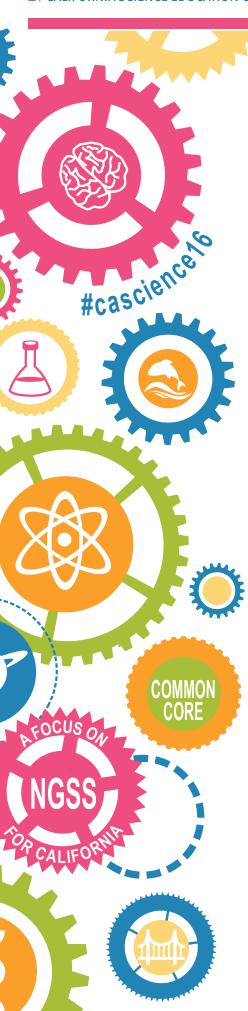


California Science Education Conference

OCTOBER 21-23, 2016 • PALM SPRINGS, CA



REGISTRATION BROCHURE



California Science Education Conference OCTOBER 21-23, 2016 • PALM SPRINGS, CA

Our education system is facing rapid, dramatic changes at local, state, and federal levels. With CA-NGSS pilot assessments scheduled for Spring of 2017, pressure to implement the California Next Generation Science Standards makes your participation in this year's conference more important than ever.

The new science assessment will be operational in 2019, making this year's 3rd and 6th graders 2019's test takers. With the flexibility of administration of the high school science assessment, this year's 8th, 9th, and 10th graders are all potential 2019 test takers. Do not wait for operational assessments—use this time with no test scores to start transitioning to CA-NGSS.

Get what you need to know about 3-dimensional learning, engineering, what is next in accountability and assessment for science, along with great programming for all science subject areas for all grade levels, from presentations by this year's keynote speakers, focus speakers, and short course and workshop presenters.

Join us in Palm Springs for three days of networking, education, and rejuvenation.

The California Science Education Conference features professional learning workshops for:

- California Next Generation Science Standards (CA-NGSS)
- STEM/STEAM
- Technology
- Common Core State Standards (CCSS)
- and much more

Register online today! conference.cascience.org

Schedule-at-a-Glance

THURSDAY, OCTOBER 20, 2016

4:00 pm – 7:00 pm Registration Desk Open

8:00 am - 5:00 pm ONWARD: Leading the NGSS Implementation in Your District - A Pre-Conference

Event for District-Level Science Coaches and TOSAs SOLD OUT!

FRIDAY, OCTOBER 21, 2016

7:00 am – 6:00 pm Registration Desk Open

8:00 am – 5:30 pm Field Course #1: Sex at the Zoo – The Importance of Genetic Diversity in

Captive Populations

8:00 am – 9:30 am Concurrent Workshops and Commercial Workshops

8:00 am – 1:00 pm Field Course #2: College and Career Readiness in Clean Tech and Wind Energy

9:40 am – 11:10 am Opening General Session and Keynote Address: CHIP YATES

(Sponsored by Chevron)

11:10 am – 12:30 pm Exclusive Exhibit Hall Time (Lunch Concessions Open in the Exhibit Hall)

12:30 pm – 2:00 pm Concurrent Workshops, Commercial Workshops and Focus Speaker:

CALIFORNIA SCIENCE CURRICULUM FRAMEWORK PANEL

1:00 pm – 5:00 pm Primary Pathway, Upper Elementary Pathway

2:00 pm - 2:30 pm Transition

2:30 pm - 4:00 pm Concurrent Workshops, Commercial Workshops and Focus Speaker: SANDY MARSHALL

2:30 pm – 5:30 pm Short Courses 4:00 pm – 4:20 pm Transition

4:20 pm – 5:50 pm Concurrent Workshops, Commercial Workshops and Focus Speaker: STEPHEN PRUITT

5:50 pm – 6:30 pm Exclusive Exhibit Hall Time 6:45 pm – 9:30 pm STEM Pool Party (ticket required)

SATURDAY, OCTOBER 22, 2016

7:00 am – 5:45 pm Registration Desk Open

7:00 am - 6:30 pm Field Course #3: Geology of Joshua Tree National Park

8:00 am – 9:30 am Concurrent Workshops, Commercial Workshops and Focus Speaker: ALAN COLBURN

8:00 am – 11:30 am Primary Pathway, Upper Elementary Pathway

8:30 am – 11:30 am Short Courses 9:30 am – 10:00 am Transition

10:00 am – 11:30 am Concurrent Workshops, Commercial Workshops and Focus Speaker:

CA-NGSS and COMPUTATIONAL THINKING PANEL

11:30 am - 12:00 pm Transition

12:00 pm – 1:30 pm Awards Luncheon and Speaker: BRIAN REISER

12:00 pm – 1:30 pm Concurrent Workshops, Commercial Workshops and Focus Speaker: ELSA HENNINGS

1:30 pm - 3:00 pm Exclusive Exhibit Hall Time

3:00 pm - 6:00 pm Short Courses

3:00 pm – 4:30 pm Concurrent Workshops and Focus Speaker: JOHN STENGER-SMITH

4:30 pm - 4:45 pm Transition

4:45 pm – 6:15 pm Concurrent Workshops and Focus Speaker: RITA JANUSZYK

SUNDAY, OCTOBER 23, 2016

7:30 am – 1:00 pm Registration Desk Open

8:00 am – 9:30 am Closing General Session and Keynote Address: DIANNA COWERN

9:30 am – 9:45 am Transition

9:45 am – 11:15 am Concurrent Workshops

11:15 am – 11:30 am Transition

11:30 am – 1:00 pm Concurrent Workshops

CSTA reserves the right to modify or cancel any of the events listed here or to modify the schedule. For the most current program of events, please visit **conference.cascience.org**.

Pre-Conference Event for District-Level Science Coaches and TOSAs

ONWARD: Leading the NGSS Implementation in Your District

Thursday, October 20, 2010 8:00 am – 5:00 pm

Join us and your colleagues for an in-de, th. CA-NGSS event before the conference begins.

person with a full 2016 CSTA conference registration. For those interested in the pre-conference event only the cost is \$200 per person. This cost includes meals and supplies.

Visit **conference.cascience.org** for more information.

Directory

Schedule-at-a-Glance 3
Pre-Conference
About the Conference4
Workshops 5
Conference Partners 6
General Sessions 7
Awards Lunch7
Award Winners7
University Credits 8
Focus Speakers 8
Short Courses10
Evening Events
Field Courses
Science Pathways15
Conference Information 16
Funding Your Participation 16
Registration Form
Hotel Reservations 19

Where California TK-12 Science Teachers Go for CA-NGSS

The California Science Education Conference is your best source of information on implementing CA-NGSS in your classroom.

You are invited to join us for the only conference dedicated to meeting the unique needs of California TK-12 Science teachers. Expect to gain practical skills to incorporate California Next Generation Science Standards (CA-NGSS) into your curriculum.

The California Science Teachers Association (CSTA) hosts this conference to focus on what California science educators need to know to hone their craft, stay updated on standards, and apply best practices gleaned from experts throughout the state.

Join more than 1,800 educators who share your passion for science from Friday, October 21 at 8:00 am to Sunday, October 23 at 1:00 pm. You'll make connections, gain new classroom ideas, and grow professionally.

Attention Preservice Teachers

Many in a multiple subject teacher credential programs only have one, 1 to 2- unit science methods class (10-20 hours total) in their entire teacher preparation program. If this is the case, attending the California Science Education Conference can provide almost as many hours of science methods instruction as you get in an entire quarter! And the best part is that you get to choose the topics that will help you the most from a menu of dozens of workshops, short courses, focus speakers, and field courses.

It gets even better! CSTA offers preservice teachers the opportunity to volunteer four hours of your time to the conference in exchange for a **free** conference registration! The only catch? You must be a preservice member of CSTA. CSTA offers a discounted membership fee of only \$25 for preservice teachers and credential students. This means that for a mere \$25 and four hours of your time, you can attend the entire three days of the conference and have the benefit of being a member of CSTA for an entire year. For more information about the volunteer program, contact Zi Stair at **zi@cascience.org**.

Who Should Attend?

Classroom science teachers (TK-12), science specialist and coaches, district and county science coordinators, home school educators, preservice science teachers, university and college science teacher educators, and informal science educators.

Beautiful Palm Springs Location

Conference sessions will be held at the Palm Springs Convention Center, 277 N. Avenida Caballeros; Renaissance Palm Springs Hotel, 888 E. Tahquitz Canyon Way; and the Hilton Palm Springs, 400 E. Tahquitz Canyon Way.

Fly into the Palm Springs International Airport, just 10 minutes away. For complete travel details, visit: **conference.cascience.org**.

Your Full Conference Registration Includes

- 200+ workshop sessions (Friday-Sunday)
- Two general sessions (Friday and Sunday morning)
- Admittance to the exhibit hall and eight focus speakers (Friday and Saturday)

Weekend only registration includes admittance to the events listed above that take place on Saturday and Sunday.

Workshops by the Best PD Providers in the State

The 2016 Conference features 90-minute workshops, giving participants and presenters the time needed to really "dig-in." CSTA has partnered with some of the best PD providers in the state to present workshops, including: the Exploratorium, K-12 Alliance, California Department and State Board of Education, the NGSS K-8 Early Implementation Initiative, and many more. See page 6 for a sample listing of workshops by these organizations.

Network and Learn at Ticketed Events

For an additional fee, registrants may purchase tickets for field and short courses as well as the awards luncheon. Connect with teachers Friday evening at the STEM Pool Party (separate ticket purchase required) or take part in the Dine About or Casino Night on Saturday evening. Weekend registrants may only purchase Saturday and Sunday event tickets.

Exhibit Hall

One of the highlights of the California Science Education Conference is the extensive array of science products in the Exhibit Hall. The Exhibit Hall features companies and organizations which offer products and services for every aspect of science education. From publishers to non-profits, from projectors to microscopes, the California Science Education Conference Exhibit Hall is your one-stop venue for all things science education. Be sure to visit the Exhibit Hall early and often, and bring a bag to hold all the goodies you'll buy and freebies you'll collect! **Door prize drawings will be held during the last hour and a half of the exhibit hall-be sure to attend!**

Exhibit Hall Schedule:

Friday, October 21 • 9:30 am - 6:30 pm (exclusive time*: 11:10 am - 12:30 pm and 5:50 pm - 6:30 pm)

Saturday, October 22 ● 9:00 am – 3:00 pm (exclusive time*: 1:30 pm – 3:00 pm)

Door Prize Drawings will be held on Saturday, October 22, 1:30 pm - 3:00 pm

*Exclusive times are hours during which no workshops are scheduled.

Workshops

The California Science Education Conference offers the most comprehensive science education workshop program in the state. Workshops are **90-minute** educational sessions. Many workshops are **hands-on** and led by other classroom teachers along with other science education professionals. **Workshops are open to all conference registrants** on a first-come, first-served basis. Workshops will be held at the Palm Springs Convention Center and the Renaissance Palm Springs Hotel. **All workshops presented are aligned to/support one or more California State Adopted Standards**. This includes the California **Next Generation Science Standards** (CA-NGSS), **Common Core** State Standards (CCSS) in English Language Arts (ELA) and Math, and **English Language Development (ELD)** Standards.

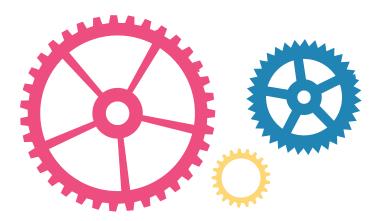
Workshops are highly interactive and often involve hands-on investigations, group work, and fascinating demonstrations. You're likely to receive free classroom materials, lesson plans, units, handouts, and other valuable resources. Access to all workshops is included with your conference registration.

Workshops are categorized by several variables including grade level and type of science (including STEM and Engineering). As well as the following emphases:

- 3-Dimensional Learning
- Classroom Management/Engagement
- Common Core-ELA
- Common Core-Math
- Crosscutting Concepts (CCCs)
- English Learners/Literacy
- Disciplinary Core Ideas (DCIs)
- Informal Science Education
- Leadership in Science
- Pedagogy
- Science & Engineering Practices (SEPs)
- Technology

WORKSHOP SCHEDULE

Friday, October 21	.8:00 am - 9:30 am (25 workshops)
	12:30 pm - 2:00 pm (25 workshops)
	2:30 pm – 4:00 pm (25 workshops)
	4:20 pm – 5:50 pm (25 workshops)
Saturday, October 22	.8:00 am - 9:30 am (25 workshops)
	10:00 am – 11:30 am (25 workshops)
	12:00 pm – 1:30 pm (25 workshops)
	3:00 pm – 4:30 pm (24 workshops)
	4:45 pm – 6:15 pm (22 workshops)
Sunday, October 23	.9:45 am – 11:15 am (11 workshops) 11:30 am – 1:00 pm (9 workshops)



Visit conference.cascience.org/ workshops for a complete listing.

This table shows an approximate count of workshops, by grade level, that will be presented during the conference that address the subject matter indicated. Many workshops cross more than one grade span and workshops are categorized by many other factors. For a complete listing of workshops filterable by various criteria, please download the conference program book app (access it online at **cascience.conference.org**).

	All Sciences	Physical (incl. Physics & Chemistry)	Earth/Space	Environ- mental	Integrated	Life/Bio	Engineering	STEM/STEAM
TK-2	18	11	9	4	2	6	7	6
3-5	22	15	6	6	2	7	8	4
6-8	36	20	5	9	9	13	12	7
9-12	32	18	6	4	1	16	5	6
Not Grade Specific	22	1		2		1		4

Featured Conference Partner Strands

CSTA is proud to partner with several organizations to provide you with quality and exclusive content. Conference Partners and a sampling of their sessions are listed below:

Alameda COE/CSU East Bay:

- The Sound of Breaking Glass
- A Window into Student Sense-Making
- Tides Around the World
- Using Phenomena to Support Literacy Demands of the CA-NGSS
- Let's Give Them Something to Talk About: Discourse in the Science Classroom

California Department/State Board of Education:

- California Science Curriculum Framework: A Tool for Teachers in CA-NGSS
- Accountability Update A Focus on Science
- Blueprint for Environmental Literacy of Implementation
- CA-NGSS Assessment What to Expect This Spring and Beyond
- CA-NGSS: What is the Role of Computational Thinking, Modeling, and Simulation?

California Environmental Education Interagency Network (CEEIN):

- Projects and Practices: Remote Sensing of the California Coast
- Too Much? Too Little? Just Right!
- How to Create Engaging Environment-Based 3-D Lessons

California NGSS K-8 Early Implementation Initiative:

- Student Driven Inquiry Within NGSS
- From Worksheets to Interactive Notebooking: CA-NGSS Thinking Maps to Support the Writing Development of English Language Learners
- Building a Better Bar: An Engineering Task for Life Sciences and Chemistry
- English Language Development in an Inquiry Based Science Classroom
- School-Wide STEAM Challenges
- Life Cycles: A 3rd Grade Three Dimensional Learning Sequence
- Roller Coaster Physics with CA-NGSS
- Student Indicators of High Quality CA-NGSS Learning
- And More!

Exploratorium:

- Discourse and 3D CA-NGSS
 Instruction for Language Learners
- Learning Under Pressure: Sequencing Activities to Help Students Make Mental Models
- Investigating Light and Color: Next Generation Science Snacks (Science Activities)
- Plankton Rainbow: Investigating the Senses and Behavior of Brine Shrimp: A Next Generation Science Snack (Science Activities)
- Exploring the Carbon Cycle and the Role of Carbon in Our Atmosphere Using Data: Next Generation Science Snacks (Science Activities)
- And More!

K-12 Alliance (K-12A):

- The Use of Student Notebooks to Support 3D Learning: Modeling Chemical Reactions in 7th Grade
- Making Sense of Science Includes Speaking, Listening, Writing and Reading
- Purposefully Connecting Math Lessons to Science Activities to Strengthen Students' Understanding of Science Concepts in Middle School
- Engineering Bioethanol: A CA-NGSS Classroom Experience
- Reading in the Content Area

Oakland Unified School District:

 CCSS and CA-NGSS: Concrete Tools for Deeper Learning of Practices in Science and Math



- Equity in the Science Classroom
- Use What You've Got: Transitioning to CA-NGSS Using Existing Curricula
- Designing a Districtwide K-12 CA-NGSS Science Program
- And More!

San Francisco Unified School District:

- Teaching ELD Through the Context of Science in SFUSD Elementary Schools
- of Science in SFUSD Elementary Schools

 Common Learning Experiences in
- High School Science
- Using Existing Materials to Teach the CA-NGSS and Develop Environmental Literacy
- Developing a Scope and Sequence for High School Science The SFUSD Process
- A District's Approach to Implementing the CA-NGSS Integrated Model in Grades 6-8
- And More!





General Sessions

Friday, October 21, 2016 • 9:40 am – 10:10 am

CSTA Annual Meeting and Opening Session

Join us for the CSTA Annual Meeting of members presided by the 2015-2017 president Lisa Hegdahl. Learn about how CSTA has taken a leadership role in all aspects of the implementation of CA-NGSS at the state level.

Friday, October 21, 2016 • 10:10 am - 11:10 am

Keynote Presentation – Daredevil in the Lab: Engaging Kids with High Stakes Science

Chip Yates

From a working-class childhood in Pittsburgh to a record-setting career in advanced electric vehicle design, the seeming impossible journey of American daredevil Chip Yates has reached millions of kids with a positive message of ingenuity and determination. In his keynote, Chip will reflect on recent lessons learned in pushing the limits of technology to highlight the intertwined relationship between innovation and risk and how perhaps our greatest gift to today's youth is instilling in them the audacity to try, the courage to fail, and the willingness to learn.

Sponsored by Chevron





Human Energy

Sunday, October 23, 2016 • 8:00 am – 9:30 am

Closing Keynote Address - Where Science Meets Cat Videos Dianna Cowern

On the world wide web, science videos are often hidden among cute pets and prank videos. In this talk, I will discuss how the online community is beginning to embrace educational content. For example, my PBS Digital Studios show, Physics Girl, has now amassed more than 290,000 subscribers and 17 million views. This presentation will cover ways to inspire future scientists and future science communicators with effective demonstrations, engaging videos and

the marriage of various STEM disciplines. And we'll watch a few fun videos along the way.

Feel free to check out http://youtube.com/physicsgirl in preparation!

Congratulations Award Winners!

CSTA is pleased to honor the following award recipients at the 2016 conference. Your dedication to and proven excellence in science education are an inspiration to us all.

The following awards will be presented at the Awards Lunch on Saturday, October 22:

John Keller, PhD Margaret Nicholson Distinguished Service Award

California Science Project K-12 Alliance Distinguished Contributions Award

Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST) – 2016 California State Finalists

Tickets to this special event are available for purchase on the registration form.

Awards Luncheon

Saturday, October 22 • 12:00 pm − 1:30 pm • Fee: \$46

Join your fellow science education colleagues for this special event designed to celebrate achievement in science education. The CSTA Awards Luncheon is held in honor of the recipients of the Margaret Nicholson Distinguished Service Award, state finalists in the science teacher category for the Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST), and the Distinguished Contributions Award. In addition to a lunch and presentation of awards, attendees will enjoy a presentation by Dr. Brian Reiser.



Awards Luncheon Speaker

Dr. Brian Reiser, Professor, Learning Sciences, School of Education and Social Policy at Northwestern University

Brian J. Reiser was a member of the National Research Council committee authoring the report Taking Science to School (2007), which provided research-based recommendations for improving K-8 science education. Reiser worked with the NRC committee to develop the Framework for K-12 Science Education (2012), which guided the design of The Next Generation Science Standards (NGSS), and Developing Assessments for the Next Generation Science Standards (2014) which provides guidelines for NGSS assessments. Reiser has also worked with Achieve to provide feedback on the design of NGSS and on the tools to help states implement NGSS, and is collaborating with several state initiatives to design and provide professional development for K-12 teachers to support them in realizing the reforms in NGSS in

their classrooms. Reiser's research examines how to make the scientific practices of argumentation, explanation, and modeling meaningful and effective for classroom teachers and students. Reiser co-led the development of IQWST (Investigating and Questioning our World through Science and Technology), a three-year middle school curriculum that supports students in science practices to develop disciplinary core ideas.

Professional Development

Upper division university credit from CSU Long Beach or a certificate of completion from CSTA are available to conference attendees participating in educational events.

University Credit from CSU Long Beach:

Participants may apply for one unit of credit for Professional Development for any 12 hours of conference workshops, short courses, or focus speaker events. There is an additional tuition fee of \$130 and written assignment requirement for the unit of credit. Assignment information will be available on the web in September. Participants must submit their signed professional development passport, course registration, fees, and their written assignment by December 1, 2016. Assignment and registration details will be available online at www.scienceteaching.org. The course will appear on your transcript as SCED490: Special Topics in Science Education.

Certificate of Completion from CSTA:

CSTA will provide a certificate of attendance/completion listing the complete contact hours to any registrant completing and submitting the necessary paperwork. Details are available online.

Focus Speakers

Focus speakers are highly regarded scientists and education experts who present 90-minute, in-depth lectures on subjects relevant to science teaching. The focus speaker series allows you to expand your understanding in a wide range of critical topics. **Focus speaker sessions are included with your conference registration.**

FRIDAY, OCTOBER 21

12:30 pm - 2:00 pm

California's New Science Curriculum Framework: An Update and Review from the Experts

Matthew D'Alessio, Lead Writer and CDE Instructional Resources Unit Staff

Visit conference.cascience.org for details.

4:20 pm - 5:50 pm

Stephen Pruitt,
Kentucky Commissioner
of Education
Visit conference.
cascience.org for

details.



2:30 pm - 4:00 pm

Inspire STEM Girls Through Gender

Equitable Teaching
Strategies in STEM
Sandy Marshall, Founder/CEO, Project Scientist
and Leija Irvan, 8th
Grade Math & Science
Teacher, Edgewood Academy, Project Scientist
Academy Teacher
Learn about gender
equitable teaching
strategies in STEM

through SciGirls.

SciGirls is an Emmy

award-winning PBS



Kids TV show, website and outreach program designed to change how millions of girls think about STEM. Videos and hands-on activities work together to spark excitement and inspire STEM learning and participation for all girls (ages 8-13). Participants will experience the SciGirls Seven, research-based strategies to engage girls in STEM, as they complete team-based challenges and explore SciGirls' extensive free resources for classroom and informal settings. Project Scientist is a non-profit dedicated to serving girls in STEM through six-week summer STEM Academies on university campuses and year-round STEM Expeditions.

SATURDAY, OCTOBER 22

8:00 am - 9:30 am

When Do I Tell Them the Answer?

Alan Colburn, Professor of Science Education, University Long Beach "When do I tell students they are wrong? What if they still have



misconceptions? When do I give the right answer?" Teachers struggling to navigate NGSS's demands often hear inaccurate thinking, especially when engaging students in the open-ended activities that come with inquiry-based instruction. The temptation to simply correct this thinking is overwhelming. This presentation focuses on how and why sometimes it's better to let students confront their misconceptions and construct their own meanings, waiting until students are confident in their conclusions or need more information. Facilitate that process, take "teacher telling" off the table for awhile, and transform your students' science experiences.

10:00 am - 11:30 am

CA-NGSS: What Is the Role of Computational Thinking, Modeling, and Simulation? Alice Steinglass, Vice President of Product and Engineering at Code. org, Irene Lee, Director, Project GUTS; Research scientist, MIT Scheller Teacher Education Program, and Trish Williams, Member and Liaison to NGSS and CS, CA State

A wave of interest from teachers, administrators, parents and students is sweeping across the US to expand and diversify student access to computer science knowledge

Board of Education



and processes. And because it is now commonplace that scientists, engineers, and computer scientists often work together, the Next Generation Science Standards include mathematical and computational thinking, as well as the development and use of models and simulations, as two of the eight practices. Skeptical but intrigued? Or ready to jump on board? Join us to hear two of the nation's top experts discuss how computer science is increasingly interconnected with science, what these NGSS practices might look like in middle and high school classrooms, and the professional learning and resources currently available. Audience Q and A.

12:00 pm - 1:30 pm

NASA's Orion Capsule Parachute System – A View from the Inside Elsa Hennings, Senior Systems Engineer in NAWCWD's Escape, Parachute and Crashworthy Division



The Orion Capsule parachute system is presented, from the developmental testing through the installation into the Exploration Flight Test 1 (EFT-1) spacecraft, to the Pacific Ocean recovery operation for EFT-1. The presenter is Elsa Hennings, the Navy's Chief Engineer for parachutes, who has been a consultant to NASA since the beginning of the Orion parachute program and has been involved with the system each step of the way.

3:00 pm - 4:30 pm

Chemistry: The 3 Stooges and Tattoos John Stenger-Smith, Chemistry Professor and DoD Researcher, Cerro Coso Community College, Ridgecrest, CA Ever wonder how these



are related? Please come join me as I speak about my experiences in life, chemistry and comedy. I'll talk about the path that lead me to my current career from the moment 3 gentlemen (not the 3 Stooges) made a mistake in the UPENN Chemistry Research Laboratory to the present, warts, 'C"s and all. I'll also speak about my past experiences as a Chemistry teacher at a community college and give very frank opinions on some latest education related topics, and a discussion about hands-on laboratories in Science. The 13-year journey of "The Tattoo" will be explained. Interspersed with this information will be interesting information about the 3 Stooges, questions and lab safety. Questions are encouraged. I will also sing "Happy Birthday" to whomever has a birthday in October.

4:45 pm – 6:15 pm

Introduction to NGSS Evidence Statements -Translating the NGSS into Lessons

Rita Januszyk, Retired Science Educator and Science Coordinator, Writer on the NGSS



Writing Team, NGSS Diversity and Equity Team, NGSS Evidence Statements, NGSS Classroom Sample Tasks, and the Illinois State Board of Education Model Science Resource Project

One of the writers of the NGSS and NGSS Evidence Statements presents an introduction to NGSS Evidence Statements intended to inform participants of their structure and function. Participants analyze a sample Evidence Statement in order to understand how it articulates the use of a practice and a crosscutting concept to demonstrate the understanding of the DCI. Applying the understanding of Evidence Statements to 9 specific lesson examples demonstrates the utility of Evidence Statements in instructional and assessment design. Participants are encouraged to bring an Evidence Statement from their grade or discipline accessed online: http://www.nextgenscience.org/resources/ evidence-statements.

Short Courses

Short Courses are three- and six-hour programs that are California NGSS and/or Common Core-aligned and include a considerable amount of hands-on activity, interactive instruction, group work, and discussion. They are optional, additional-fee events that are open to registered conference participants on a first-come, first-served basis. Many short courses sell out early, CSTA strongly encourages you to purchase your tickets in advance. Short courses will be held at the Hilton Palm Springs Hotel.

FRIDAY, OCTOBER 21 • 2:30 pm – 5:30 pm										
Short Course	Presenter(s)	Grade Level • Science • Emphasis	Ticket							
SC1: Fostering a Science-Driven Language and Literacy Learning Environment Authentic communication is the best way to learn language and content. Learn to strategically include integrated and designated ELD instruction into 3-D science lessons. Engage in a hands-on science and language learning experience, and receive a toolkit for developing science/language acquisition lessons that meet the rigors of CA-NGSS and the California ELA/ELD Framework.	Diana Velez, K-5 Specialist, Lawrence Hall of Science UC Berkeley and Claudio Vargas, Coordinator, Science Programs, Oakland USD School District [OUSD] Conference Partner Presentation	Grades: Upper Elementary/Middle School (Grades 3-8) Science & Emphasis: Physical Science; 3-Dimensional Learning; Common Core- ELA; English Learners								
SC2: Using Hands-On Performance Assessment in 6-8 Classrooms: Assessing Student Mastery of the Science Practices, DCIs, and CCSS-ELA Explore hands-on performance assessment and its relationship to students' mastering Common Core and Next Generation Science Standards. Engage in a hands-on task, use this protocol to develop tasks of your own, and take home a sample student set-up.	Deborah Tucker, Science Education Consultant and Grant Gardner, President, Assessment Services, Inc.	Grades: Middle School (Grades 6-8) Science & Emphasis: Life Science/ Biology; Pedagogy; Preservice; SEPs	\$30							
SC3: Introduction to Teaching Science for Social Justice This short course will introduce teachers to the art of social justice teaching. Through interactive activities, we will share specific practices that have been successfully used in our science classes. Teachers will leave with new skills they can easily implement.	Amber Lancaster, Science Teacher, June Jordan School for Equity and Lenore Kenny, Science Teacher, June Jordan School for Equity	Grades: Middle School/High School (Grades 6-12) Science & Emphasis: All Sciences; Classroom Management/Engagement; DCls; Pedagogy	\$10							
SC4: Focus on Practices: Math and Computational Thinking, Your New Favorite Practice Math in science is more than just graphing. Have fun and learn how this practice not only stands on its own but can be a powerful ally to strengthen student facility with all of the other practices and crosscutting concepts.	David Tupper, CaMSP Project Director/TOSA, San Diego COE and Jeremiah Potter, MS Science/ NOYCE Master Teacher, Pacific Beach Middle School NGSS Early Implementation Initiative/ San Diego USD [CA-NGSS Early Implementer] Conference Partner Presentation	Grades: K-12 Science & Emphasis: All Sciences; 3-Dimensional Learning, Crosscutting Concepts; SEPs	\$20							
SC11: Project Prototype (CAMSP Cohort 10) NGSS Science and Engineering Lessons for Secondary Teachers Join us for a look at CA-NGSS instruction across three school districts participating in Project Prototype (CaMSP Cohort 10 grant). Actively explore innovative ideas for your secondary classroom. Leave the workshop with strategies and implementation ideas!	David Budai, Content Specialist: Elementary Science, Coachella Valley USD [CA-NGSS Early Implementer] Conference Partner Presentation	Grades: Middle School/High School (Grades 6-12) Science & Emphasis: STEM/STEAM; Pedagogy, Preservice Teacher Education, SEPs	\$20							

SATURDAY, OCTOBER 22 • 8:00 am – 11:30 am AND 3:00 pm – 6:00 pm												
Short Course	Presenter(s)	Grade Level • Science • Emphasis	Ticket									
SC10 is a 6 hour course presented over two three-hour sessions. SC10: What Happened to My Unit on Light? Part 1: 8:30 am − 11:30 am • Part 2: 3:00 pm − 6:00 pm Explore a sequence of 3-dimensional instruction on light aligned to CA-NGSS. Advance from K through 8th, engaging in activities built from a framework that attends to Common Core literacy, Science and Engineering Practices, Crosscutting Concepts and Disciplinary Core Ideas.	Arthur Beauchamp, Senior Director of Professional Learning, UC Davis School of Education and Cynthia Passmore, Associate Professor, UC Davis [K-12 Alliance] Conference Partner Presentation	Grades: Primary/Upper Elementary/ Middle School (Grades K-8) Science & Emphasis: Physical Science; 3-D Learning	\$25									

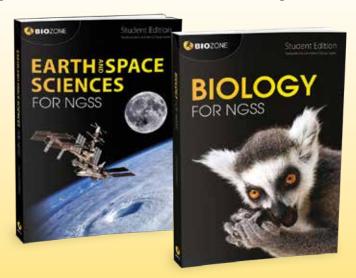
SATURDAY, OCTOBER 22 • 8:30 am – 11:30 am										
Short Course	Presenter(s)	Grade Level • Science • Emphasis								
SC5: A View from the Classroom of the CA-NGSS Scientific Practices Explore how to implement three CA-NGSS Science Practices. Beginning with an engaging phenomenon, you will use tools to ask questions, plan investigations and represent a conceptual model. You will leave with a concrete plan for implementing these practices.	Ingrid Salim, Science Teacher, Davis Senior High School and Kathleen Gill, Science Teacher, Davis Joint USD	Grades: Upper Elementary/Middle School/High School (Grades 3-12) Science & Emphasis: Physical Science; 3-D Learning, Pedagogy, SEPs	\$10							
SC6: Engineer Your Own Working Microscope with Everyday Materials Use a multimedia story about a \$1 microscope developed to diagnose diseases as inspiration to learn how to engineer a lighted microscope. Experience how engineering fits into three-dimensional learning through a sequence that targets life science and physical science goals.	Kirk Brown, Director of Science and STEM Integration, San Joaquin COE and Andrea Aust, Science Education Manager, KQED Public Broadcasting	Grades: Middle School (Grades 6-8) Science & Emphasis: Engineering; 3-D Learning, Pedagogy, Technology	\$30							
SC7: Integrating Science, ELA, and ELD: It All Works Together Participate in a learning sequence infusing ELD practices and strategies throughout a three-dimensional CA-NGSS learning segment using a 5E inquiry lesson design. Resources include planning templates.	Barbara Woods, Curriculum Specialist, Galt Elementary School District and Neika Estey, Teacher, 6th Grade, River Oaks Elementary [CA-NGSS Early Implementer] Conference Partner Presentation	Grades: Upper Elementary/Middle School (Grades 3-8) Science & Emphasis: Earth/Space Science; 3-D Learning, English Learner, Pedagogy	\$25							
SC8: Creating GIS Maps and Story Maps to Understand Intersections of Pollution and Income Work through an inquiry based lesson around the question: "Are low-income minorities disproportionately affected by air pollution?" Using free online GIS programs create maps and presentations with data regarding a specific community currently experiencing pollution problems. Bring a laptop to access all applications. iPads will only allow access to some applications.	Laura Ruiz, Field of Dreams Learning, YouthBuild USA Science	Grades: Middle School/High School (Grades 6-12) Science & Emphasis: Earth/Space Science; 3-D Learning, Crosscutting Concepts; Technology	\$10							
SC9: Digging In: Year 2 Lessons Learned from the CA NGSS K-8 Early Implementation Initiative Are you a teacher leader, administrator, or professional development provider leading the implementation of the CA-NGSS? This session is for you! Hear real stories about the successes and challenges of implementation and learn about tools and processes to help you.	Kathy DiRanna, Statewide Director, K-12 Alliance/WestEd [CA-NGSS Early Implementer] Conference Partner Presentation	Grades: Primary/Upper Elementary/ Middle School (Grades K-8) Science & Emphasis: All Sciences; Leadership (coaching, site leadership, administrator, professional development)	\$20							

SATURDAY, OCTOBER 22 • 3:00 pm – 6:00 pm											
Short Course	Presenter(s)	Grade Level • Science • Emphasis	Ticket								
SC12: How to Help School Districts Decide the Middle School Question Learn the difference between integrated and coordinated science. Engage in processes for making informed decisions about the middle school question of whether science should be integrated or discipline specific. Consider a hybrid model.	Jo Topps, Regional Director, K-12 Alliance/WestEd [K-12 Alliance] Conference Partner Presentation	Grades: Middle School (Grades 6-8) Science & Emphasis: All Sciences; Leadership (coaching, site leadership, administrator, professional development)	\$20								
SC13: Science and Literacy in Primary Grades (K-2): A Win-Win for Both CA-NGSS 3-D Science and Common Core-ELA This primary grade three member "Early Implementer" team will share Earth Science learning sequences designed to deepen understanding for K (weather), 1 (sun, moon, and stars) and 2 (landforms) linked to Common Core-ELA using note booking and ELA scaffolding strategies.	Karen Cerwin, Regional Director, K-12 Alliance/WestEd [CA-NGSS Early Implementer] Conference Partner Presentation	Grades: Primary (Grades K-2) Science & Emphasis: Earth/Space Science; 3-D Learning, Classroom Management/Engagement; Common Core-ELA	\$10								
SC14: Chemistry Experiments and Experiences (ChemEx²) Experience multi-use experiments to foster student learning. Improve your students' ability to argue a claim from evidence/observations. Revisit experiments for deeper understanding. These experiments, designed and vetted by Stanford University Department of Chemistry, are aligned with CA-NGSS and Common Core.	Sally Seebode, Educator, San Mateo High School and Katrina Rotter, Science Teacher, Lowell High School	Grades: Middle School/High School/13+ (Grades 6-13+) Science & Emphasis: Chemistry; 3-D Learning; Common Core-ELA; DCIs	\$35								
SC15: Using Phenomenon as a Tool for Integrating CA-NGSS Middle School Instruction Participants will experience using phenomena to create a coherent and integrated CA-NGSS three-dimensional unit that provides equitable access to science content in 6-8th grade classrooms.	Christy Compton Hall, Science Resource Teacher, San Diego USD Office of Leadership & Learning [CA-NGSS Early Implementer] Conference Partner Presentation	Grades: Middle School (Grades 6-8) Science & Emphasis: Integrated Science; 3-D Learning	\$10								



Do you have NGSS resources that support your teaching style?

BIOZONE's NGSS series combine detailed content with clear images and annotated diagrams within activities that encourage collaborative learning



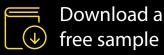
The perfect mix of resources all rolled into one!

Textbook Lite | Activities | Study Guide





See every page in full detail online

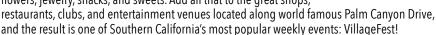


Evening Events

Thursday, October 20 • 6:00 pm – 10:00 pm

Palm Springs VillageFest

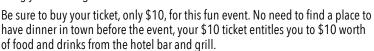
Arriving the night before the conference starts? Join thousands of visitors and locals in beautiful downtown Palm Springs on Thursday evening for the valley's finest event. Every Thursday evening, downtown Palm Springs transforms into a bustling venue with a diverse array of artists, artisans, entertainers, and purveyors of fresh fruits and veggies, flowers, jewelry, snacks, and sweets. Add all that to the great shops,





STEM Pool Party, Pool Deck, Renaissance Palm Springs Hotel

Palm Springs is all about hanging by the pool! Join CSTA for a fun evening of music, networking, and more around the largest swimming pool in Palm Springs! The Renaissance Palm Springs Hotel pool deck features cabanas, fire pits, and a heated swimming pool. CSTA and the UCR Bourns College of Engineering/MESA program will add a twist to the standard pool party scene with engineering challenges! Register your team for the cardboard boat challenge (teams of 4 to 6 per team) and race across the swimming pool, or just kick back and enjoy the music and watch the races or check out the ROV demonstrations from the Marine Advanced Technology Education (MATE) Center. Don't forget to bring your bathing suit!





Saturday, October 22, 7:00 pm

Dine-About Palm Springs

CSTA is pleased to offer conference attendees an opportunity to meet and network with fellow science teachers. We have made reservations at several area restaurants for Saturday, October 22 at 7:00 pm. Each reservation is for a table of six, and the restaurants have all agreed to issue separate checks.

Here is how the program works: Visit the Dine-About Palm Springs sign-up board in the CSTA booth in the exhibit hall. There you will find the list of restaurants, sample menus, and

a sign-up sheet. If you would like to eat at that restaurant, add your name to the list. Once the sign-up list is full no more names can be added. On Saturday, October 22, arrive at your restaurant of choice and check in for the reservation being held under the name of CSTA. Then enjoy an evening shared with your fellow science teachers, making new friends, and enjoying a night out on the town.

Saturday, October 22, 7:00 pm

Night at the Casino

Feeling lucky? Want to take your chance at pulling the wheel or your luck of the draw? The Spa Resort Casino is a stone's throw away for those with a gambling spirit or adventure for nightlife. Go on your own or travel with a group. CSTA will lead the group from the lobby of the Palm Springs Convention Center to the Casino at 7:00 pm.

Spa Resort Casino offers an action-packed, 24-hour casino with slots, table games, high-limit gaming and a gorgeous live music lounge

in a setting that is stylish, yet comfortable. Spa Resort Casino is also home to the area's only fully-enclosed, non-smoking slot room.

When it's time to take a break from the action, a variety of popular restaurants are right off the casino floor. Steps from the fabled Palm Canyon Drive in downtown Palm Springs, is one of the city's best-kept secrets in fine dining: The Steakhouse at Spa Resort Casino, honored with the Wine Spectator Award of Excellence.

Even more awaits Spa Resort Casino quests at the Paradise Rewards Club. Make that the first stop and sign up for membership with a chance to win \$5,000 Paradise Cash Play.

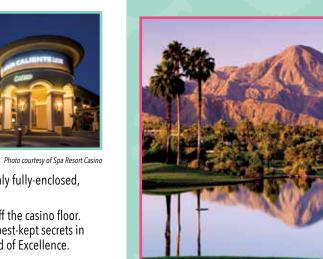
About Palm Springs, Our Host City

The ultimate desert playground for outdoor adventure, arts and culture, gaming, and entertainment. Whether you are attending a top-quality science education conference, planning a family vacation, a couple who wants a romantic retreat, or a girlfriend's getaway ... Palm Springs is "Fun in the Sun" year-round.

Nestled at the base of the majestic San Jacinto Mountains, the City of Palm Springs is the ancestral home of the Agua Caliente Band of Cahuilla Indians. The village atmosphere has been preserved and embellished over the years.

Palm Springs offers a wealth of activities and events throughout the year. Soar to the top of Mount San Jacinto on the world famous Palm Springs Aerial Tramway, play a round of golf at Tahquitz Creek Golf Resort, or hike the ancient palm groves of the Indian Canyons. Tour celebrity and midcentury homes, attend fabulous theatre performances, or wind down with a poolside massage.





Field courses offer hands-on learning experiences at exciting destinations throughout the Palm Springs area. They are optional, have an additional-fee, require advance ticket purchase, and are open to adult, registered conference participants on a first-come, firstserved basis. Ticket prices include round trip bus service between the Palm Springs Convention Center and the field course site, lunch, a bottle of water, and field course activities.

Field course buses depart from the Palm Springs Convention Center. Times listed include travel time, which may vary depending upon road and traffic conditions. Please arrive at the bus departure site in front of the Palm Springs Convention Center 15 minutes prior to the scheduled departure time to ensure an on-time departure. For outdoor activities, participants are encouraged to wear comfortable walking shoes, layered clothing, and carry a backpack containing sunscreen, sunglasses, a hat, binoculars, camera, a notepad, and a pen. CSTA recommends that you bring your own snacks as needed.

Field Course Partners

CSTA thanks the following individuals and organizations for partnering with the California Science Education Conference to provide the unique field course experiences:

The Living Desert Coachella Valley Economic Partnership (CVEP) **Palm Springs Windmill Tours Joshua Tree National Park**

Field Courses

Friday, October 21 • 8:00 am - 5:30 pm

FC01: Sex at the Zoo - The Importance of Genetic Diversity in **Captive Populations**

The Living Desert is a remarkable zoo and botanical garden representing the desert environments of North America and Africa. With over 1,200 protected acres, and 450 wild animals. Come explore how the Living Desert helps endangered species. Teachers will also learn about the Species Survival Plan that is used to make decisions about the mating of endangered animals and use data to make decisions about which individuals should be mated. Participants will be able to tour the zoo.

More details: Please wear comfortable, closed toe walking shoes suitable for the field, sunscreen, a hat, and bring some extra water to drink.



Photo courtesy of Greater Palm Springs CVE

30 attendees maximum Fee: \$75 (includes a box lunch)

Friday, October 21 • 8:00 am – 1:00 pm

FC02: College and Career Readiness in Clean Tech and Wind Energy

You are preparing your students to be college and career ready in science. Find out what this really means as you tour a wind farm with one of the industry's pioneering experts and a business startup "reactor" where alternative energy and medical startups are inventing the jobs of tomorrow! Even in a struggling economy there are many good jobs with benefits to go unfilled



because applicants lack the skills in science and math. You will meet people in their job sites, find out what they do, and learn how they use science and math in their careers. [STEM].

More details: Please wear comfortable closed toe walking shoes suitable for the field, sunscreen and a hat.

Fee: \$65 (includes a box lunch)

Saturday, October 22 • 7:00 am - 6:30 pm

FC03: Geology of Joshua Tree National Park

At nearly 800,000 acres in size, Joshua Tree National Park is immense and infinitely variable. Viewed from the road, this desert park only hints at its vitality. Closer examination reveals a fascinating array of plants and animals that make their home in this land shaped by strong winds, unpredictable torrents of rain, and climatic extremes. The fascination aboveground is nothing



compared to the active geology underground where smaller faults extending from the larger San Andreas Fault continue to shape the desert. With National Park Service Rangers, come explore this amazing desert landscape through its geology. Participants will travel gravel roads in the park and hike off trail in locations best suited for viewing the geology up-close and personal.

More details: Please wear sturdy hiking boots/shoes, water, and snacks, sun hat, sunscreen, layers (high desert can get cold and windy), and cameras.

30 attendees maximum

Fee: \$85 (includes lunch)

Science Pathways: Supporting Elementary Teachers

Join primary (TK-2) and upper elementary (3-5) colleagues for the wonderful opportunity to learn how to implement the CA-NGSS. Teams of 3-5 teachers/administrators from your school/district are encouraged to apply for this amazing workshop. Space is limited so apply now!

These compact and powerful nine hour professional development courses are specially designed for teachers of TK-2 and 3-5 to help them integrate CA-NGSS, CCSS, and ELD standards into their daily curriculum. These courses will provide thorough grounding in science instruction and fortify teachers with an understanding of the three dimensional learning associated with CA-NGSS. The cost of participation for this event is conference registration fees + \$40 to cover materials fees and breakfast on Saturday. Participants will also have access to 2016 California Science Education Conference events included with their registration. Additional costs may include related travel and lodging costs and meals. For more information and application visit **conference.cascience.org/pathways**. Capacity: 30 participants for each science pathway.

Friday, October 21 • 1:00 pm- 2:00 pm

Introduction to NGSS Evidence Statements – Translating the NGSS into Lessons

Rita Januszyk, Retired Science Educator and Science Coordinator, Writer on the NGSS Writing Team, NGSS Diversity and Equity Team, NGSS Evidence Statements, NGSS Classroom Sample Tasks, and the Illinois State Board of Education Model Science Resource Project



Friday, October 21 • 2:00 pm - 5:00 pm

Primary Pathway OR Upper Elementary Pathway Workshop Primary Pathway – Grades TK-2: CA-NGSS and English Language Learners

Dr. Maria Simani, California Science Framework Writer and Statewide Director of the California Science Project; Joanna Totino, Bay Area Science Project

Upper Elementary Pathway – Grades 3-5: Equity and Access in Engineering

Nia Keith, Engineering is Elementary; Heather Glanz, Rio Seco Elementary, Santee School District



Saturday, October 22 • 7:30 am - 8:00 am

Light breakfast

Saturday, October 22 • 8:00 am - 11:30 am

Primary Pathway OR Upper Elementary Pathway Workshop Primary Pathway - Grades TK-2: Equity and Access in Engineering Nia Keith, Engineering is Elementary; Michelle French, Sonoma COE

Upper Elementary Pathway – Grades 3-5: Integrating Science and Common Core

Dr. Susan Gomez-Zwiep, California Science Framework Committee Member, Science Education Professor, CSU Long Beach and Regional Director for the K-12 Alliance/WestEd; Crystal Howe, TK-12 Science Resource Teacher, San Diego USD, CREEC Coordinator, and CSU San Diego Noyce Master Teaching Fellow

Sunday, October 23 • 9:45 AM - 12:45 PM

Primary Pathway OR Upper Elementary Pathway Workshop

Primary Pathway – Grades TK-2: Integrating CA-NGSS into the Primary Classroom: Access for All

Michelle French, Sonoma COE; Kirsten Franklin, TOSA, Petaluma City School District

Upper Elementary Pathway – Grades 3-5: 3-Dimensional CA-NGSS Instruction in the Upper Elementary Classroom

Amy Argento, Resource Teacher, Torrance USD; Tera Black, Resource Teacher, Torrance USD; Marissa Stillittano, Resource Teacher, Torrance USD

Apply at conference.cascience.org/pathways

Conference Information

Location

The 2016 California Science Education Conference will be held at the Palm Springs Convention Center, 277 N. Avenida Caballeros, Palm Springs, CA 92262; the Renaissance Palm Springs, 888 East Tahquitz Canyon Way, Palm Springs, CA 92262; and the Hilton Palm Springs, 400 East Tahquitz Canyon Way, Palm Springs, CA 92262.

General Registration Information

To register at the CSTA member rate, your membership must be current through November 1, 2016. If your membership expires before this date, you must renew your membership on-line or on the conference registration form. You may also join as a new member and register at the discounted member rate.

Registration fees will be determined by the date forms and payment are received in the CSTA office, not by postmark. Registration forms not accompanied by payment in full will not be processed. Checks and purchase orders should be made payable to CSTA. One purchase order may be used for multiple registrants and must accompany registration forms; please reference the purchase order number on each registration form.

Your registration fee includes more than 200 90-minute workshops, the General Sessions, Focus Speaker sessions, and access to the exhibit hall.

Funding Your Conference Participation

There are several ways to fund your participation in the CSTA conference. Below are just a few strategies that teachers have employed this year and in years past:

- Use of Title I federal funding targeted to support instructional strategies and methods to improve overall instructional programs for all children in a school.
- Use of Title II funds to support professional learning for teachers.
- Sponsorship or support from your school's PTA/PTO or similar organization
- Flexible/discretionary funding in the 2016-17 California State Budget
- Your LEA's LCAP priorities 2, 4, 7, and 8.
- SB-77 Educator Effectiveness Grant Funding

For more information on the 2016-17 California State budget, LCAP funding, and SB-77, please visit http://www.cascience.org/csta/ngss_pd.asp.

Ticketed Events

Ticketed events (awards luncheon, short courses, field courses, and evening events) are not included in your registration fee. If you wish to purchase a ticket for a ticketed event, you must register for the conference. Please make your ticketed event selections carefully. CSTA is not responsible for schedule conflicts resulting from a registrant's selections and will not refund fees in such cases. If you select a ticketed event that is sold-out or unavailable, you will be given the option of applying the funds to another available event or receiving a refund. If you choose to receive a refund and you paid by credit card or purchase order, your credit card charge or invoice will be adjusted accordingly. If you paid by check, a check refund will be issued. From time to time, a ticketed event may be cancelled due to low enrollment; in such cases refunds for that event will be provided as indicated above.

University Credit

Information and forms for university credit will be located in the conference program book. University credit will be offered through CSU Long Beach. \$130 additional fee required. See page 8.

Pre-Registration

CSTA strongly encourages pre-registration. Pre-registration saves you money and ensures space in ticketed events. If you are paying by credit card, register on-line at **conference.cascience. org**. On-line registration by credit card is fast and easy. If you will be paying by check or purchase order, mail or fax (P.O. only) your registration form and payment. Payment must be received in the CSTA office by October 3, 2016 to receive pre-registration rates. Pre-registered attendees may report directly to the Pre-Registration counter in the lobby of the Palm Springs Convention Center to pick up conference materials.

Confirmation of Pre-Registration

Once your registration form and fees are processed, a confirmation e-mail will be sent to the e-mail address on your registration form. Attendees registering on-line will receive an e-mail confirmation upon successful completion of their registration. Please visit **www.cascience.org** to confirm your registration by logging into your member profile.

Payment Options/ Registration Methods

Credit Card Payments: on-line, fax, or mail Purchase Order Payments: email, fax, or mail Check Payments: mail only

Checks and purchase orders for conference fees must be made payable to CSTA. We accept VISA, MasterCard, American Express, and Discover. CSTA's federal tax ID number is 94-2926545. CSTA is a non-profit 501(c)(3) corporation. Housing payments should be made per the instructions provided on the housing form.

Group Rates

Groups of 20 or more qualify for this special rate regardless of the membership status of each registrant. All forms (one for each registrant) must be accompanied by a single check or purchase order and received by October 3, 2016. **Group registrations will not be accepted at on-site registration.**

Guest Rates

Registration for an accompanying guest allows admission to the exhibit hall, focus speakers, and general sessions only. Evening events are ticketed and must be purchased separately.

On-Site Registration

You may register on-site at the conference in the **lobby of the Palm Springs Convention Center** in between the Oasis and Primrose rooms.
Registration will be open during the following hours:

Thursday, October 20	4:00 pm - 7:00 pm
Friday, October 21	7:00 am - 6:00 pm
Saturday, October 22	7:00 am - 5:45 pm
Sunday, October 23	7:30 am – 1:00 pm

On-Site Ticket Sales

You may purchase any unsold tickets for field courses, short courses, and evening events at On-Site Registration. However, since tickets are sold on a first-come, first-served basis, tickets for these events may not be available. Advance purchase is strongly recommended.

Overnight Accommodations

CSTA has negotiated significantly reduced group rates at several Palm Springs hotels. Please see the housing form in this brochure for hotel details and rates. CSTA strongly recommends that you make your hotel reservations as early as possible. Hotels may not honor the reduced room rate after the deadline, and some hotels may sell out early. You can avoid this by reserving online or filling out and faxing your housing form to Conference Housing today. Please note: Housing reservations are handled by Conference Housing, Inc. Please do not send your housing reservation form to CSTA as it will not be processed. Visit http://www.conferencehousing.com/CSTA/PalmSprings/ for details and online reservations.

Presenters

Workshop and short course presenters must register for the conference according to the procedures described in their acceptance packets. Presenters may pick up registration materials in the **lobby of the Palm Springs Convention Center** in between the Oasis and Primrose rooms.

Cancellations and Transfer of Registration

If you need to cancel your registration, you must notify CSTA in writing prior to October 3, 2016 (received date). Cancellations should be directed to the Executive Director and mailed (950 Glenn Dr. Ste. 150, Folsom, CA 95630), faxed (916-979-7023), or e-mailed (registration@ cascience.org) to CSTA. Cancellations are subject to a \$25 administrative fee. Registration fees are fully transferable; if you need to cancel, you are strongly encouraged to send a colleague in your place. To transfer your registration to another person, send a request in writing stating to whom you wish to transfer your registration fee. There is no fee for transferring a registration.

Refunds

A full refund of the registration fee, less a \$25 administrative fee, will be granted for all written cancellation requests received by CSTA by October 3, 2016. No refunds will be made for cancellations received after this date. Refunds will be issued based on the manner of payment by December 5, 2016. Refunds will not be processed at the conference, and there are no refunds for no-shows. Meal purchases cannot be refunded, and no refunds will be issued for amounts under \$25.

Photograph and Video Policy

Registration and attendance at, or participation in, CSTA meetings and other activities constitutes an agreement by the registrant to CSTA's use and distribution (both now and in the future) of the registrant or attendee's image or voice in photographs, videotapes, electronic reproductions, and audiotapes of such events and activities.

Special Needs Requests

Attendees requiring special accommodations, including dietary, nursing moms, and ADA accommodations, etc. must register by October 3, 2016 and contact CSTA via email: registration@ cascience.org with their requests.

Children

The CSTA conference is intended for the benefit of adults. While we recognize that some events may be of some interest to children, our primary concern is for the enjoyment and benefit of our adult attendees. It is not our intention to prohibit attendance by children; however CSTA assumes no liability for the actions, supervision, care taking, or well-being of children. Any children brought to a CSTA event must be accompanied at all times by their parent or adult guardian. Children are subject to a reduced registration fee which provides admission only to the same activities as the guest registration.

Disclaimer

CSTA, its employees, officers, and agents claim no liability for the acts of any suppliers to this meeting, nor for the safety of any attendee while attending or in transit to or from the conference. The total amount of any liability during the precise hours of the conference will be limited to a refund of the registration fees paid by the attendee. The attendee acknowledges acceptance of this provision by registering for the conference.

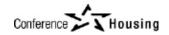


Palm Springs Convention Center

Registration Form: 2016 California Science Education Conference, Palm Springs (Please type or print neatly.)

To check the status of your membership, the availability of additional fee events, visit **www.cascience.org**. Incomplete forms not accompanied by payment will not be processed. One registrant per form, please. Forms must be received by October 3, 2016 to guarantee pre-registration.

1) REGISTRANT INFORMATION						SC CS
NAME						CF TEACHERS ASS
ADDRESS						ПСПС
ADDRESS Home Business CITY, STATE ZIP			COUNTY_			
EMAIL**By providing your email address, you	are consenting	g to be communicated v	with electronically by CS	TA. Your consent may be re	evoked by notifying CSTA.	
HOME PHONE			WORK PH	IONE		
SCHOOL DISTRICT						
EMERGENCY CONTACT NAME & PHON						
☐ Special need request. Must regist	ter by October 3	3. (Includes dietary, ADA	A, nursing mom, etc.)			
2) MEMBERSHIP 1 Year (\$50)	☐ 2 Years	(New Teacher \$50)	□ 3 Years (\$120)	☐ Lifetime (\$500)	☐ Preservice (\$25)	\$
3) REGISTRATION Includes access to Registration Type	workshops, exl	hibit hall, general sessi	ons, and focus speakers	on the days you are regist Advanced I By 10/3	Rate On-site	
CSTA Members (paid through 11/	1/16 or later)			· · · · · · · · · · · · · · · · · · ·		
☐ Full Registration (FriSun.)				\$155 \$125	\$175	\$
Weekend Only (Sat. & Sun.)Preservice Full Registration (Fri	Sun 1			\$135 \$90	\$150 \$100	\$ \$
☐ Preservice Weekend Only (Sat. 8	Sun.)			\$45	\$50	\$
Nonmembers ☐ Full Registration (FriSun.)				\$207	\$228	\$
☐ Weekend Only Registration (Sat	. & Sun.)			\$188	\$205	\$
Guests & Groups					an ala	\$
□ Group (20 or more, single payme□ Guest (FriSun.)	eni, regardiess	or membership) (Fil30	ли. <i>)</i>	\$130/pers \$85	on n/a \$105	\$ \$
4) TICKETED EVENTS						
Short Courses: Course #	Fee	Course #	Fee	Course #	Fee	Total \$
Field Courses: Course #	Fee	Course #	Fee	Course #	Fee	Total \$
Awards Lunch - Brian Reiser: #A	ttending	\$46 per person				Total \$
Friday STEM Pool Party: #Attendi	ng		\$10 per person			Total \$
Saturday Evening - Casino Night	: #Attending _		FREE			Total \$
	on cito:					
Opt Out - Help CSTA reduce waste I do NOT need a printed Progra		use the Conference App).			TOTAL \$
Opt Out - Help CSTA reduce waste	am Book. I will	use the Conference App).			TOTAL \$
Opt Out – Help CSTA reduce waste ☐ I do NOT need a printed Progra ☐ I do need a printed Program B	am Book. I will ook.			American Express or Disco	ver.)	TOTAL \$
Opt Out – Help CSTA reduce waste I do NOT need a printed Program B I do need a printed Program B 5) PAYMENT INFORMATION (Payment	am Book. I will ook. ent may be mad		order, Visa, MasterCard,	American Express or Disco	ver.)	TOTAL \$
Opt Out – Help CSTA reduce waste ☐ I do NOT need a printed Progra ☐ I do need a printed Program B	am Book. I will ook. ent may be mad o CSTA)	de by check, purchase o	order, Visa, MasterCard,	American Express or Disco	ver.)	TOTAL \$
Opt Out – Help CSTA reduce waste I do NOT need a printed Program B I do need a printed Program B S) PAYMENT INFORMATION (Payme) Check/P.O. enclosed (payable to	am Book. I will ook. ent may be made o CSTA) rCard	de by check, purchase o Check/P.O # X Discover	order, Visa, MasterCard,			TOTAL \$
Opt Out – Help CSTA reduce waste I do NOT need a printed Program B I do need a printed Program B S) PAYMENT INFORMATION (Payme Check/P.O. enclosed (payable to Charge My Visa Maste	ent may be made o CSTA)	de by check, purchase o Check/P.O # X	order, Visa, MasterCard, Account #			
Opt Out – Help CSTA reduce waste I do NOT need a printed Program B I do need a printed Program B S) PAYMENT INFORMATION (Payme Check/P.O. enclosed (payable to Name on Card	ent may be made o CSTA) rCard	de by check, purchase o Check/P.O # X	order, Visa, MasterCard, Account #			
Opt Out - Help CSTA reduce waste I do NOT need a printed Program B I do need a printed Program B S) PAYMENT INFORMATION (Payme) Check/P.O. enclosed (payable to the payable to the pay	am Book. I will ook. ent may be mad o CSTA) rCard	de by check, purchase o Check/P.O # X	order, Visa, MasterCard, Account #			



For immediate confirmation of your hotel and dates

www.cascience.org

Housing Reservation Form

California Science Education Conference Palm Springs, CA October 21 – 23, 2016 Reserve Early to Guarantee your 1st Hotel Choice

Reserve Online:

reserve online at

Reserve by Fax:

1-877-385-9595

Reserve by Mail:

Conference Housing

11956 Bernardo Plaza Dr. No. 337

San Diego, CA 92128

1 PA	RTICIPANT	INFORM	ATION:	Conference	e Housing	I OII Free	9 1-8 <i>//</i> -	-385-9595		
First N		INFORWI	ATION.		Last Na	ame:				
Addres	SS: (We recomn	mend your ho	me address)		,	City:			State:	
Postal	Code:		Phone:		Fax:	<u> </u>		Email:		
Schoo	school or Organization: School District:									
2. HOT	TEL REQUE	STS:								
	val Date		rture Date	Room Type			Specia	l Requests	Roommate(s) Name	e(s)
40./	/ 0040	40 /	/ 0040	☐ Single 1 Bed				noking	2.	
10 /		10 / Calendar	/ 2016	Double/Doubl Triple 2 Beds	e 2 Beds / 2 / 3 Persons			n-Smoking ndicap Accessible	3.	
TU 18	W TH 19 20		SAT SUN 22 23	☐ Quad 2 Beds ☐ Suite – Conta			□ <u> </u>	 	4.	
3. HO	TEL PREFE	RENCE:			SHU	TTLES PRO	VIDED :	TO/FROM THE SAC	SUARO and DOUBLE	ETREE ONLY
		Hotel		Address	3	Room Rate (Single/Doub		Room Rate (Triple/Quad)	Distance to Convention Center	Parking *Subject to Change
	Renaissa	nce		888 East Tahquit	z Canyon	\$169 + tax of 16.95% +\$1.1	of	\$169 + tax	Connected	\$22 – Valet \$12 – Self
	Hilton			400 East Tahquit	z Canyon	\$159 + tax of 16.95% +\$1.1		\$159 + tax	Two Blocks	\$25 – Valet \$18 – Self
your	Courtyard	l by Marric	ott	1300 East Tahqui	tz Canyon	\$145 + tax (16.5% +\$.29	\$145 + tax of 16.5% +\$.29 \$145 + tax		Three Blocks	Complimentary
Please Note your	Extended	Stay		1400 East Tahquitz Cany		\$125.99+ tax of 13.5%		\$139.99 + tax	Three Blocks	Complimentary
Jease	the Sagua	aro		1800 East Palm	Canyon	\$145+ tax o 16.56%	sf \$145 + tax		2 Miles Shuttle Provided	Complimentary
	Palm Mountain Resort		155 South Belardo		\$79 Wed/Thur/Sun \$135 Fri/Sat + tax of 16.5%		+\$20 per person per night + tax	3/4 of a Mile	Complimentary	
		ings Hotel the Comfo	Downtown ort Inn)	390 S Indian Canyon		\$99 Wed/Thur/Sun \$141 Fri/Sat + tax of 14.5% + \$3		\$99 Wed/Thur/Sun \$141 Fri/Sat + tax	³ ∕₄ of a Mile	Complimentary
	DoubleTre	ee Golf Re	esort	67967 Vista Chin	0	\$149+ tax o 15% + \$.40	f	\$149 + tax	5 miles	Complimentary
			ATE CHANG	E POLICY:						
All hote submit	ted to Confe	ons, date c erence Ho	hanges, nam using.	ne changes and can		nust be		ellations must be rec night room charge r	eived prior to 7 days on ay apply.	of your arrival or
Contac Please	After October the hotels contact Coom for anoth	directly fo nference I	r all arrival/de lousing with	eparture changes o any cancellations a	r name chai is we will try	nges. and use		do not show up on y charge may apply.	our scheduled arrival	date a one-night
5. FOF	RM OF GUA	RANTEE:		Your credit card	will not be	charged prio	r to the ϵ	event - Payment wi	ll be requested at che	ck in by the hotel
	☐ Visa			MasterCard	□ Ame	rican Expre	ss	☐ Discover		iners Club
Credit	Card Accou	int Numbe	r:					Expiration	Date (must be later th	ıan 10/16)
Cardho	older Name:	(Please p	orint)		C	ardholder Si	gnature:			
6. OPT	TIONAL PA	YMENT B	Y CHECK:							
				to guarantee your credit card. All pay			ctly to the	e hotel upon check-i	n.	
If you a	are paying b	y check fo	or your stay y	ou must pay the ho	tel directly p	orior to checl	k-in. Plea	ase send all future fu	inds no earlier than O	ctober 1, 2016

directly to the hotel with your reservation name, arrival date, departure date, and include the event name "California Science Education Conference".



950 Glenn Drive, Suite 150 Folsom, CA 95630 www.cascience.org

			Tam	narisk		iranvia	Valmonte				Alejo Rd.			2 miles —
	,	N . Palm Canyon Dr.	Indian Canyon Dr.	Calle Encilia	Amado Rd. Andreas Rd.		*	Avenida Caballeros	N. Hermosa Dr.	N. Sunrise Way	Amado Rd. ahquitz Canyon Way	Farrell Dr.	Civic Drive	Constant day
6	S Belardo Rd.		3	Calle Encilia	Arenas Rd.	E. Sa	turnino Rd.		S. Hermosa Dr.		Baristo Rd.			Palm Springs International Airport
			1		Parocela Dunes Rd.		Warm Sands Dr.	Sunny	Dunes Rd.	5	.7 miles			El Cielo Rd.

HOTEL ADDRESSES

- 1 Renaissance Palm Springs Hotel (Host) 888 East Tahquitz Canyon Way
- 2 Hilton Palm Springs Resort 400 East Tahquitz Canyon Way
- **3 Palm Springs Hotel Downtown** 390 South Indian Canyon Drive
- **Courtyard by Marriott** 1300 East Tahquitz Canyon Way
- **5 The Saguaro** 1800 East Palm Canyon
- 6 Palm Mountain Resort 155 South Belardo

- DoubleTree Golf Resort 67967 Vista Chino, Cathedral City
- **3 Extended Stay America** 1400 E. Tahquitz Canyon Way

CONFERENCE FACILITY ADDRESS

➤ Palm Springs Convention Center 277 North Avenida Caballeros

Conference Sponsors

CSTA thanks the following companies who proudly support the california science education conference.



