

CONFERENCE PREVIEW

2019

AREA
CONFERENCES
ON SCIENCE
EDUCATION



This Is the Place for Monumental Science

SALT LAKE CITY, UT
OCT. 24-26



Science: The Bridge to Endless Possibilities

CINCINNATI, OH
NOV. 14-16



Fostering a Culture for Science

SEATTLE, WA
DEC. 12-14

#NSTA19

REGISTER EARLY AND SAVE \$\$

WWW.NSTA.ORG/CONFERENCES



NSTA Partner School Package



Each Partner School receives these benefits:

- » **NSTA membership** for all teachers in the school building
- » **One free conference** registration for a teacher/administrator to a STEM Forum or an NSTA Conference
- » **Recognition** as an NSTA Partner School
- » **One** print journal for the school building and e-journals for every teacher/member in the school
- » **One** hard copy of NSTA Reports (newspaper) with e-Reports for every teacher/member in the school
- » **Learning Center Forum**, including collections of NGSS and STEM resources differentiated by grades
- » **An initial one-on-one conversation** with NSTA to determine which products and services can best support school-wide professional learning goals
- » **Participation** in three virtual conferences per year, exploring critical topics for STEM and NGSS integration
- » **Access** to a national NGSS and STEM listserv and 16 other listservs

In addition, each teacher receives discounts on

- » **NSTA conferences and workshops**
- » **Print books**
- » **Interactive eBooks+**

Special Introductory Price:

\$1,950 per school



Please visit

www.nsta.org/schoolmembership

for more information

schoolmembership@nsta.org





Table of Contents

SPONSORS

Salt Lake City

Speakers.....	5
Special Events.....	8
Short Courses.....	9
Graduate Credit Opportunity/Committee Leaders.....	10
Schedule at a Glance.....	11

Cincinnati

Speakers.....	13
Special Events.....	16
Short Courses.....	17
Graduate Credit Opportunity/Committee Leaders.....	18
Schedule at a Glance.....	19

Seattle

Speakers.....	21
Special Events.....	23
Graduate Credit Opportunity/Committee Leaders.....	24
Short Courses and Educational Trip.....	25–26
Schedule at a Glance.....	27

First-Timers Sessions.....	3
NSTA's Store and NSTA Press® Sessions.....	29
Exhibitors.....	30–31
Registration and Travel Arrangements.....	32–33



The environment is important to science educators. This preview is recyclable and was printed on recycled paper.



—Photo courtesy of Jacob Statton



Attention Newbies!

**This a Great Time to Join Us
at Our NSTA Area Conferences
on Science Education**

Welcome First-Time NSTA conference attendees as NSTA celebrates our 75th year! 2019 marks our 75th year of promoting science education across the nation and beyond.

We've got special First-Timer sessions so you won't feel overwhelmed by all there is to see and do at an NSTA conference on science education. These interactive explorations take you through the program, the conference app, and NSTA's social media. By the end of the session, you will know just how to get the most from your conference experience in addition to building new networks with science colleagues.

Salt Lake City

Date/Time: Thursday, October 24, 8:00–9:00 AM

Location: I55F, Salt Palace Convention Center

Cincinnati

Date/Time: Thursday, November 14, 8:00–9:00 AM

Location: Jr. Ballroom D, Duke Energy Convention Center

Seattle

Date/Time: Thursday, December 12, 8:00–9:00 AM

Location: Ballroom 6C, Washington State Conv. Center

Between **September 1**
and **October 31, 2019**,
get **free shipping** when
you order \$75 or more of
NSTA Press and
NSTA Kids books.

Use promo code
SHIP19
when you checkout
in the online
Science Store.*

*Offer valid only on orders for NSTA Press and NSTA Kids books or e-books purchased in the online NSTA Science Store and shipped to U.S. addresses. May not be combined with any other offer.

Salt Lake City Speakers

Follow your
favorite speaker on Twitter!
See our featured speakers'
Twitter handles on these
pages or search on
#NSTA19.

KEYNOTE SPEAKER

WILD ABOUT SCIENCE: My Journey from NFL Cheerleader to National Geographic Explorer



Mireya Mayor @mireyamayor

PRIMATOLOGIST AND NATIONAL GEOGRAPHIC EXPLORER

Join Mireya Mayor for a morning of adventure, as this one-time Miami Dolphins cheerleader shares how she found a love for anthropology and pursued a doctoral degree to how she discovered a new species of lemur on the island of Madagascar, became a Fulbright Scholar and National Geographic's first woman wildlife correspondent to the grueling adventure of motherhood.

As an advocate for science and education, her passion is both inspiring and contagious. Mireya's talk aims to inspire teachers and students, particularly women and girls, to pursue their passions in the sciences, because "you ask people to name a female explorer, and they're pretty hard-pressed."

*Speaker is sponsored by
National Geographic
Learning | Cengage*



FEATURED PRESENTATION

The Playful Side of Science



AnnMarie Thomas @amptMN

PROFESSOR, SCHOOL OF ENGINEERING AND THE OPUS COLLEGE OF BUSINESS, UNIVERSITY OF ST. THOMAS, ST. PAUL, MN

AnnMarie Thomas is a professor in the School of Engineering and the Opus College of Business at the University of St. Thomas. She is the founder and director of the Playful Learning Lab, which explores ways to encourage children of all ages to embrace playful learning. AnnMarie is the author of *Making Makers: Kids, Tools, and the Future of Innovation* and director and co-creator of OK Go Sandbox, an education collaboration with the Grammy award-winning band, OK Go. In this presentation AnnMarie looks at the unexpected ways that educators can bring together fields like music and computer programming, dance and physics, circus and sensors, and sculpting and circuitry.

STRAND: Forming Natural Bridges: Integrating Science Across Content Areas

Integrative learning is a habit of mind that a student builds, beginning with bridging simple connections and ideas that progress toward synthesizing and transferring learning to new and complex situations. Sessions with grade-appropriate examples of this continuum will illustrate how students can effectively connect, transfer, reflect, and communicate their experiences.

FEATURED PRESENTATION

Teaching Science Is Phenomenal!



Brett Moulding

DIRECTOR, PARTNERSHIP FOR EFFECTIVE SCIENCE TEACHING AND LEARNING, OGDEN, UT

Brett Moulding was a member of the NRC committee that developed the *Framework for K–12 Science Education* and a lead writer on the *Next Generation Science Standards*. He was the director of the Council of State Science Supervisors' Building Capacity for State Science Education (BCSSE) initiative and is the director of the Partnership for Effective Science Teaching and Learning (PESTL). Brett is the author of *A Vision and Plan for Science Teaching and Learning* and *Teaching Science Is Phenomenal*. Brett's session will focus on how teachers can use science phenomena to engage students in three-dimensional science performances for learning science.

STRAND: Navigating Phenomenal Landscapes: Using Phenomena as a Way to Guide Science Instruction

Science helps us make sense of observable natural phenomena and to predict future occurrences. Phenomena should be used to help students navigate their learning. Phenomena are best used in classrooms to engage students in science and engineering practices as they develop their understanding of disciplinary core ideas through the lens of crosscutting concepts. These phenomena can operate much like landmarks on a map, helping students understand the world around them and to make sense of future sights they might see.

FEATURED PRESENTATION

Engaging the Whole Family in STEM: Leveraging the Influence of the Home Toward STEM Interests, Aspirations, and Identity



Sonia Galaviz

STEM COORDINATOR AND FIFTH-GRADE TEACHER, GARFIELD ELEMENTARY SCHOOL, BOISE, ID

Sonia Galaviz is a fifth-grade teacher at Garfield Elementary School in Boise. She has taught for 15 years in Title 1 schools and is passionate about public education. Sonia is Garfield's STEM Coordinator and works to enhance STEM education and opportunities in her school, which serves a diverse population of students and families including refugees, English language learners, several special needs programs, homeless and families in transitional housing, and those living below the federal poverty line. Sonia's session will discuss specific experiences designed to engage and support the whole family in STEM, particularly those from diverse/underrepresented backgrounds.

STRAND: Hook 'em for Life: Sustaining Science Teaching and Learning

Humans are curious, wondering creatures. Understanding how to create rich science environments that support and encourage all students' love of science is key to "hooking" their interest in science and engaging their curiosity as lifelong learners and advocates of scientific literacy. Sessions will exemplify how science learning is inspired in the classroom and extends far beyond.



—Photo courtesy of Austen Diamond Photography/Visit Salt Lake

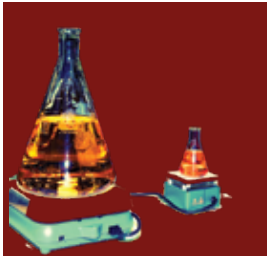
Check out more than 200 sessions and other events with the
Salt Lake City Session Browser
www.nsta.org/saltlakecitybrowser

Salt Lake City Conference + SPECIAL EVENTS

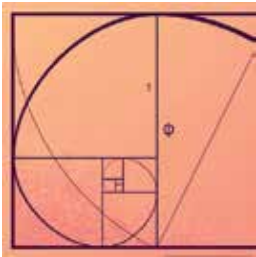
STARTS
THURSDAY
OCTOBER 24
@ 8:00 AM

FRIDAY
OCTOBER 25

CHEMISTRY DAY



ENGINEERING DAY



ENDS
SATURDAY
OCTOBER 26
@ 12 NOON

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/saltlakecitybrowser. (Tickets Required)

Coasting with Newton's Laws (SC-1)

DATE: THURSDAY, OCTOBER 24, 8:00–11:00 AM

TICKET PRICE: \$15 ADVANCE; \$20 ON-SITE

In order to interact and apply Newton's laws of motion, participants in this short course will design a model roller coaster using foam tubes and marbles that works reliably and safely. Coaster designs will include upside-down loops, corkscrews, specific degree turns, and length of drops that apply to potential and kinetic energy. Participants will consider project requirements and limitations that engineers must take into consideration with designing roller coasters. At the end of the short course, participants will discuss how the workshop applies directly to the 5-E Learning Cycle. Other aspects and theories of the lesson will be discussed through Kagan Cooperative Learning structures (science and engineering practices, disciplinary core ideas, and crosscutting concepts). Participants will then use their experiences to write reports of their findings (ELA/mathematics).

Three-Dimensional Teaching and Learning Powered by STEM (SC-2)

DATE: THURSDAY, OCTOBER 24, 2:00–5:00 PM

TICKET PRICE: \$47 ADVANCE; \$52 ON-SITE

In which ways are the *Framework* vision and STEM initiatives in harmony with each other? We will explore the *Framework* vision for a scientifically literate society and discuss how this vision is mutually supportive of STEM education. In this short course, we will focus on aspects of the designed world through the application of science and engineering practices. The goal of this short course is to empower educators to better integrate both STEM and three-dimensional standards for teaching and learning. Bring a notepad and pencil or tablet/laptop.

Bodies in Motion and Forces at Play: Modeling Science and Arts Integration Through Movement (SC-3)

DATE: FRIDAY, OCTOBER 25, 8:00–11:00 AM

TICKET PRICE: \$12 ADVANCE; \$17 ON-SITE

Strand: Forming Natural Bridges: Integrating Science Across Content Areas

In this short course, participants will discover ways to use physics and dance in parallel to help students understand science and engineering practices and crosscutting concepts that apply to choreography as well as to engineering, and to science as well as to artistic performance. Although physics and dance or science and the arts each have important distinctions and different purposes, many practices such as investigating, modeling, and communicating; and crosscutting concepts like patterns, cause and effect, stability and change, etc. can be leveraged to engender significant student inquiry. We'll demonstrate some activities, provide resources, and promote discussion for classroom application and future work that incorporates these integrated practices. All abilities and backgrounds welcome.



—Photo courtesy of Steve Greenwood/Visit Salt Lake

Graduate Credit Opportunity

Graduate Credit Sponsored by Southern Utah University

Salt Lake City area conference attendees can earn one (1) graduate-level credit in professional development through **Southern Utah University course #EDPD 5010-400**. To obtain credit, you must be registered for the Salt Lake City area conference, complete the required assignments, and pay a fee of \$25 for one credit. An NSTA transcript is also required. Register for graduate-level credit by Thursday, October 10 (two weeks prior to the start of the conference) at utsta.org, and submit the required assignments by Sunday, December 1, 2019. For complete details, visit bit.ly/2KC6uoK.

Salt Lake City Conference Committee Leaders

John R. Taylor

Conference Chair
Assistant Dean and Professor
of Biology
Southern Utah University
Clear City, UT
taylorjr@suu.edu

Josh Stowers

Program Coordinator
Assistant Professor
Brigham Young University
Provo, UT
josh_stowers@byu.edu
taylorjr@suu.edu

Dawn Monson

Local Arrangements Coordinator
Executive Director
Utah Science Teachers
Association
Provo, UT
dmonson@utsta.org

Salt Lake City

Conference at a Glance

Make your own conference schedule using the Salt Lake City Session Browser (www.nsta.org/saltlakecitybrowser). 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	HANDS-ON WORKSHOP
Elementary	Thurs., 8:00–9:00 AM—Inquiry in Action: Investigating Matter K–5		•						•
	Thurs., 12:30–1:30 PM—One, Two, Three, Four...First-Graders Love to Explore...with Sound!					•			•
	Thurs., 3:30–4:30 PM—Birding Is Elementary	•						•	
	Fri., 9:30–10:30 AM—Bring Back the Bees!	•							•
	Fri., 12:30–1:30 PM—Inviting Play into the Classroom				•				•
	Fri., 2:00–3:00 PM—Let's Get Wet—Wind, Water, and Weather for Grades PreK–3			•					•
	Sat., 9:30–10:30 AM—Nurture Through Nature (How Four Teachers Stumbled Their Way into Building the Most Innovative School Club in the Country)						•	•	
	Sat., 11:00 AM–12 Noon—K–3 Discovery and Exploration at the Intersection of Literacy and Science					•		•	
Middle Level	Thurs., 8:00–9:00 AM—NARST-Sponsored Session: I Didn't Know What Real Science Was? Citizen Science, STEM Education, and Career Interest						•	•	
	Thurs., 12:30–1:30 PM—Using Current Examples of Natural Selection in Your Classroom	•							•
	Thurs., 2:30–3:00 PM—It's All Matter with Matter Tag		•					•	
	Thurs., 3:30–4:30 PM—Earthquake Shaking: Building Contest			•					•
	Fri., 8:30–9:00 AM—Newton's Laws on Gym Scooters		•					•	
	Fri., 11:00 AM–12 Noon—ASEE Session: Literacy-Infused Engineering for Middle School and Elementary Students				•				•
	Fri., 2:00–3:00 PM—Data in the Classroom: Use NOAA Resources to Bring Scientific Data to Your Classroom			•				•	
	Sat., 8:00–8:30 AM—Increasing Student Understanding by Integrating Video Lectures into Your Science Course					•		•	
High School–College	Thurs., 9:30–10:30 AM—Phenomenon-Based Learning Using Digitized Museum Objects	•							•
	Thurs., 8:00–9:00 AM—NESTA Session: Addressing the NGSS Through Topographic Maps and Profiles			•					•
	Thurs., 12:30–1:30 PM—Analyzing Hazards and Risks in High School Chemistry Labs		•					•	
	Thurs., 2:00–3:00 PM—Exploring Genetics Through Genetic Disorders	•							•
	Thurs., 3:30–4:30 PM—A Data-Centered Approach to Science Teaching					•		•	
	Fri., 8:00–9:00 AM—You Can Never Talk Too Much...the Productive Science Classroom					•			•
	Fri., 9:30–10:00 AM—Developing a Course-Based Undergraduate Research Experience	•						•	
	Fri., 12:30–1:30 PM—Data Collection, Analysis, and Reporting in a Digital Laboratory				•				•
	Fri., 2:00–3:00 PM—Making Science Learning Life-long, Life-wide, and Life-deep: Incorporating Out-of-School (Informal) STEM Learning Experiences in the Classroom						•	•	
	Sat., 9:30–10:30 AM—Using Models to Teach High School Chemistry Topics		•						•
	Sat., 11:30 AM–12 Noon—Earth and Space Digital Media Resources with Accessibility Supports			•				•	

NATIONAL CONFERENCE ON SCIENCE EDUCATION

SAVE THE DATE



OVER 1,200 SESSIONS

NETWORK WITH
MORE THAN 10,000
EDUCATORS

350+ EXHIBITORS
WITH CUTTING-EDGE
RESOURCES

AND MUCH MORE!

NSTA is holding its 68th national conference next year

The theme is 20/20 Science: Expanding the Vision.
Conference program strands include:

- The Long View: Building a Lifelong Passion for Science
- Learning Science in All Spaces and Places: Near and Far
- Thinking, Acting, and Communicating Like Scientists:
A Focus on Disciplinary Literacy
- Aligning the Lenses: Authentic, Three-Dimensional Measurement
of Student Learning

For more information, please visit
www.nsta.org/boston

#NSTA20



Cincinnati Speakers

Follow your
favorite speaker on Twitter!
See our featured speakers'
Twitter handles on these
pages or search on
#NSTA19.

KEYNOTE SPEAKER

Schools Saving Species?



Luke Dollar @lukedollar

NATIONAL GEOGRAPHIC EXPLORER AND BASHORE DISTINGUISHED PROFESSOR AND CHAIR, DEPT. OF ENVIRONMENT AND SUSTAINABILITY, CATAWBA COLLEGE, SALISBURY, NC

A National Geographic Explorer and wildlife biologist, Luke has 25 years' experience coordinating conservation, research, and educational and development programs. His research focuses on carnivores ranging from big cats to Madagascar's largest carnivore, the fossa (*Cryptoprocta ferox*), and satellite analyses of their habitats. Luke served as program director of National Geographic's Big Cats Initiative from 2009 to 2017. His talk will focus on how wildlife conservation is intrinsically linked to education and educational development, as well as share stories from his efforts at big cat conservation.

*Speaker is sponsored by
National Geographic
Learning | Cengage*



FEATURED PRESENTATION

A New Era: Beyond Science and Literacy Integration



Jacqueline Barber @jqbarber

ASSOCIATE DIRECTOR, THE LAWRENCE HALL OF SCIENCE,
THE UNIVERSITY OF CALIFORNIA, BERKELEY

We used to call it integration of science and literacy. Now we recognize that reading science text, engaging in science talk, and constructing written and oral scientific arguments is simply part and parcel of science. Learning to obtain, negotiate, and communicate information in evidence-based ways is an essential part of preparing students for a lifetime as evidence-based thinkers. Jacquey will discuss this pivotal moment in science education, why it promises to transform how we think about teaching and learning science, and why that's a good thing!

STRAND: Building Strong Bridges: Reinforcing the Connection Between Science and Literacy

High-performing schools often model transdisciplinary learning to help students make connections and deepen understanding in science and other content areas. In light of recent trends as computer science and technology standards are formed and expected to be infused into traditional science classes, offering STEM-focused challenges to bridge literacy skills across disciplines allows teachers to address diverse learners' needs. In this strand, participants will delve into examples from practitioners reaching across traditional boundaries to illuminate three-dimensional science learning.

FEATURED PRESENTATION

Science as a Fundamental Skill and Lifelong Experience: Workforce and Life Force



STEPHEN PRUITT @DrSPruitt

PRESIDENT, SOUTHERN REGIONAL EDUCATION BOARD, ATLANTA, GA

Stephen Pruitt started his education career as a high school chemistry teacher in Fayetteville and Tyrone, Georgia. During his career, he has amassed an extensive policy, assessment, and instructional background in education at the local, state, and national levels, including coordinating the development of the *Next Generation Science Standards* in his prior role at Achieve, Inc. Discussion centers on the world that awaits us in 2030, what system changes should entail, and how to advocate for the importance of science.

STRAND: Bridging the Three Dimensions of Science Teaching and Learning: Practices, Core Ideas, and Crosscutting Concepts

Most states are either using an authentic, state-developed Three Dimensional Learning Framework or they have implemented the *NGSS* to guide instruction that reflects local expectations. It is essential that teachers have opportunities to develop their ability to promote student learning. In this strand, participants will strengthen their capacity with the fundamental understandings of science (disciplinary core ideas), the “doing” of science (science and engineering practices), and the multidisciplinary themes (crosscutting concepts), for genuine and effective practice for all learners.

FEATURED PRESENTATION

Satellites Over Seals: Empowering Lifelong Learning Through Citizen Science in Antarctica



Michelle LaRue @drmichellelarue

RESEARCH ECOLOGIST, DEPT. OF GEOGRAPHY, UNIVERSITY OF CANTERBURY, CHRISTCHURCH, NZ

Satellites Over Seals is an interdisciplinary project initiated in 2016, which seeks to informally engage citizens with remote sensing and wildlife ecology to ultimately determine the fate of one of Antarctica's most iconic mammals: the Weddell seal. An ice-dependent species, the Weddell seal lives in some of the most remote habitats in the world, ironically making it perfectly suited for detection on high-resolution satellite imagery. In this talk, Michelle will introduce challenges in understanding the ecology of Southern Ocean predators, and how engaging with citizen scientists via new technologies mutually benefits scientific pursuit and lifelong engagement with the natural world.

STRAND: Constructing Bridges: Building Lifelong Appreciation and Passion for Science

Educators must be able to help students transcend instructional experiences as they develop the habits of science they will carry through life. The application of science pedagogy can introduce learners to the broad concepts and myriad connections to the real world around them. In this strand, participants will explore the varying depths of science available to all—no matter where their river flows.



— Photo courtesy of Michelle LaRue

Check out more than 200 sessions and other events with the Cincinnati Session Browser at:
www.nsta.org/cincinnati/browser

Cincinnati Conference + SPECIAL EVENTS

STARTS

THURSDAY

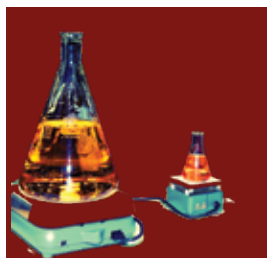
NOVEMBER 14

@ 8:00 AM

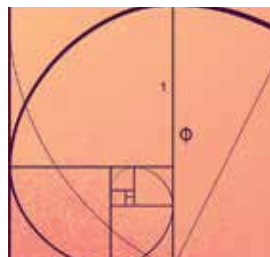
FRIDAY

NOVEMBER 15

CHEMISTRY DAY



ENGINEERING DAY



ENDS

SATURDAY

NOVEMBER 16

@ 12 NOON

Short Courses

Short courses will be filled on a first-come, first-served basis, so act now! For complete descriptions and to purchase tickets, visit www.nsta.org/cincinnati/browser.
(Ticket Required)



SC-3: Patterns and Trends—Photo courtesy of Cornell Lab of Ornithology

Reimagining Three-Dimensional Science Assessments: What Does It Look Like to Monitor Student Progress in the Era of New Standards? (SC-1)

DATE: THURSDAY, NOVEMBER 14, 10:30 AM–4:40 PM

TICKET PRICE: \$39 ADVANCE; \$44 ON-SITE

Explore the key features of assessments designed to elicit three-dimensional performances with an emphasis on fairly and equitably supporting diverse learners. Using research-based tools and processes, we will dive into examples of high-quality assessments and examine annotated examples of assessments. Walk away with a deeper understanding of the NGSS, what three-dimensional assessments “look like,” and concrete short- and long-term strategies you can use to transition your existing assessments. Expect a 30-minute break for lunch on own.

Creepy, Crawly Fun: Investigating the NGSS with Insects (SC-2)

DATE: FRIDAY, NOVEMBER 15, 8:00–11:00 AM

TICKET PRICE: \$44 ADVANCE; \$49 ON-SITE

Come investigate complete 5E lessons that use insects as learning tools! In this hands-on/minds-on short course, participants will explore complete 5E lessons that meet NGSS performance expectations for various grades K–4. Many of the lessons can be modified to fit different grade levels. Learn how to bring STEM to life with the wonders of a variety of species of insects! Find out how to set up a classroom enclosure for insects, acquire native species like termites and terrestrial isopods and care for them, and explore scientific inquiry activities you and your students can perform! Bring your laptop/tablet.

Patterns and Trends: Observe and Explore Bird Populations with Citizen Science (SC-3)

DATE: FRIDAY, NOVEMBER 15, 12:30–3:30 PM

TICKET PRICE: \$64 ADVANCE; \$69 ON-SITE

Experience firsthand the fun and ease of participating in eBird, the largest biodiversity-related citizen science project in the world, by going on a bird walk outside. Afterward, see demonstrations of the online tools and models eBird provides to engage students in graphing, mapping, and analyzing data to understand human impacts on bird populations. Leave with free curricula, a bird feeder, a new pair of Celestron binoculars, and the confidence to implement these teaching strategies.



—Photo courtesy of Louis Rideout/ Cincinnati USA Convention & Visitors Bureau

Graduate Credit Opportunity

Graduate Credit Sponsored by Ashland University

Cincinnati area conference attendees can earn one (1) Continuing Education Unit (CEU) credit in professional development through **Ashland University course #6260 C2**. To obtain CEU credit, you must be registered for the Cincinnati conference, complete the required assignments, and pay a fee of \$180. An NSTA transcript is also required. Register for CEU credit by Friday, November 29, 2019. For complete details, visit bit.ly/31MTtxT. Questions should be directed to Pat Crahan, director at Ashland University Southwest Center, at 800-670-0395/513-772-5532 or e-mail: ashland@greatoaks.com.

Cincinnati Conference Committee Leaders

Angela McMurry

Conference Chair
Biology Instructor and
SECO President
Arcanum High School
Arcanum, OH
mcmurry.angela@gmail.com

Paula Roberts

Program Coordinator
Science Instructional
Supervisor
Mahoning County
Educational Service Center
Canfield, OH
p.roberts@mahoningesc.org

Leslie Silbernagel

Local Arrangements Coordinator
Curriculum Supervisor
Northwest Local School District
Cincinnati, OH
lsilbernagel@nwlsd.org

Cincinnati

Conference at a Glance

Make your own conference schedule using the Cincinnati Session Browser (www.nsta.org/cincinnatibrowser). 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	HANDS-ON WORKSHOP
Elementary	Thurs., 8:00–9:00 AM—Crossing Over: Incorporating Energy and Science in Language Arts		•						•
	Thurs., 12:30–1:30 PM—The Nature of Teaching K–5 Natural Resources Curricula	•							•
	Thurs., 2:00–3:00 PM—CESI-Sponsored Session: Integrating Science for Young Children with an Outdoor Focus						•		•
	Thurs., 3:30–4:30 PM—Let's Get Wet: Wind, Water, and Weather for Grades PreK–3			•					•
	Fri., 8:00–9:00 AM—Fossils, Rocks, and Soil...Oh My!			•				•	
	Fri., 9:30–10:30 AM—Fairy Tale Forensics				•				•
	Fri., 12:30–1:30 PM—Makerspaces: Why, What, How			•				•	
	Fri., 2:00–3:00 PM—Energy, Energy Everywhere: An Investigation for Young Children Using Toys and Literature		•						•
	Sat., 8:00–9:00 AM—Phenomenon-Based, Three-Dimensional Learning Using Interactive E-Books and Hands-On Activities: Grades K–5					•		•	
	Sat., 9:30–10:30 AM—Using Nature Storybooks in the Early Childhood Classroom	•							•
Middle Level	Thurs., 8:00–9:00 AM—NMLSTA-Sponsored Session: Behave Like an Enzyme, Act Like a Plant	•						•	
	Thurs., 12:30–1:30 PM—To Bee or Not to Bee: Students Track Pollinators in Their School and Community as They Become Citizen Scientists						•		•
	Thurs., 2:00–3:00 PM—Enabling ALL Grade 3–8 Students to Recognize the Impact of STEM and the Essential Integration of All STEM Disciplines					•		•	
	Fri., 8:00–9:00 AM—ACS Middle Level Session: Particles of a Liquid and Changes of State		•						•
	Fri., 9:30–10:30 AM—Girls in Charge: The KGSC Teen Board Experience						•	•	
	Fri., 11:00 AM–12 Noon—ASEE Session: Puddlestoppers, Savin' Them Shoes				•				•
	Fri., 12:30–1:30 PM—Food Chains: Using Field Surveys That Give Real Results	•						•	
	Sat., 8:00–9:00 AM—STEM-ify Your Middle School Science Classroom					•			•
	Sat., 9:30–10:30 AM—Bringing Earth and Space Phenomena-Based Learning into Your Classroom with Digital Media			•					•
High School–College	Thurs., 8:00–9:00 AM—Innovative Life Science Activities for Preservice and Inservice Elementary Teachers	•							•
	Thurs., 12:30–1:30 PM—Understanding the Hubble Redshift			•				•	
	Thurs., 2:00–3:00 PM—Analyzing Hazards and Risks in High School Chemistry Labs		•					•	
	Fri., 8:00–9:00 AM—Equilibrium: The Key to Student Success		•						•
	Fri., 9:30–10:30 AM—Literacy, Content Reading, and the Promotion of Metacognitive Learning Strategies in STEM					•		•	
	Fri., 12:30–1:30 PM—Forensic Soil/Sand Analysis Using Historical Case Studies/Podcasts (NGSS/Earth Science/History)			•				•	
	Fri., 2:00–3:00 PM—Promoting Classroom Discourse					•			•
	Sat., 8:00–9:00 AM—Beams to Bridges: Graphing Stress			•					•
	Sat., 9:30–10:30 AM—Engineering Design for Biology—Protein Folding	•							•
	Sat., 11:00 AM–12 Noon—Revitalizing STEM Education Through Manufacturing Apprenticeships						•	•	

JOIN US

9TH ANNUAL STEM

SCIENCE TECHNOLOGY ENGINEERING MATHEMATICS

Forum & Expo

HOSTED BY NSTA
Louisville, Kentucky
July 22–24, 2020

- Experience hands-on sessions that enhance your ongoing development and improve your STEM knowledge.
- Explore ways to foster integration of research-based methods into the STEM curriculum.
- Network with colleagues and hone your STEM leadership skills.
- Compare project- and research-based activities that tackle issues of real-world relevance.
- Discover the aspirations of students who share their interests in STEM opportunities and careers.
- Check out the hottest tools and resources for STEM educators.
- Get the keys to success in developing partnerships with informal education groups, business, industry, and governmental agencies.

#STEMforum

This dynamic event brings together educators and organizations that 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.



Seattle Speakers

Follow your
favorite speaker on Twitter!
See our featured speakers'
Twitter handles on these
pages or search on
#NSTA19.

KEYNOTE SPEAKER

Tapestry Thinking: Weaving Diverse Threads of Science and Society



*Speaker is sponsored by
National Geographic
Learning | Cengage*

Nalini M. Nadkarni @nalininadkarni

PROFESSOR, DEPT. OF BIOLOGICAL SCIENCES, THE UNIVERSITY OF UTAH,
SALT LAKE CITY

How might we engage students who seem uninterested in science? Nalini describes her approach of “tapestry thinking,” weaving the ecological values of the tropical rain forest trees she has studied for three decades with other societal values, such as sports, religion, the arts, and social justice. Her programs inspire a sense of wonder and stewardship for forests and nature in groups who do not or cannot gain access to traditional venues for science education. She has engaged urban children, faith-based groups, policy-makers, incarcerated adults, and youth in custody by partnering with “ambassadors” of these groups and then bringing engagement events to the venues where they naturally gather.

FEATURED PRESENTATION

Teaching and Learning for Creativity Throughout the Lifespan



Jonathan Plucker

JULIAN C. STANLEY ENDOWED PROFESSOR OF TALENT DEVELOPMENT,
JOHNS HOPKINS UNIVERSITY, BALTIMORE, MD

The economy and culture of the 21st century has a tremendous need for creative talent. Whether one works in manufacturing, government, education, or the service industry, there is always a shortage of creatively talented people. In addition, the ability to exercise one's creativity is often identified as an important factor for happiness and well-being. Research on creativity, especially on how to foster and assess it, has grown tremendously over the past 30 years, and during this talk, we will review these recent developments and identify key strategies for enhancing scientific creativity in both students and adults.

STRAND: Finding Joy in Experiencing Science

To promote a scientifically literate society, it is imperative to instill in our students a love of science. Students need opportunities to be engaged in the scientific process and find happiness and hope in the scientific endeavor. All people need to be able to understand topics and make personal, professional, and civic decisions based on scientific evidence. In this strand, participants will learn about various ways of encouraging student engagement in science and learn about successful strategies for promoting student enjoyment in science throughout the learning process.

FEATURED PRESENTATION

Inside—Outside: The Diverse World of Learning



Chris Reykdal @chrisreykdal

WASHINGTON SUPERINTENDENT OF PUBLIC INSTRUCTION, OLYMPIA

Lifelong STEM learning is everywhere, but where and how do our students access rich STEM experiences? How can a painting or an event in history open the doors for students to think about STEM learning and career pathways? What does rainfall in the Pacific Northwest mean for the rest of the country? These different questions speak to STEM literacy, which is at the heart of lifelong learning. STEM learning improves the social, environmental, and economic conditions for our students' future lives. How do we enhance, strengthen, and create systems to robustly ensure that all our students can participate? Currently serving in his first term as state superintendent of public instruction, Chris and his team are focused on opening multiple pathways to high school graduation, including expanded technical education opportunities.

STRAND: Building Partnerships for Effective Science Education

Building collaborative partnerships in science enriches student learning, as well as creating life-long, life-wide, and life-deep experiences for students. Partnerships can be peer to peer, team to team, across curricular areas, as well as outside the classroom. We specifically invite Career and Technical Education–related workshops that focus on the scientific aspects of this strand. This strand will provide participants with strategies to increase partnerships through collaboration, thereby deepening the learning experience of our students.

FEATURED PRESENTATION

Building Grades 9–14 STEM/CTE Career Pathways Systems: Lessons from the Field



Robert Schwartz

SENIOR RESEARCH FELLOW, HARVARD GRADUATE SCHOOL OF EDUCATION, AND PROFESSOR IN RESIDENCE, JOBS FOR THE FUTURE (JFF), CAMBRIDGE, MA

Robert will share the promising career pathways work underway in such diverse places as New York City, California's Central Valley, and the states of Arizona and Delaware. He will touch on the challenges inherent in engaging regional leaders from K–12 and postsecondary education, the workforce system, employer associations, and youth-serving community organizations to work collaboratively to create the kind of opportunity structure for young people that can get them started on a successful career trajectory. Hear about the power of networks in advancing professional learning and building a new field of practice.

STRAND: Providing STEM Pathways for the Future

STEM begins with science, therefore it is critical that we develop and encourage all students to pursue a range of science opportunities in STEM classes. This will serve them well as they enter the job force and their adult lives. Science experiences must start at the preK level to ensure each student has a STEM future. Students need hope for earning living family wages and being productive contributors to our society. This strand will help teachers see how they can provide opportunities for each student to learn about and experience STEM pathways, incorporating three-dimensional learning and the NGSS (if applicable).

Seattle Conference + SPECIAL EVENTS

STARTS

THURSDAY

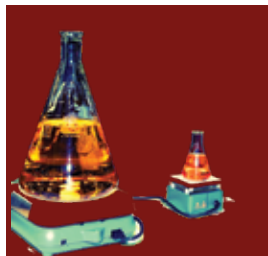
DECEMBER 12

@ 8:00 AM

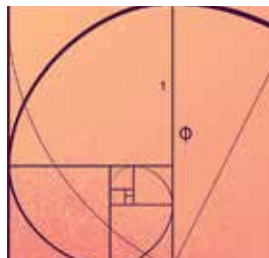
FRIDAY

DECEMBER 13

CHEMISTRY DAY



ENGINEERING DAY



ENDS

SATURDAY

DECEMBER 14

@ 12 NOON



Graduate-Level Credit Opportunity

Graduate-Level Credit Sponsored by Dominican University of California

Seattle area conference attendees can earn one (1) or two (2) graduate-level credits/units in professional development through **Dominican University of California course #EDUO 9039**. To obtain credit/units, you must be registered for the NSTA Seattle area conference, complete the required assignments, and pay a fee of \$95 for one credit/unit or \$190 for two credits/units. An NSTA transcript is also required. Register for graduate-level credit by Monday, December 30, 2019, and submit the required assignments by Sunday, January 26, 2020. For complete details, visit bit.ly/3ITv1L3.

Seattle Conference Committee Leaders

John P. McNamara

Conference Chair
Emeritus Professor
Washington State University
Pullman, WA
mcnamara@wsu.edu

Bob Sotak

Program Coordinator
Science/STEM Education
Consultant
Sotak Consulting Services
Edmonds, WA
bobsotak@gmail.com

Lisa Chen

Local Arrangements Coordinator
P-12 Science Instructional
Specialist
Shoreline School District
Shoreline, WA
lisa.chen@k12.shorelineschools.org

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/seattlebrowser.
(Tickets Required)



SC-4: Increasing Student Engagement Through “Aha” Moments—Photo courtesy of Nick Gould Photography

Thinking Machines: Build an Artificial Neural Network in Your Classroom (SC-1)

DATE: THURSDAY, DECEMBER 12, 8:00–11:00 AM

TICKET PRICE: \$20 ADVANCE; \$25 ON-SITE

Discover how to use Arduinos to build a working Artificial Neural Network (ANN). ANNs are currently used in many fields, including data mining, internet search engines, and machine vision applications (e.g., Google’s self-driving cars). ANNs differ from conventional computer programs in that they are designed to “learn” to accomplish a task based upon the principles that underlie learning in biological neural networks. Hands on with free student-tested curriculum available! Bring a laptop with Arduino software preloaded (www.arduino.cc/en/Main/Software).

Blending the E and the S in STEM (SC-2)

DATE: THURSDAY, DECEMBER 12, 8:00–11:00 AM

TICKET PRICE: \$15 ADVANCE; \$20 ON-SITE

Strand: Providing STEM Pathways for the Future

In this short course, we will explore the integration of engineering into science classrooms in ways that motivate deep learning of science and engineering via doable instructional shifts. This research-based and reality-driven approach is based on tested resources built on a research foundation for layering the NGSS engineering design process into elementary classrooms and secondary science courses.

Building Bridges Between Biology and Health Through Type 2 Diabetes Education (SC-3)

DATE: FRIDAY, DECEMBER 13, 8:00–11:00 AM

TICKET PRICE: \$15 ADVANCE; \$20 ON-SITE

Strand: Building Partnerships for Effective Science Education

The phenomenon of type 2 diabetes anchors core ideas about homeostasis, nutrition, population traits, gene-environment interactions, cell signaling, and more. In this short course, participants will experience three-dimensional designed lessons and activities from our diabetes collection, created for introductory and advanced biology classes. Included are four activities: Use of a

Short Courses, cont.

glucose homeostasis model board; a population trait inheritance simulation using beans, including a discussion of the role of race in health outcomes; our Yeast Feast lab in which yeast are used as a bioassay for glucose; and a cell signaling lab in which participants experience the “glucose blocker” Gymnema herbal tea.

Increasing Student Engagement Through “Aha” Moments: Supporting the NGSS with Process Oriented Guided Inquiry Learning (POGIL) (SC-4)

DATE: FRIDAY, DECEMBER 13, 9:00 AM–3:00 PM

TICKET PRICE: \$55 ADVANCE; \$60 ON-SITE

Strand: Finding Joy in Experiencing Science

Immerse yourself in collaborative learning to explore connections between POGIL strategies and the NGSS. Experience the roles, teamwork, and process skills that engage students and improve content mastery and retention. These student-centered learning strategies support all students, from English language learners and special education to gifted, as students create their own understanding of fundamental STEM concepts by working through carefully designed guided inquiry activities. Bring your curiosity along with a pencil. Plan for a break for lunch on own.



Educational Trip

This educational trip will be filled on a first-come, first-served basis, so act now! For a complete description and to purchase a ticket, visit www.nsta.org/seattlebrowser. (Ticket Required)

Fermentation Science: A Behind-the-Scenes Look at Hale’s Brewery and Westland Distillery (T-1)

DATE: THURSDAY, DECEMBER 12, 1:30–4:00 PM

TICKET PRICE: \$33 ADVANCE; \$38 ON-SITE

On this tour, you will explore the fascinating fermentation process of in-depth brewing. This expedition will take you to one of Seattle’s most iconic beverage production facilities, Hale’s Ales Brewery in the historic Ballard neighborhood. You will learn firsthand from master brewers how biology, chemistry, and physics converge in the different processes of brewing beer. You will dive into topics such as yeast microbiology, enzyme action, carbon dioxide production, and water chemistry. By the end of the tour, you will be a fermentation aficionado, having mastered the difference between lagers and ales, as well as how the treatment of the raw ingredients affects the final flavors. The tour will finish with a sensory analysis of products guided by trained olfactory experts and a tasting. *Note:* Must be 21 or older. ID required to participate.

Seattle

Conference at a Glance

Make your own conference schedule using the Seattle Session Browser (www.nsta.org/seattlebrowser). 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	HANDS-ON WORKSHOP
Elementary	Thurs., 8:00–9:00 AM—Inquiry in Action: Investigating Matter K–5		•						•
	Thurs., 12:30–1:30 PM—A Multi-District Movement Toward NGSS: The Northwest LASER Alliance					•		•	
	Thurs., 3:30–4:30 PM—Experience 3-D Learning in the K–2 Classroom Around the Principles of Flight		•						•
	Fri., 8:00–9:00 AM—Nurture Through Nature (How Four Teachers Stumbled Their Way into Building the Most School Club in the Country)						•	•	
	Fri., 11:00 AM–12 Noon—What Elementary and Middle School Teachers Can Learn from Engineers				•			•	
	Fri., 12:30–1:30 PM—Let's Get Wet: Wind, Water, and Weather for Grades PreK–3			•					•
	Fri., 2:00–3:00 PM—Bringing Earth and Space Phenomena into Your Classroom with Digital Media			•					•
	Sat., 8:00–9:00 AM—Jazz Up Student Science and Engineering Practices with Birds	•							•
	Sat., 11:00 AM–12 Noon—Two, Four, Six, Eight...This Is How We Integrate!					•			•
Middle Level	Thurs., 12:30–1:30 PM—Measuring Sea Level from Space			•					•
	Thurs., 2:00–2:30 PM—Superheroes and Cultural Responses: An Interdisciplinary Approach to Genetics	•						•	
	Thurs., 3:30–4:00 PM—Storm Drain Detectives					•		•	
	Fri., 8:00–9:00 AM—Engineering Design in the Middle School Classroom				•			•	
	Fri., 9:30–10:00 AM—Dear Pen Pal: How to Start a Pen Pal Program with Your Middle School Students						•	•	
	Fri., 11:00 AM–12 Noon—School Energy Experts		•						•
	Sat., 8:00–9:00 AM—How Can We Produce Fog for a Spooky Scene? Engaging Students Through Authentic Science and Engineering Practices				•				•
	Sat., 9:30–10:30 AM—Injecting Viruses into the Curriculum	•							•
	Sat., 11:00–11:30 AM—Two Deserts, One Sky: Connecting Students Half a World Apart by Teaching Each About Their Own Desert			•				•	
High School—College	Thurs., 8:00–9:00 AM—Building Bonds with STEM Industry						•	•	
	Thurs., 12:30–1:30 PM—Connecting Natural Selection and Speciation	•							•
	Thurs., 2:00–3:00 PM—Equilibrium: The Key to Student Success		•						•
	Thurs., 4:00–4:30 PM—Why Mentorship Matters to the Future of STEM					•		•	
	Fri., 8:00–9:00 AM—Engineering Design to Study Physics				•				•
	Fri., 9:30–10:30 AM—Catalyzing a Systems Approach to Studying Scientific Wellness, Disease, and Health Careers					•			•
	Fri., 11:00 AM–12 Noon—Climate Science for Teachers: Using the NSTA Position Statement			•				•	
	Fri., 12:30–1:30 PM—Using Case Studies in the High School Science Classroom						•	•	
	Fri., 2:00–3:00 PM—Thinking Machines: Build an Artificial Neural Network in Your Classroom!				•				•
	Sat., 8:00–8:30 AM—Building Curriculum Around Phenomena	•						•	
	Sat., 11:30 AM–12 Noon—Adding Modern Physics to the Traditional Physics Curriculum		•					•	

Visit the NSTA STORE

FREE
Shipping
for Onsite Book
Purchases!



Download the
conference app
and check for
store hours.

Offering the latest
resources for science
teachers, including new
releases and bestsellers!

- Fun NSTA-branded gear—unique hats, shirts, mugs, and more
- Meet your favorite NSTA Press authors
- Ask about our NSTA gift cards—great gift ideas!

Use the conference app for special giveaways,
contests, and more throughout the conference.

Visit www.nsta.org/store to make a
purchase today, or call 800-277-5300.



Visit NSTA Store

STORE HOURS

Wednesday	4:30–7:00 PM
Thursday	7:30 AM–5:30 PM
Friday	7:30 AM–4:30 PM
Saturday	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

Salt Lake City

Plan on attending one or more of these sessions offered by our NSTA Press® authors, including *One Teacher's Influence on a Natural Phenomenon*; *Eureka! K–2* and *Grades 3–5 Science Activities and Stories*; *Second Edition Curriculum Topic Study (CTS)*, a *Systematic Process for Informing Curricular and Instructional Decisions*; and more! For details, visit us online at www.nsta.org/saltlakecitybrowser.

Cincinnati

Don't miss out on sessions offered by our NSTA Press® authors, including *Argument-Driven Inquiry in Biology, Chemistry, and Physics: Lab Investigations for Grades 9–12*; *Solar Science Provides Three-Dimensional Learning Experiences About the Sun, Earth, and Moon*; *Never Stop Wondering*; and more! Visit us online at www.nsta.org/cincinnatibrowser for details.

Seattle

NSTA Press® sessions are a “must-see”! Make plans to attend one or more of these sessions offered by our NSTA Press® authors, including *Reading, Writing, and Reasoning in the Schoolyard*; *Uncovering Students' (and Teachers') Ideas About Engineering and Technology*; *Fact or Phony? Successful Strategies to Promote Media Literacy*; and more! Visit us online at www.nsta.org/seattlebrowser for details.



The NSTA Exhibit Hall, with more than 125 of the leading science education companies and organizations in the world, has the newest products to show and share with educators.

EXHIBIT LOCATION

The exhibits are located in:

Salt Lake City

Hall B of the Salt Palace Convention Center

Cincinnati

Exhibit Hall A of the Duke Energy Convention Center

Seattle

Exhibit Hall 4A of the Washington State Convention Center

VIRTUAL EXHIBIT HALL

Preview and create your own list of exhibitors before the conferences using these links:

www.nsta.org/saltlakecityexhibits

www.nsta.org/cincinnatiexhibits

www.nsta.org/seattleexhibits

Don't miss
exclusive hands-on
Exhibitor Workshops
to take a deep dive
into exciting
new products!

THIS IS A PARTIAL LIST OF EXHIBITING COMPANIES FOR THE 2019 AREA CONFERENCES.

Activate Learning

Allen Institute

American Chemical Society

American Meteorological Society

Amplify

ANATOMY IN CLAY® Learning System

Arbor Scientific

Army Educational Outreach Program

Bedford, Freeman & Worth High School
Publishers

Bio-Rad Laboratories, Inc.

Carolina Biological Supply Co.

Clever Crazes for Kids

COSI

The Dana Foundation

Drone System Technologies

EcoTeach

Educational Innovations, Inc.

Edvotek Inc.

ExploreLearning

Fisher Scientific

Flinn Scientific, Inc.

Forestry Suppliers Inc.

Geyer Instructional Products

Great Minds LLC

HHMI BioInteractive

Houghton Mifflin Harcourt

Kings Island

Lab-Aids, Inc.

Learning A-Z

Legends of Learning

Loose in the Lab

MiniOne Systems

miniPCR Bio

Montana State University - MSSE

Nasco

National Geographic Learning | Cengage

National Institute on STEM Education

NatureBridge

Northwest Earth and Space Sciences Pipeline

NPS Lake Roosevelt National Recreation Area

PASCO

Pearson

School Specialty

Shoreline Community College

Simulation Curriculum Corp.

Southern Science Supply

STEMscopes - Accelerate Learning

TCI

Texas Instruments

U.S. Space and Rocket Center

Vernier Software & Technology

Westminster College

WGBH Education

WorldStrides

—Photo courtesy of Christina Dierssen



—Photos courtesy of Jacob Staton



SALT LAKE EXHIBIT HOURS

Thursday, Oct. 24
11:00 AM-5:00 PM

Friday, Oct. 25
9:00 AM-4:00 PM

Saturday, Oct. 26
9:00 AM-12 Noon

Exclusive exhibit hall and
exhibitor workshop hours

Thu. Oct. 24
11:00 AM-12:30 PM

Fri. Oct. 25
3:00-4:00 PM



CINCINNATI EXHIBIT HOURS

Thursday, Nov. 14
11:00 AM-5:00 PM

Friday, Nov. 15
9:00 AM-4:00 PM

Saturday, Nov. 16
9:00 AM-12 Noon

Exclusive exhibit hall and
exhibitor workshop hours

Thu. Nov. 14
11:00 AM-12:30 PM

Fri. Nov. 15
3:00-4:00 PM



SEATTLE EXHIBIT HOURS

Thursday, Dec. 12
11:00 AM-5:00 PM

Friday, Dec. 13
9:00 AM-4:00 PM

Saturday, Dec. 14
9:00 AM-12 Noon

Exclusive exhibit hall and
exhibitor workshop hours

Thu. Dec. 12
11:00 AM-12:30 PM

Fri. Dec. 13
3:00-4:00 PM

Registration + Travel Arrangements

1

Register



The fastest way to register 24 hours a day—register online with a credit card at:

www.nsta.org/saltlakecity
www.nsta.org/cincinnati
www.nsta.org/seattle



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/saltlakecity • www.nsta.org/cincinnati
• www.nsta.org/seattle

	EARLYBIRD	ADVANCE	ON-SITE
Salt Lake City	SEPT. 13	OCT. 4	After OCT. 4
Cincinnati	OCT. 4	OCT. 25	After OCT. 25
Seattle	NOV. 4	NOV. 22	After NOV. 22

FULL REGISTRATION

NSTA Member	\$195	\$205	\$240
Affiliate members**	\$195	\$205	\$240
Nonmember	\$290	\$300	\$330
Retired NSTA Member	\$140	\$150	\$165
Full-time Student	\$100	\$110	\$130

ONE DAY ONLY (THU OR FRI)

Nonstudent (member or nonmember)	\$175	\$185	\$195
Full-time Student	\$70	\$80	\$90

LAST DAY ONLY (SAT)

Nonstudent (member or nonmember)	\$110	\$115	\$120
Full-time Student	\$45	\$55	\$65
Nonteaching Spouse/Guest	\$100	\$110	\$120

Save on your registration fees by taking advantage of special earlybird and advance rates!
Also—save up to \$95 on your registration fees when you become an NSTA member!

For a description of the categories listed above, please visit the websites listed above.

2

Travel



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/saltlakecitytravel

www.nsta.org/cincinnatiattravel

www.nsta.org/seattletravel

****Affiliate members include...**

For Salt Lake City only:

- *AACT Members (American Association of Chemistry Teachers)*
- *AAPT Members (American Association of Physics Teachers)*
- *ACS Members (American Chemical Society)*
- *ASEE Members (American Society for Engineering Education)*
- *NABT Members (National Association of Biology Teachers)*
- *USTA Members (Utah Science Teachers Association)*

For Cincinnati only:

- *AACT Members (American Association of Chemistry Teachers)*
- *AAPT Members (American Association of Physics Teachers)*
- *ACS Members (American Chemical Society)*
- *ASEE Members (American Society for Engineering Education)*
- *KSTA Members (Kentucky Science Teachers Association)*
- *NABT Members (National Association of Biology Teachers)*
- *SECO Members (Science Education Council of Ohio)*

For Seattle only:

- *AACT Members (American Association of Chemistry Teachers)*
- *AAPT Members (American Association of Physics Teachers)*
- *ACS Members (American Chemical Society)*
- *ASEE Members (American Society for Engineering Education)*
- *NABT Members (National Association of Biology Teachers)*
- *WSTA Members (Washington Science Teachers Association)*

3

Housing

Salt Lake City Housing Deadline:

Sept. 27, 2019

www.nsta.org/saltlakecityhousing

Cincinnati Housing Deadline:

Oct. 18, 2019

www.nsta.org/cincinnatihousing

Seattle Housing Deadline:

Nov. 15, 2019

www.nsta.org/seattlehousing

Make your hotel reservations now and save! NSTA has negotiated special discounted room rates with hotels near the convention centers in Salt Lake City, Cincinnati, and Seattle.

*** Housing forms for Salt Lake City, Cincinnati, and Seattle are available as PDFs at the above websites.



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



For housing questions, 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/Salt Lake City

175 South West Temple, Suite 30
Salt Lake City, UT 84101

Orchid.Events—NSTA/Cincinnati

175 South West Temple, Suite 30
Salt Lake City, UT 84101

Orchid.Events—NSTA/Seattle

175 South West Temple, Suite 30
Salt Lake City, UT 84101

**Do not mail
to NSTA**

Non-Profit
US POSTAGE
PAID
BOLINGBROOK, IL
PERMIT #1200

National Science Teaching Association
1840 Wilson Blvd.
Arlington, VA 22201-3000

JOIN NSTA AND SAVE!

Did you know? NSTA members get substantial discounts on registration.

Become an NSTA member at www.nsta.org/membership.

SAVE UP TO \$45

WHEN REGISTERING BY THE
EARLYBIRD DEADLINES
LISTED BELOW

SALT LAKE CITY, UT
OCT. 24-26

EARLYBIRD
SEPT. 13

CINCINNATI, OH
NOV. 14-16

EARLYBIRD
OCT. 4

SEATTLE, WA
DEC. 12-14

EARLYBIRD
NOV. 4

2019

AREA CONFERENCES ON SCIENCE EDUCATION

