ticket Price:** \$25 advance; \$30 on-site

Looking for STARS in Atlanta? Follow us to Fernbank Science Center, Home of the STARS! Join us for a planetarium show on the largest screen in Atlanta, the Jim Cherry Memorial Planetarium, and then step outside and be among the stars at the Dr. Ralph L. Buice, Jr. Observatory, the largest telescope in the southeastern United States. See where the stars hang out in Atlanta—Fernbank Science Center.

*NSTA wishes to thank Fernbank Science Center for providing complimentary admission and planetarium show tickets for trip participants.*

### From Appalachia to Asteroids: Exploring a Billion Years of Georgia History (F-1)

**Date:** Friday, March 16, 8:00 AM–5:00 PM

**Ticket Price:** \$57 advance; \$62 on-site

From asteroid impacts to the rise of the Appalachian Mountains, the rocks of Georgia feature a record of cataclysms dating back more than a billion years. We will explore ancient coastlines where debris from two major asteroid impacts rained down 35.5 and 65 million years ago and investigate the clues of a large Proterozoic impact more than 900 million years ago. Along the way, we will see dramatic evidence of the tectonic forces that shaped eastern North America

during the Paleozoic, massive volcanic eruptions during the Mesozoic, and sea level rise and fall during the Cenozoic. Come dressed ready to explore. Hard hats, rock hammers, and a boxed lunch will be provided. Trip includes stops at four sites.

*Note: Please bring a sturdy bag for collecting. If you have steel or composite-toe boots, please bring them. Toe guards will be provided for those who don't.*

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## From Gardens to Granite: GSU Perimeter College Native Garden and Arabia Mountain (F-3)

**Date: Friday, March 16, 8:30–11:30 AM**

**Ticket Price: \$42 advance; \$47 on-site**

See one of the largest collections of fern taxa and native plants in the country during a tour of the Native Plant Botanical Garden ([sites.gsu.edu/pcnativegarden](https://sites.gsu.edu/pcnativegarden)) located on Georgia State University's Perimeter College Decatur Campus. Then hike through one of Georgia's most fascinating ecosystems at Arabia Mountain National Heritage Area ([arabiaalliance.org](https://arabiaalliance.org)). Be sure to dress for the weather and wear comfortable walking shoes. It is recommended that you bring bottled water for the hike at the Davidson–Arabia Mountain Nature Preserve.

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## STEM-Themed Guided Tour at Zoo Atlanta (F-4)

**Date: Friday, March 16, 9:30 AM–2:30 PM**

**Ticket Price: \$39 advance; \$44 on-site**

Explore the Zoo through bio-inspired design! Find out how animals are inspiring solutions to everyday scientific and engineering problems. For example, learn how researchers are studying the drinking behaviors of cats to create technologies that will propel liquid upward, helping to find more efficient ways to clean up oil spills! Time included for lunch on own, as well as self-exploration of the Zoo after STEM-themed guided tour.

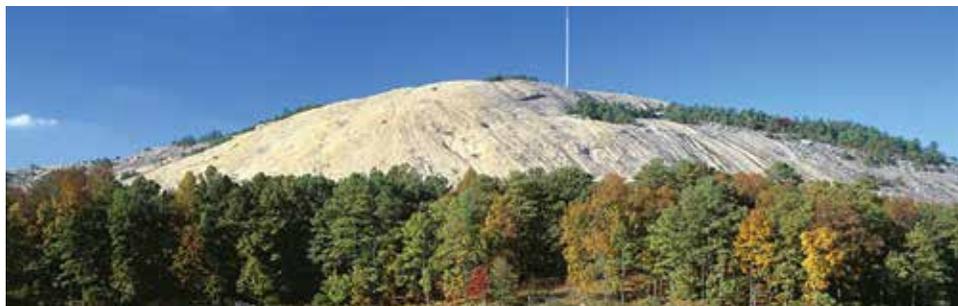
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## Exploring the White Whaleback of Granite—Stone Mountain (F-5)

**Date: Friday, March 16, 12:45–5:00 PM**

**Ticket Price: \$42 advance; \$47 on-site**

Tour Stone Mountain and learn about its fascinating geologic history with the authors of *Roadside Geology of Georgia*. Receive an overview of the geology of Stone Mountain, a granite monadnock about 20 miles east of Atlanta, rising about 800 feet above the surrounding terrain. Beginning at the Walk-Up Trail, we will examine granite cut by pegmatite dikes, and observe solution pits with evidence of ecologic succession and early spring wildflowers near the base of the trail. You can see evidence of hand-quarrying of the rock and carvings made by visitors to the mountain, dating back more than 100 years. We will visit the natural history museum in Confederate Hall, where we will learn about the geologic history and formation of Stone Mountain. Then we will board the bus and travel to the outdoor Quarry Exhibit, where the granite was quarried



—Photo courtesy of Stone Mountain

from the 1850s to the 1970s. At the Quarry Exhibit, we will observe evidence of recent exfoliation, clusters of tourmaline crystals or “cat’s paws” in the granite, flow banding, pegmatite dikes, and xenoliths of gneiss that got caught up in the magma as the Stone Mountain granite intruded the surrounding rocks of the Piedmont. Dress for the weather, bring a water bottle, and wear comfortable walking shoes or field boots. Must be able to walk moderate distances. Visit [www.geogiarocks.us](http://www.geogiarocks.us) for more information about Georgia’s geology.

## Public Health on Display at the Centers for Disease Control’s Museum (F-6)

**Date: Friday, March 16, 1:15–4:30 PM**

**Ticket Price: \$35; by preregistration only**

Ever wonder how CDC scientists merge old-fashioned detective work with high-tech science to crack the cases of mystery diseases? Get the story as we tour the David J. Sencer CDC Museum at CDC Headquarters. One of 13 major operating components of the Department of Health and Human Services (HHS), the Centers for Disease Control and Prevention in Atlanta is one of the only federal government agencies with headquarters outside of Washington, D.C. The CDC Museum teaches public health, specifically as it relates to CDC’s work. Other tour topics may include microbiology, infectious disease, environmental health, CDC history, or even the art in our exhibits. All guided tours of the CDC Museum exhibits include an introduction using the short stories on the multimedia show, an introduction to the current temporary exhibit, and a tour of the permanent exhibit, The Story of CDC.

*Note: A valid government-issued ID is required for entry onto CDC’s campus. (driver’s license for U.S. citizens; passport for non-U.S. citizens). The ID requirement only applies to adults. No food or beverages allowed; no vending or concessions are available in the CDC Museum. Cameras are allowed inside the David J. Sencer CDC Museum’s exhibit space, but please refrain from taking any pictures outside of the CDC Museum.*

## Taste and Explore World of Coca-Cola (S-3)

**Date: Saturday, March 17, 1:45–4:15 PM**

**Ticket Price: \$16; by preregistration only**

For more than 25 years, World of Coca-Cola has welcomed guests from more than 100 countries, and all of the U.S. Join over 25 million people who have visited the Atlanta attraction and experience the history of the famous beverage brand at the dynamic, multimedia home of the 131-year-old secret formula for Coca-Cola. Enjoy an ice-cold, refreshing Coca-Cola, Diet Coke, Coke Zero Sugar, or Coke Life in the lobby before beginning your self-guided tour. Get closer than ever before to the vault containing the secret recipe, view more than 1,200 historic artifacts, and get a behind-the-scenes look at the bottling process. Take a trip around the world in a thrilling 4-D movie experience, take a photo with the Coca-Cola Polar Bear, and tempt your taste buds with more than 100 beverages from around the globe.

Group will walk to World of Coca-Cola.



—Photo courtesy of World of Coca-Cola



## Graduate Credit offer

### Graduate Credit Sponsored by Dominican University of California

Earn one (1) or two (2) graduate-level credit/s in professional development through Dominican University of California ([dominicancaonline.com](http://dominicancaonline.com)) course #EDUO 8018. To obtain credit/s, you must be registered for the 2018 Atlanta National Conference, complete the required assignments, and pay a fee of \$95 for one credit or \$190 for two credits. An NSTA transcript is also required. Deadline is April 30, 2018.

For details, visit [bit.ly/2juJzff](http://bit.ly/2juJzff).

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# 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/atlantabrowser](http://www.nsta.org/atlantabrowser). (Tickets Required)

## If You Can Think It, You Can Model It (SC-1)

Date: **Thursday, March 15, 3:00–6:00 PM**

Ticket Price: **\$37 advance; \$42 on-site**

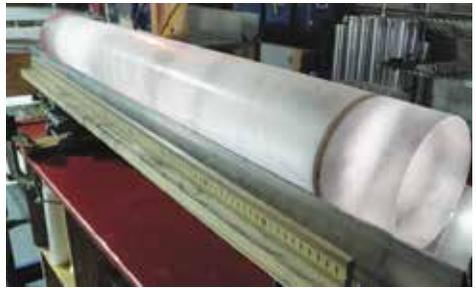
This short course will introduce participants to SageModeler, a simple and engaging tool for modeling complexity and examining behavior in complex systems and a variety of contexts. Through explorations and activities using this free web-based software, participants will expand their knowledge of systems and systems thinking, build and simulate visualizations of their own mental models, and explore ways to incorporate computer modeling into curricular activities and units appropriate to both middle school and high school students. *Note:* Bring a laptop computer or Chromebook with Google Chrome installed. For more information, visit [learn.concord.org/building-models](http://learn.concord.org/building-models).

## Climate Change Misinformation: Sort Fact from Fiction with Ice Core Science (SC-2)

Date: **Thursday, March 15, 3:00–6:00 PM**

Ticket Price: **\$33 advance; \$38 on-site**

This short course will provide current information and the tools and resources to teach climate change within the NGSS. Interact with an ice core scientist presenting cutting-edge research and climate change information, while a master polar educator leads hands-on activities for engaging and transferring the information to students. Receive stellar resources developed by scientists and educators from the Ice Drilling Program Office (IDPO) with National Science Foundation funding. Bring materials to take notes. For more information, visit [www.climate-expeditions.org](http://www.climate-expeditions.org).



—Photo courtesy of Heidi Roop/U.S. Ice Drilling Program

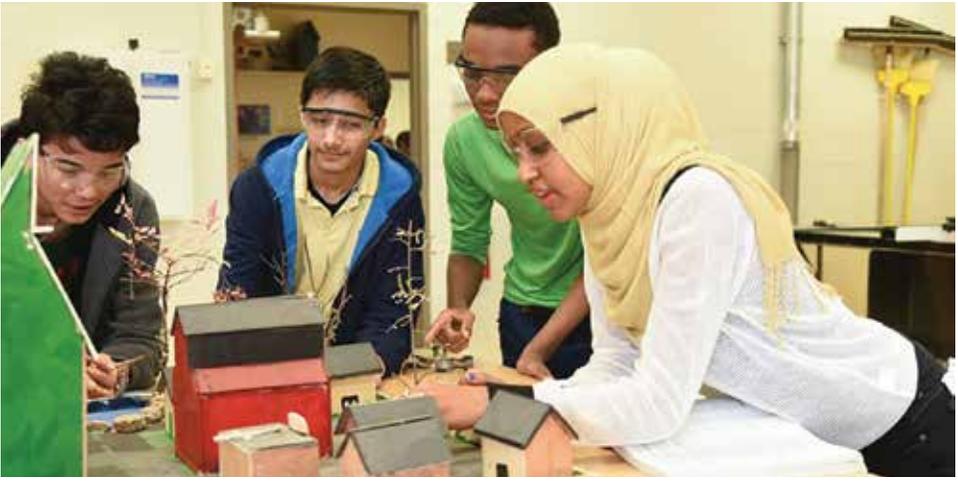
## Meaning Making in Science: How Disciplinary Literacy Supports the Development of Scientific Understanding (SC-3)

Date: **Thursday, March 15, 3:00–6:00 PM**

Ticket Price: **\$33 advance; \$38 on-site**

**Strand: Comprehending the Role of Literacy in Science**

We are strong advocates for disciplinary literacy—helping students learn to think, act, and communicate like scientists and engineers. During this short course, participants will engage in activities that explore disciplinary literacy in science. We will showcase the critical role that the scientist’s notebook plays in literacy and science content as well as practices development. Strategies and resources built with our teachers and other experts will be shared, including our “Core Actions” and reading and notebook strategies that take students from observation to explanation and argument writing. A laptop/computer to view resources is recommended.



—Photo courtesy of DeKalb County School District

## Science for Everyone: Engaging Diverse Learners Using SIOP Strategies, Visual Literacy, Scaffolding, and Culturally Relevant Pedagogy (SC-4)

Date: **Friday, March 16, 7:15–11:50 AM**

Ticket Price: **\$38 advance; \$43 on-site**

**Strand: Reflecting On Access for All Students**

In this off-site short course, come observe teachers and students at Clarkston High School, one of the most culturally diverse schools in the nation. The city of Clarkston has been dubbed the most culturally diverse city per square mile in the United States. Participants will observe biology, environmental science, physical science, and chemistry classrooms with the option of also visiting any of the 19 content-specific sheltered classes (ESOL–ELA, social studies, and mathematics). As small groups, participants will observe the classrooms and then join in later for a large group discussion on teaching strategies, including SIOP (Sheltered Instruction Observation Protocol Model). Bring materials to take notes.

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## Designing and Using Three-Dimensional Assessments in Your Classroom (SC-5)

Date: **Friday, March 16, 8:00–11:00 AM**

Ticket Price: **\$33 advance; \$38 on-site**

**Strand: Focusing On Evidence of 3-D Learning**

As states adopt three-dimensional science standards, assessment needs to integrate disciplinary core ideas, science and engineering practices, and crosscutting concepts. In this short course, a curriculum designer and a state assessment leader will take participants through a process to consider how assessment can be used to support 3-D teaching and learning.

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## Citizen Science Projects That Transform School Yards into STEM Labs and Help K–12 Students Make Sense of Phenomena in Nature (SC-6)

Date: **Friday, March 16, 8:00–11:00 AM**

Ticket Price: **\$37 advance; \$42 on-site**

**Strand: Imagining Science as the Foundation for STEM**

This short course is designed to equip educators with tools, resources, and strategies for facilitating field investigations, providing opportunities for students to make sense of phenomena in nature. We'll try out citizen science projects that incorporate engineering design challenges, student-led experiments, and microcontroller coding. Participants will receive links to 3-D

Lesson Frameworks, a Foldscope field microscope, window bird feeder, the Citizen Science issue of *Natural Inquirer* magazine, and seeds, as well as find out how to obtain a Citizen Science ecoSTEM Kit. Be prepared to spend part of the time outdoors, weather permitting.

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## The World Ender: A STEAM PBL Unit (SC-7)

Date: **Friday, March 16, 10:00 AM–4:00 PM**

Ticket Price: **\$53 advance; \$58 on-site**

**Strand: Imagining Science as the Foundation for STEM**

What would you do if an asteroid hit Earth? Come explore curriculum based on an engineering design challenge in which students must work collaboratively to create a knowledge base of research, inquire and investigate relevant phenomena, and think critically to redirect an asteroid. The World Ender is a problem-based unit that not only will excite your students, but also touches on many cross-disciplinary areas. Bring your laptop/tablet. Expect a half-hour break for lunch on own.

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## Developing a Reasonable NGSS Transition Plan for My District or School (SC-8)

Date: **Friday, March 16, 10:00 AM–5:00 PM**

Ticket Price: **\$43 advance; \$48 on-site**

In teams, apply tools and processes from a Connecticut NGSS implementation leader that support the development of a goal-oriented district or school plan to address the NGSS. Offered by the Connecticut Science Center, this short course is designed to help vertical district teams (and teams from schools with significant local control over their science program) in crafting a long-term vision for science education; taking stock of their own strengths, opportunities, and challenges; setting reasonable goals; and creating a multi-year transition plan that supports achieving the NGSS. Expect a half-hour break for lunch on own.

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## Putting the Pieces Together: Introduction and Implementation of 3-D Learning (SC-9)

Date: **Friday, March 16, 3:00–6:00 PM**

Ticket Price: **\$20 advance; \$25 on-site**

**Strand: Imagining Science as the Foundation for STEM**

A large urban district shares their journey to introduce 3-D science and the shifts in best practices for their 4,000 K–12 science teachers. In this short course, we will introduce a professional learning model that includes Science Ambassadors, Curriculum Writers, and Learning Architects—each with an important role in helping teachers understand the needed shifts in science instruction to realize the goals in the *K–12 Science Framework*. We are in a non-NGSS state that is focusing on phenomena-based 3-D instruction.

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## Integrating Engineering into K–8 Life Science Lessons (SC-10)

Date: **Saturday, March 17, 8:00–11:00 AM**

Ticket Price: **\$40 advance; \$45 on-site**

**Strand: Imagining Science as the Foundation for STEM**

Looking to infuse some “life” into your engineering design challenges? Come explore how nature can provide a rich context for students to engage with engineering. We’ll unpack a new framework for transforming traditional 5E life science lessons into “5E+” life science and engineering



Short Course SC-7: *The World Ender*: A STEAM PBL Unit

lessons and experience a “5E+” lesson in action. Then we’ll break into small groups and transform your own lessons into “5E+” lessons. We’ll end with a gallery walk of each group’s ideas. Come by yourself or as a school team with a lesson you’re interested in adapting and leave with practical ideas, tools, and materials!

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## Using NGSS Storylines to Support Students in Meaningful Engagement in Science and Engineering Practices (SC-11)

Date: **Saturday, March 17, 8:00–11:00 AM**

Ticket Price: **\$64 advance; \$69 on-site**

Strand: **Focusing On Evidence of 3-D Learning**

Participants will investigate how *NGSS* storylines can support students in developing ideas over time, motivated by questions about phenomena in the world, where each step is an attempt to address a question or gap in the current explanatory model. Using example open-source storylines from elementary, middle school, and high school, participants will analyze lesson designs, classroom video, and student work to investigate how to bring coherent storylines to life in K–12 classrooms. Bring a laptop/tablet to connect to the internet. For more information, visit [www.nextgenstorylines.org](http://www.nextgenstorylines.org).

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## Elementary GLOBE Short Course Training (SC-12)

Date: **March 17, 10:00 AM–5:00 PM**

Ticket Price: **\$58 advance; \$63 on-site**

Strand: **Comprehending the Role of Literacy in Science**

Do you teach about weather? Elementary GLOBE storybooks incorporated with NASA resources engage the natural curiosity of students through learning activities and science journaling experiences. You will be trained by our team of scientists in some of GLOBE Atmosphere Protocols, such as data submission to GLOBE website. Support continues when you return to your classroom with eTraining and webinars. Take-home materials include two storybooks (*Do You Know That Clouds Have Names?* and *What’s Up in the Atmosphere?*); air and infrared thermometers; a cloud chart; learning activities focusing on literacy skills; an *NGSS*-focused implementation guide; as well as NASA and GLOBE materials. It is recommended that you bring a laptop/tablet. Expect a 30-minute break for lunch on own.

# Registration & Travel

1

## REGISTER



The fastest way to register 24 hours a day—register online at [www.nsta.org/confreg](http://www.nsta.org/confreg) with a credit card.



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 forms are available as PDFs at [www.nsta.org/confreg](http://www.nsta.org/confreg).

2

## HOUSING

**Atlanta Housing Deadline:  
February 19, 2018**

Make your hotel reservations now and save! NSTA has negotiated special discounted room rates with 14 hotels near Georgia World Congress Center (the convention center).



Visit: [www.nsta.org/atlantahousing](http://www.nsta.org/atlantahousing) 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:

**Orchid.Events–NSTA/Atlanta**  
175 South West Temple, Suite 30  
Salt Lake City, UT 84101

**Do not mail to NSTA.**

\*\*Housing form is available as a PDF at [www.nsta.org/atlantahousing](http://www.nsta.org/atlantahousing).

**Save \$90 on your registration when you become an NSTA member!**

# Arrangements

3

## TRAVEL



NSTA has made arrangements with several major airlines, as well as Amtrak 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/atlantatravel](http://www.nsta.org/atlantatravel)

### PRICE LIST

	EARLYBIRD	ADVANCE	ON-SITE
	FEB. 9	FEB. 23	After FEB. 23
<b>FULL REGISTRATION (TWO TO FOUR DAYS)</b>			
NSTA Member	\$285	\$315	\$340
GSTA Member*	\$285	\$315	\$340
Nonmember	\$375	\$405	\$430
Retired NSTA Member	\$180	\$195	\$220
Full-time Student	\$110	\$125	\$150
<b>ONE DAY ONLY (THU, FRI, OR SAT)</b>			
Nonstudent (member or nonmember)	\$190	\$210	\$230
Full-time Student	\$80	\$85	\$100
<b>ONE DAY ONLY (SUN)**</b>			
Nonstudent (member or nonmember)	\$110	\$115	\$125
Full-time Student	\$60	\$65	\$75
<b>NONTEACHING SPOUSE/GUEST</b>	\$110	\$135	\$155

\* *Georgia Science Teachers Association (GSTA)*

\*\* *No exhibit hall hours on Sunday*

### REGISTRATION CATEGORIES

The **Member rate** applies to the following:

- Current NSTA members
- Nonmembers who submit an NSTA membership application and membership fee along with the registration form
- GSTA members (Georgia Science Teachers Association)—*GSTA members receive the NSTA member rate for the 2018 Atlanta National Conference only*

NSTA members who are fully retired and have been an NSTA member for at least five years may register at the **Retired rate**.

Full-time students 18 years of age or older may register at the **Student rate** if the registration form is accompanied by a copy of a current university ID or a letter from the university indicating full-time enrollment.

Your nonteaching spouse/guest and children must be registered in order to visit the Exhibit Hall but do not need to submit separate registration forms. Please provide their names on your own registration form. Children of high school age and younger can be registered for free. **A fee is required for your spouse/guest.** College students and teaching spouses must submit separate registration forms and payment.

# Exhibitors

The NSTA Exhibit Hall, with more than 350 of the leading science education companies and organizations in the world, has the newest products to show and share with educators.

## THIS IS A PARTIAL LIST OF EXHIBITORS.

- 3B Scientific  
3D Molecular Designs  
7th Annual STEM Forum & Expo, hosted by NSTA  
AAAS Project 2061  
AALAS Foundation  
ABRAMS  
ACIS Educational Tours  
ACT, Inc.  
Activate Learning  
Actively Learn  
Adam Equipment Inc.  
Aldon Corp.  
American Association for Cancer Research  
American Association of Colleges of Pharmacy  
American Association of Physics Teachers  
American College of Education  
American Lab Design  
American Meteorological Society  
American Museum of Natural History  
American Society of Plant Biologists  
Amplify  
Amy Brown Science  
Anatmage Inc.  
ANATOMY IN CLAY® Learning System  
Anatomy Warehouse  
Animalearn  
Appleseed Expeditions  
AquaPhoenix Scientific  
Arbor Scientific  
Artskills®  
Barbakam Science Lab Notebooks  
Because Learning  
Bedford, Freeman, & Worth High School Publishers  
Beyond Benign  
Bio Corp.  
Bio-Rad Laboratories, Inc.  
BIOZONE International Ltd.  
Bone Clones, Inc.  
BOXLIGHT  
Buzz Aldrin's ShareSpace Foundation  
Capital Microscope Services  
Carolina Biological Supply Co.  
Catalyst Learning Curricula  
CCIS, Inc.  
Cedar Fair Entertainment Co.  
Celestron, LLC  
Centripetal Press  
Ceramic and Glass Industry Foundation  
Clemson University  
Commercial Spaceflight Federation  
The Cornell Lab of Ornithology  
CPO Science/School Specialty  
Delta Education/School Specialty  
Digitalis Education Solutions, Inc.  
*Dinah.com*  
Discovery Dome from ePlanetarium  
Disney Youth Programs  
Diversified Woodcrafts, Inc.  
Driftwood Education Center  
*DroneCurriculum.net*  
Dynalon Labware  
EAI Education  
eCYBERMISSION & GEMS  
Education Matters  
Educational Innovations, Inc.  
Edvotek Inc.  
EF Explore America  
Eisco Scientific  
Elbit Systems of America, LLC  
Energy Concepts, Inc.  
Engineering is Elementary  
Enovative Technologies, LLC  
Esri  
EVERFI  
ExploreLearning  
Exploring Physics  
FDA Food Science & Nutrition Education  
Firefly Books Ltd.  
*FIRST*  
Fisher Science Education  
Flinn Scientific  
FLIR Systems, Inc.  
Forestry Suppliers, Inc.  
Frey Scientific/School Specialty  
Georgia Aquarium  
Georgia Southern University  
Georgia State University  
Geozy Solutions  
Getting Nerdy LLC  
Grand Classroom  
Great Minds LLC  
Half Price Books  
Hanna Instruments, Inc.  
Hayden-McNeil Publishing  
Houghton Mifflin Harcourt  
Howard Hughes Medical Institute  
HudsonAlpha Institute for Biotechnology  
InsectLore  
Insurance Institute for Highway Safety  
International Ocean Discovery Program  
Inventionland Institute  
IRIS  
IXL Learning  
JASON Learning  
Johns Hopkins Center for Talented Youth  
K'NEX  
Kaplan Early Learning Co.  
Kendall Hunt Publishing Co.  
Kesler Science, LLC  
Killer Snails, LLC  
Knopf Doubleday Publishing Group  
Lab-Aids, Inc.  
LaMotte Co.  
LearnEd Notebooks  
Learning A-Z  
Learning Bits, Inc.



—Photo courtesy of Mike Weiss

### EXHIBIT HOURS

THU., MAR. 15 11:00 AM–6:00 PM\*  
 FRI., MAR. 16 9:00 AM–5:00 PM  
 SAT., MAR. 17 9:00 AM–3:00 PM

### EXHIBIT LOCATION

The exhibits are located in Hall B-2 of Georgia World Congress Center.

[www.nsta.org/atlantavirtualshow](http://www.nsta.org/atlantavirtualshow)  
 Preview and create your own list of Atlanta exhibitors before the conference using this link.

\*Exclusive Exhibit Hall and Exhibitor Workshop Hours • Thu., 11:00 AM–12:30 PM

- |   |   |                                       |
|---|---|---------------------------------------|
| Legends of Learning   | National Coalition for Aviation and Space Education             | Nutrients for Life Foundation         |
| LEGO Education  | National Energy Education Development Project                   | OHAUS Corp.                           |
| Macmillan Adult   | National Flight Academy   | Operation Wallacea                    |
| Macmillan Children's Publishing Group                         | National Geographic   | Otto Trading LLC                      |
| The Markerboard People, Inc.                                  | National Geographic Learning   Cengage Learning                 | PASCO scientific                      |
| Math for America (MfA)  | National Institute for STEM Education                           | PBS Educational Media                 |
| McGraw-Hill Education   | National Institute of Neurological Disorders and Stroke (NINDS) | PBS LearningMedia/WGBH                |
| Measured Progress   | National Integrated Cyber Education Research Center             | PCG Education                         |
| Microduino, Inc.  | National Inventors Hall of Fame/Camp Invention                  | Peachtree Publishers                  |
| MiniOne Systems   | National Nanotechnology Coordination Office (NNCO)              | Pearson                               |
| miniPCR™  | Newell Brands   | Penguin Academic                      |
| molymod®, Spiring Enterprises Ltd.                            | NewPath Learning  | Perimeter Institute                   |
| Monsanto Co.  | Nomad Press   | PETA                                  |
| MSOE Center for BioMolecular Modeling                         | NSTA 2018 Charlotte Area Conference                             | The Pet Care Trust                    |
| Nanolive SA   | NSTA 2018 National Harbor (MD) Area Conference                  | PhET Interactive Simulations          |
| NaRiKa Corp.  | NSTA 2018 Reno Area Conference                                  | Pitsco Education                      |
| NASA Science Mission Directorate                              | NSTA 2019 St. Louis National Conference                         | PlayMada Games LLC                    |
| Nasco   |   | PocketLab by Myriad Sensors           |
| The National Academies of Sciences, Engineering, and Medicine |   | Population Connection                 |
| National Agriculture in the Classroom                         |   | PowerUpEDU                            |
| National Center for Science Education                         |   | Project Learning Tree                 |
|   |   | Publisher Spotlight                   |
|   |   | Random House Academic                 |
|   |   | <i>Responsibility.org</i>             |
|   |   | Rosen Publishing                      |
|   |   | SAE International's A World In Motion |



—Photo courtesy of Mike Weiss

- Tyhope
- University of Delaware Dept. of Animal and Food Sciences
- University of Nebraska at Kearney
- Vaccine Education Center at Children's Hospital of Philadelphia
- Van Andel Education Institute
- Vernier Software & Technology,
- Virginia Tech College of Science
- Ward's Science
- Washington University in St. Louis
- Wavefunction, Inc.
- WeatherHawk
- WestEd
- Western Michigan University
- WhiteBox Learning
- Wiley
- Wisconsin Fast Plants® Program
- WorldStrides
- World Wildlife Fund
- XanEdu Custom Solutions

- Safari Club International Foundation
- Scholastic Inc.
- School Datebooks
- School Specialty, Inc.
- Science Island and Smart Chick
- Science Take-Out, LLC
- Search Associates—International Teaching Opportunities
- Shape of Life
- Sheldon Laboratory Systems
- Shell Science Lab Challenge
- Simulation Curriculum Corp.
- Skulls Unlimited International, Inc.
- SmartSchool Systems
- Smithsonian Science Education Center
- Society for Neuroscience
- Society for Science & the Public
- Soil Science Society of America
- Sourcebooks
- Southern Science Supply
- Space Station Explorers/CASIS
- SparkPoint Innovations
- St. George's University, Grenada, West Indies
- STEM Sims
- STEMscopes
- STEMy Stuff
- Stuppy, Inc.
- Swift Optical Instruments
- TeacherGeek,
- Team America Rocketry Challenge
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