

# REGISTRATION BROCHURE

CALIFORNIA SCIENCE EDUCATION CONFERENCE

October 21 - 23, 2011

*Pasadena*



*celebrating 20 years of  
science education*

**PARTICIPATE** *in hands-on workshops.*

**TAKE HOME** *lesson plans, classroom management tips, and resources.*

**INCREASE** *your science content knowledge.*

**LEARN** *about exciting science research and developments in a focus speaker session.*

**EXPLORE** *an exhibit hall with dozens upon dozens of science resources.*

**ENJOY** *networking with fellow science educators.*

**REGISTER** *before October 8 and save money.*

# 2011 CALIFORNIA SCIENCE EDUCATION CONFERENCE

**C**alifornia Science Teachers Association (CSTA) is a professional organization of science educators in California. For 20 years CSTA has been hosting the California Science Education Conference, providing quality professional development to California's science educators.

## WHO SHOULD ATTEND?

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

## BROCHURE DIRECTORY

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## CONFERENCE LOCATION

The 2011 California Science Education Conference will be held at the Pasadena Convention Center, 300 E. Green Street, Pasadena, CA 91101, the Sheraton Hotel Pasadena, and the Hilton Hotel Pasadena. The closest airport to Pasadena is the Bob Hope Burbank Airport. For complete travel details and conference area map, visit: [http://www.cascience.org/csta/conf\\_travel.asp](http://www.cascience.org/csta/conf_travel.asp).

## WHAT IS INCLUDED WITH YOUR CONFERENCE REGISTRATION?

Full conference registration includes access to all 250 workshop and commercial workshop sessions (Friday, Saturday, and Sunday), two general sessions (one on Friday and one on Sunday), two evening events (Friday and Saturday nights), admittance into the exhibit hall (open on Friday and Saturday), and seven focus speakers (Friday and Saturday).

Weekend only registration includes workshops and commercial workshops on Saturday and Sunday, the general session on Sunday, the exhibit hall on Saturday, the Saturday evening event, and the focus speaker sessions on Saturday.

For an additional fee registrants can purchase tickets for three-hour Short Courses, Field Courses, and the Awards Breakfast on Saturday morning. Weekend only registrants can only purchase tickets for ticketed events on Saturday.

# SCHEDULE AT-A-GLANCE

## THURSDAY, OCTOBER 20, 2011

4:00 pm – 8:00 pm | Registration Desk Open

## FRIDAY, OCTOBER 21, 2011

7:00 am – 6:00 pm	Registration Desk Open
7:45 am – 4:30 pm	Field Courses 1-5
8:00 am – 9:00 am	Concurrent Workshops
8:00 am – 5:00 pm	Wyland Professional Development Day
9:00 am – 6:00 pm	Exhibit Hall Open
9:15 am – 10:45 am	Opening Session & Keynote Address— <b>TBA</b>
11:00 am – 12:00 pm	Concurrent Workshops
12:00 pm – 1:00 pm	Exclusive Exhibit Time
1:00 pm – 2:00 pm	Concurrent Workshops and Focus Speaker
1:00 pm – 4:00 pm	Short Courses
2:30 pm – 3:30 pm	Concurrent Workshops and Focus Speaker
4:00 pm – 5:00 pm	Concurrent Workshops and Focus Speaker
5:00 pm – 6:00 pm	Exclusive Exhibit Time
7:00 pm – 9:00 pm	Evening Event: Cheesy Sci-Fi Movie Night
7:00 pm	Dine-About Pasadena

## SATURDAY, OCTOBER 22, 2011

7:00 am – 5:45 pm	Registration Desk Open
7:30 am – 9:00 am	Awards Breakfast— <b>SHIRLEY CORRIHER</b>
8:00 am – 9:00 am	Concurrent Workshops
9:00 am – 12:00 pm	Short Courses
9:00 am – 3:00 pm	Exhibit Hall Open
9:30 am – 10:30 am	Concurrent Workshops
9:30 am – 5:30 pm	Field Course 6
11:00 am – 12:00 pm	Concurrent Workshops and Focus Speaker
12:30 pm – 1:30 pm	Concurrent Workshops and Focus Speaker
1:00 pm – 4:00 pm	Short Courses
1:30 pm – 3:00 pm	Exclusive Exhibit Time
	PRIZE DRAWINGS!
3:15 pm – 4:15 pm	Concurrent Workshops and Focus Speaker
4:35 pm – 5:35 pm	Concurrent Workshops
7:00 pm – 9:00 pm	Saturday Evening Event: Sharing Science Through Art, Vision, and Creativity— <b>WYLAND</b>

## SUNDAY, OCTOBER 23, 2011

7:00 am – 12:00 pm	Registration Desk Open
8:00 am – 9:00 am	Concurrent Workshops
9:20 am – 10:20 am	Concurrent Workshops
10:40 am – 11:40 am	Concurrent Workshops
11:45 am – 1:00 pm	Closing Session & Keynote Address — <b>ED BEGLEY, JR.</b>

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 [www.cascience.org](http://www.cascience.org).

# GENERAL SESSIONS

## OPENING SESSION & KEYNOTE ADDRESS



Join CSTA for the annual meeting of members! CSTA President Rick Pomeroy will deliver an update on the state of the association and the state of science education in California. The development of the Next Generation Science Standards over the next few years holds the potential for some exciting changes in science education. Learn how

CSTA has been a leader in this important process. This session will also include a keynote presentation. The keynote speaker will be announced soon. Visit [www.cascience.org](http://www.cascience.org) for updates.

**Friday, October 21, 9:15 am – 10:45 am**

## CLOSING SESSION AND KEYNOTE ADDRESS



### ED BEGLEY, JR.

CSTA is pleased to announce that Ed Begley, Jr. will be the closing keynote speaker for the 2011 California Science Education Conference. For years Ed Begley, Jr. has been known not only for his acting talent but also for his passion for "living green". Join Ed for an entertaining and enlightening look at ways we can educate ourselves and our students on how to "live simply so that others can simply live." Stay after the session for an

opportunity to take a photo with Ed and get his autograph. (Limited availability, first-come, first-served.) **Sponsored by Chevron.**

**Sunday, October 23, 11:45 am - 1:00 pm**

## FOCUS SPEAKERS (🍌=NEW TEACHER)

Focus Speakers are highly regarded scientists and education experts who present one-hour, in-depth sessions 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.**

### ADVANCEMENTS IN PROSTHETIC TECHNOLOGY



**RYAN RUSSELL**, Area Practice Manager, Hanger Prosthetics and Orthotics, **KATY SULLIVAN**, Amputee Empowerment Partners of Southern California, Hanger Orthotics & Prosthetic

Prosthetic technology is a wonderful marriage of physics, engineering, and biology. Join Ryan and Katy as they provide personal insight and describe their experience in this rapidly developing field. Receive an overview of the field of prosthetics from a historical perspective to the technological advancements available today and in the future. Learn about the physics and engineering of the design and fabrication process, and how the technology interacts with the human body.

Hear the perspective of both the prosthetist and the patient. Careers in the field of prosthetics will also be discussed.

**Friday, October 21, 11:00 AM – 12:00 PM**



### TRAVELS ALONG THE DNA HELIX



**JACQUELINE K. BARTON**, Hanisch Memorial Professor and Chair, Division of Chemistry and Chemical Engineering, California Institute of Technology

We think of the DNA double helix as the library of the cell; it encodes all that we are. But the DNA helix can also serve as a conduit for the flow of electrons, a medium for signaling. DNA can show reactivity from insulating to wire-like depending upon the stacking of the base pairs, the "steps in the spiral staircase". Like a stack of copper pennies, the stack of DNA base pairs can be conductive. Research will be described that talks about signaling through DNA and across the genome, how we can use the chemistry of DNA to diagnose mutations, and how this chemistry may be used within the cell.

**Friday, October 21, 1:00 PM – 2:00 PM**

# FOCUS SPEAKERS (🌀=NEW TEACHER) (continued)

## WATER IN THE SOLAR SYSTEM



**PATRICIA BEAUCHAMP**, Program Technical Manager, Strategic Missions and Advanced Concepts Office, Solar System Exploration Directorate, Jet Propulsion Laboratory

Water plays two fundamental roles in the solar system. As well as being ubiquitous on Earth, it is a building block of comets, the numerous icy moons in the outer solar system, the gas giant planets, and most of the dwarf planets. It is also the critical factor for life as we know it, and an understanding of its water properties on solar system bodies guides their characterization as potential abodes of life. **Sponsored by Northrop Grumman.**  
**Friday, October 21, 2:30 PM – 3:30 PM**

## SCIENCE FOR ENGLISH LANGUAGE LEARNERS: USING INQUIRY SCIENCE TO BUILD LANGUAGE SKILLS



**SUSAN GOMEZ-ZWIEP**, Assistant Professor of Science Education, CSU Long Beach

🌀 Science can be an effective platform for English language development (ELD) providing a familiar and tangible context for students to develop new language. However, as more instructional minutes are assigned to ELD and other related content areas

(i.e. reading), there is little time left for science. We will look at the inherent overlap between science process skills and language functions. A blended ELD and Science 5E lesson template will be provided as well as lessons learned from the field about how to construct and implement blended lessons.

**Friday, October 21, 4:00 PM – 5:00 PM**

## THE FUTURE OF SOLAR POWER



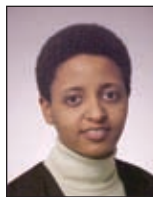
**MARK THOMPSON**, Professor of Chemistry, University of Southern California

The sun provides nearly limitless amounts of clean, free energy, but we have a hard time collecting and storing this energy cost effectively. In my presentation I will discuss the current technologies for solar energy collection and storage, as well as the directions we need to

take our research to make solar energy a real competitor to fossil fuels.

**Saturday, October 22, 11:00 AM – 12:00 PM**

## FUELS FROM SUNLIGHT, WATER AND CARBON DIOXIDE: A THERMOCHEMICAL APPROACH



**SOSSINA M. HAILE**, Professor of Materials Science and of Chemical Engineering, California Institute of Technology

Perhaps the greatest challenge facing our planet is sustainable energy. Remarkably, more energy from sunlight strikes the earth in one hour than all of the energy consumed on the planet in one year. Thus, the challenge

modern society faces is not one of identifying a sustainable energy source, but rather one of capitalizing on the vast, yet intermittent, solar resource base. Laboratories around the world are pursuing a variety of promising storage methods for converting solar energy into a reliable energy source for on-demand utilization. Learn about a unique thermochemical approach for converting water and carbon dioxide to storable fuels using the heat of the sun.

**Saturday, October 22, 12:30 PM – 1:30 PM**

## MARS SCIENCE LABORATORY AND THE SEARCH FOR HABITABLE ENVIRONMENTS

**ASHWIN VASAVADA**, Deputy Project Scientist, Mars Science



Lander, Jet Propulsion Laboratory

NASA's Mars Science Laboratory rover "Curiosity" is scheduled to launch this November. Curiosity is the largest, most sophisticated rover ever. Curiosity's science leader provides a close look at the laboratory instruments and science objectives as we examine Mars' surface as a potential habitat for life, past or present.

**Saturday, October 23, 3:15 PM – 4:15 PM**

## 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 over 125 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 9:00 am – 6:00 pm  
(exclusive time\*: 12:00 pm – 1:00 pm and 5:00 pm – 6:00 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, 2011, 1:30 pm – 3:00 pm**

*\*Exclusive time 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. It is designed specifically to meet the diverse needs of science teachers and educators in all grade levels, with **over 200 hour-long, standards-based sessions** presented by teachers and education professionals who are considered leaders in their field.

Many workshops qualify for professional development credit, with the opportunity to earn one unit of post-baccalaureate university credit by attending twelve hours of qualifying sessions. 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.

## WORKSHOP SCHEDULE

Friday, October 21,  
8:00 am to 5:00 pm..... Approximately 90 workshops  
Saturday, October 22,  
8:00 am to 5:35 pm..... Approximately 100 workshops  
Sunday, October 23,  
8:00 am to 11:45 am..... Approximately 30 workshops

The following is a sampling of workshop offerings. Visit the CSTA website, [www.cascience.org/csta/conf\\_workshops.asp](http://www.cascience.org/csta/conf_workshops.asp), to browse the complete workshop schedule by subject matter and grade level.

## PRE-K – GRADE 5

Science: The Perfect Context to Learn Language	Science Notebooks: ELD and ELA in Context
A Head Start on Science	Improve Your Teaching of Science Through Media-Based Student Assessment
Strategic Science Teaching: Connecting Literature with CA Science Standards for Grades K–2	Elementary Family Discovery Science Program and Positive Discipline: A Recipe for Success
Strategic Science Teaching: Connecting Literature with CA Science Standards for Grades 3–5	Science Education Series and Web Resources from PBS KIDS
Rocking the Rock Cycle with...Candy?	Experimental Design K–5
Raising the Bar with Questioning Strategies in 3rd Grade Earth Science: Lessons Learned	CaMSP – Incubating Changes in Districts and IHEs
Engaging Young Learners in Science with PBS Media-Rich Educational Resources	Move Over Energizer Bunny... Using NASA Themes to Integrate Science, Math, and Language Arts
Newton 's First Law: Inertia Explained—25 Activities to Teach Inertia	

## GRADES 6 – 8

Connecting and Engaging: Plugging Middle School Students into Conserving Water and Energy	Marine Plastic Pollution: Examining Issues and Solutions in a Middle School Classroom
Strategic Science Teaching: Connecting Literature with CA Science Standards for Grades 6–8	Facing the Future: Climate Change Connections and Solutions
Managing the Middle School Science Lab	Journey to the Center of the Earth
Teaching the 8th Grade Chemistry Standards, with Paper Manipulatives, on a Budget	An Innovative Middle School Family Science Discovery Program: What Makes Plastics So Good and So Bad
Snapshot Science! Balls and Ramps	Scientific Inquiry Through Hands-on Logic Activities
Hands-on Inquiry to Determine the Epicenter of an Earthquake	Motivating Middle School Students to Monitor and Assess Their Learning
Improving the Testing of Scientific Reasoning in Grade 8 Science	Cost Effective Chemical Compounds

## GRADES 9 – 12

Genetics with Flies Is Easy. Really!	Achieving High Biology CST Scores and Motivation in Urban Schools
Differentiating Instruction in the General Ed. Science Classroom	Physics Models: A Cohesive Approach to Understanding Mechanics
Let's Build a St. Louis Motor	Stoichiometry: A Stumbling Block for Chemistry Students
Subduction Zone Conditions—School of Rock	Ditching Lecture for Lab
On the Lighter Side of Science	Physics Demonstrations and Labs—Force and Motion
Strategic Science Teaching: Connecting Literature with CA Science Standards for Grades 9–12	Using Socratic Labs to Teach Atomic Structure and Periodic Trends
Physics First and Biology Last: A Story of Adoption, Implementation, and Evaluation	Now Explain It to Me: Claim, Evidence, and Reasoning in the Special Education Classroom
Project WILD Science and Civics: Sustaining Wildlife for Grades 9–12	The Kinetics Connection: Demonstrations with a Theme

## ALL GRADE LEVELS

Using Moodle in a Math Science Partnership: Helping Teachers Move from Awareness to Implementation	Skywatching Activities for 2011–2012
Common Core State Standards Update	What Is in Boiling Water?
Supermarket Chemical Reactions in Ziptop Bags	Designing Inquiry Science Lessons for English Learners: A Blended Lesson
Learn to Imagine Using NASA Education Resources	Just What Exactly Is a STEM (STEAM?) Magnet?
The Art and Science of Questioning	Enhancing Environmental Literacy in the Science Classroom, The EEI Curriculum
Stretch Your Digital Dollar: Affordable Strategies for Integrating Mobile Technologies into the Classroom	California Science Safety
Fun with Easy to Do S.T.E.M. Rocketry!	Bringing Language and Science Together
	Planning Smart: Improving Student Achievement

Plus over 150 other sessions! Check the CSTA website ([www.cascience.org](http://www.cascience.org)) for updates.



# AWARDS BREAKFAST

## BREAKFAST WITH FOOD SLEUTH SHIRLEY CORRIHER— WHAT'S ON YOUR TABLE?



**SHIRLEY CORRIHER**, *Biochemist and Author*

Cooking is chemistry, and Shirley Corriher makes it accessible. She explains everything you could ever want to know (and then some) about the chemical processes of eggs, fats, breads, sauces, and other foods. She is an author, chef, and a biochemist. As an article in *Food and Wine* put it "If it's about food and you want to know why, Shirley is the person to figure it out." She is famous for the

"protein hop" - an interpretive dance of sorts to demonstrate the molecular transformations that turn flour, eggs, and sugar into a cake. Her arms wave vigorously, mimicking how proteins in wheat flour interlock to provide the structure that holds a baked good together. After a morning with Shirley you will never see food the same way again. Meet this award-winning author of *CookWise* and *BakeWise*. **Sponsored by Northrop Grumman.**

**Saturday, October 22, 7:30 am – 9:00 am**

**Fee: \$25**

## EVENING EVENTS

### DINE-ABOUT PASADENA

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 Friday, October 21 at 7:00 pm. Each reservation is for a table of six, and the restaurants have all agreed to issue separate checks. For more information visit [www.cascience.org/csta/conf\\_eveningevent/asp](http://www.cascience.org/csta/conf_eveningevent/asp).

**Friday, October 22, 7:00 pm**

### THE MEASURE AND MIS-MEASURE OF MARS: HOW SCIENCE & SCI-FI HAVE INFLUENCED OUR VIEW OF THE RED PLANET; FEATURING THE ANGRY RED PLANET

At any moment in time, Earthlings have thought they had a good understanding of what Mars was like, especially as an abode of life. Join us for a march through time to see how Mars has held a special place in our minds and imagination. Then sit back for a special screening of one of the more amusing B-movie classics that pretty much gets everything wrong. Long before *Armageddon* and *The Core*, there was *The Angry Red Planet*!



One free ticket is included with conference and guest registration. Additional tickets may

be purchased at the conference on a space-available basis for \$10.00.

**Friday October 21, 7:00 pm – 9:00 pm**

## CONGRATULATIONS AWARD WINNERS!

We congratulate the winner of the 2011 CSTA Future Science Teacher Award, the 2010 PAEMST Winner, and the 2011 PAEMST California State Finalists. Your dedication and proved excellence in science education are an inspiration to us all.



**GUADALUPE DE LA O**  
*Future Science Teacher Award\**

**ANNE MARIE BERGEN**  
*2010 PAEMST Recipient*

**DEAN BAIRD**  
**ZIBA MAYAR**

**ERICKA SENEGAR-MITCHELL**  
*2011 PAEMST California State Finalists*

**Awards will be presented at the Awards Breakfast.**

**SATURDAY, OCTOBER 22, IN THE PIAZZA ROOM,  
SHERATON PASADENA HOTEL, 7:30 AM – 9:00 AM.**

*Special Guest Speaker: Shirley Corriher*

**\*CO-SPONSORED BY SEAWORLD SAN DIEGO**

### SHARING SCIENCE THROUGH ART, VISION, AND CREATIVITY



Join a panel of science movers, shakers, and visionaries, led by renowned environmental artist and educator Wyland, who are using their creativity to inspire a lifetime love for science. From logical to intuitive information processing, these science exhibit developers, researchers, and curators will demonstrate how a range of traditional and non-traditional learning tools can

encourage greater understanding, retention, and an unbridled sense of wonder. Panelists will present visuals and key concepts that attendees can incorporate into future development/teaching goals.

**Saturday, October 22, 6:00 pm - 8:00 pm**

**A live auction of a limited edition Wyland print will follow the presentation. See below for print. Visit [www.cascience.org/csta/conf\\_eveningevent/asp](http://www.cascience.org/csta/conf_eveningevent/asp) to view the print in more detail.**



# SHORT COURSES (🍏=NEW TEACHER)

Short Courses are three-hour programs that are California standards-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. Unsold Short Course tickets may be available on-site at the conference, but as many Short Courses sell out early, CSTA strongly encourages you to purchase your tickets in advance. Short Courses will be held at Pasadena Convention Center, Sheraton Hotel, and Hilton Hotel.

**FRIDAY, OCTOBER 21, 2011**

**1:00 PM - 4:00 PM**

## **SC01: MODELING PLATE TECTONICS: CALIFORNIA-STYLE**

**CHERYL ANN PARK**,  
*Century High School;*  
**MAUREEN ANGLE**,  
*Seegerstrom High School*

Join us as we share a dozen of our favorite tried and true plate tectonics models. Each participant receives models, handouts, instructions, and posters ready to use Monday morning. **(CSP)**

**Grades 6; 9-12** **Fee: \$15**  
**EARTH/SPACE SCIENCE,**  
**PEDAGOGY/I&E**

## **SC02: READY TO ROLL! THE EDUCATION AND THE ENVIRONMENT INITIATIVE (EEI)**

**BRYAN EHLERS**, *California Environmental Protection Agency;*  
**GERALD LIEBERMAN**,  
*Education and the Environment Roundtable*

Experience California's first, (very cool!), standards-based, State Board of Education-approved 85-unit, K-12 curriculum that aligns environmental content to California's academic content standards—to rave reviews by educators throughout California.

**Grades: K-12** **Fee: \$10**  
**ENVIRONMENTAL SCIENCE, SCIENCE LEADERSHIP**

## **SC03: PLACE-BASED FISHERIES ECOLOGY—HOW TO GET YOUR STUDENTS DIVING FOR PAPERCLIPS**

**LISA UTTAL**, *Monterey Bay National Marine Sanctuary*

Participate in a NOAA education activity that uses a simulated squid fishery, with natural and man-made challenges, to teach students about trends in and dynamics of fisheries ecology and management.

**Grades: 9-13+** **Fee: \$10**  
**MULTIDISCIPLINARY SCIENCE, STEM/ CAREERS/WORKFORCE**

## **SC04: KNOWING WHAT STUDENTS KNOW: PROBING FOR UNDERSTANDING**

**KAREN CERWIN**, *K-12 Alliance/WestEd*

🍏 Wondering what your students understand? Explore assessment probes to elicit student thinking. Probes help you analyze student learning, misconceptions, and interventions. Receive sample probes and a process for developing probes.

**Grades 4-12** **Fee: \$30**  
**MULTIDISCIPLINARY SCIENCE, ASSESSMENT**

## **SC05: INTERACTIVE NOTEBOOK—A WAY TO ACCESS SCIENCE CONTENT WHEN COUPLED WITH EFFECTIVE STRATEGIES**

**MARK MCKAY**, *Venture Academy;* **ANNIE DUONG**,  
*San Joaquin COE*

🍏 The interactive notebook along with other effective strategies is a tool used to deepen students' understanding of academic content through active participation in the learning process.

**Grades: 5-13+** **Fee: \$45**  
**MULTIDISCIPLINARY SCIENCE, LITERACY/EL**

## **SC06: FORENSIC SCIENCE IN YOUR CLASSROOM**

**KARALYN RAMON**, *Loyola High School*

Building on forensic science in your classroom, this short course will provide participants with the opportunity to get their hands on real forensic science techniques by solving a simulated crime.

**Grades: 6-12** **Fee: \$25**  
**MULTIDISCIPLINARY SCIENCE, PEDAGOGY/I&E**

## **SC07: PODCASTING IN THE SCIENCE CLASSROOM**

**JULIE DRAKE**, *Los Angeles COE;* **LAURA SMITH**, *Los Angeles COE*

🍏 Looking for innovative ways to teach science? Do methods that encourage students as producers to "show what they know" sound intriguing? This hands-on session is for you! This session will be held in the laptop lab. *Laptop lab provided by:*

*Instructional Technology Outreach, Los Angeles County Office of Education.* <http://ito.lacoe.edu>  
**Grades: K-12** **Fee: \$10**  
**MULTIDISCIPLINARY SCIENCE, TECHNOLOGY**

## **SC08: HANDS-ON PERFORMANCE ASSESSMENT FOR K-6 STUDENTS: ONE IMPETUS FOR INQUIRY IN OUR CLASSROOMS**

**DEBORAH TUCKER**, *Science Education Consultant;* **GRANT GARDNER**, *Assessment Services, Inc.*

Assessing inquiry is essential to instruction. Participants will engage in two hands-on performance tasks, explore the uses and advantages of this form of assessment, and take home sample student set-ups.

**Grades: K-5** **Fee: \$40**  
**PHYSICAL SCIENCE, ASSESSMENT**

# SHORT COURSES (🍏=NEW TEACHER) (continued)

SATURDAY, OCTOBER 22, 2011

9:00 AM – 12:00 PM

## SC09: TEACHING INQUIRY THROUGH 5E EARTH SCIENCE INVESTIGATIONS

**PAUL GARDNER**, *San Joaquin COE*; **SEAN TIMMONS**, *San Joaquin COE Science and Special Projects*

Learn to implement a model of guided inquiry and interactive notebooks through the study of erosion, weathering, and deposition. Learn a hands-on, inquiry-based activity focused on these strategies and concepts. **(CSP)**  
**Grades: 3–5** **Fee: \$35**  
**EARTH/SPACE SCIENCE, PEDAGOGY/I&E**

## SC10: MODELING CUTTING-EDGE, HANDS-ON, HIGH-TECH EXPERIENCES TO IMPROVE EARTHQUAKE MONITORING

**SHAUN SMITH**, *NASA*; **SONJA SQUIRES**, *Joe Walker Middle School*

Motivate your students to achieve in STEM through NASA's *Flight Mission Challenge: Improving Earthquake Monitoring* unit. NASA master educators will lead you in a cutting-edge, hands-on, multimedia-rich experience.  
**Grades: 5-9** **Fee: \$10**  
**EARTH/SPACE SCIENCE, PEDAGOGY/I&E**

## SC11: DEVELOPING A SENSE OF WONDER—NEW EARLY CHILDHOOD ENVIRONMENTAL EXPERIENCES

**KAY ANTUNEZ DE MAYOLO**, *Project Learning Tree, California Department of Forestry and Fire Protection*; **BOBBIE WINN**, *Project WILD, Department of Fish and Game*

Looking for early childhood curriculum to engage students in exploring and learning about the natural world? Join us and experience the new Project WILD and Project Learning Tree ECE guides.  
**Grades: Pre-K-2** **Fee: \$10**  
**ENVIRONMENTAL SCIENCE, PEDAGOGY/I&E**

## SC12: WATER QUALITY ASSESSMENTS

**JULIA RANKIN MORANDI**, *The Science Collaborative, Inc.*; **KRISTY MORRIS**, *The Los Angeles and San Gabriel Rivers Watershed Council*

Learn how scientists determine water quality by performing biological (macro-invertebrates) and chemical assessments and use state protocols to assess the riparian habitat.  
**Grades: 9-12** **Fee: \$35**  
**ENVIRONMENTAL SCIENCE, INFORMAL SCIENCE**

## SC13: TEACHING EVOLUTION: SUCCESSFUL STRATEGIES FOR CHALLENGES IN THE CLASSROOM

**PAMELA HARMAN**, *SETI Institute*; **NICOLINE CHAMBERS**, *West High School*

🍏 Evolution is fundamental to biology. Resources and strategies will enable teaching the nature of science, and the examination of evidence supporting evolution. Receive "Teaching Evolution & the Nature of Science."  
**Grades: 7-12** **Fee: \$30**  
**LIFE SCIENCE, PEDAGOGY/I&E**

## SC14: CREATE YOUR OWN \$55 INTERACTIVE WHITEBOARD

**KATHY MCELROY**, *Monterey Bay Aquarium*; **HEATHER MARSHALL**, *Sobrato High School*

🍏 Receive a Wiiimote and infrared pen! Used with free software and Bluetooth, these tools become an interactive whiteboard. Set up the systems and discuss best practices for using them.  
**Grades: 6-12** **Fee: \$65**  
**MULTIDISCIPLINARY SCIENCE, TECHNOLOGY**

## SC15: COLLEGE SCIENCE METHODS COURSE: MODEL LESSONS AND ASSIGNMENTS, OVERARCHING GOALS, AND SAMPLE SYLLABI

**LAURA HENRIQUES**, *CSU Long Beach*; **DAVID ANDREWS**, *CSU Fresno*  
Are you a science methods instructor? Join us for model lessons, assignments, syllabi, and meet other methods instructors. New and veteran methods instructors will find something valuable in this course. **(ASTE)**  
**Grades: 13+** **Fee: \$25**  
**MULTIDISCIPLINARY SCIENCE, PRESERVICE TEACHER EDUCATION**

### CONFERENCE PARTNERS

CSTA has partnered with several organizations to bring you quality programming. CSTA thanks the following organizations for their contributions to the California Science Education Conference:

American Chemical Society (ACS)	California Environmental Education Interagency Network (CEEIN)
Association of Science Teachers Educators (ASTE)	COSEE West and Southwest Marine Educators Association (COSEE/SWMEA)
California Academy of Sciences	K-12 Alliance
California Science Project (CSP)	NASA/JPL
	Wyland Foundation



# SHORT COURSES (🍷=NEW TEACHER) (continued)

SATURDAY, OCTOBER 22, 2011

1:00 PM - 4:00 PM

## SC16: BUILD A TELESCOPE: EXPLORE THE EM SPECTRUM AND THE UNIVERSE

**EDNA DEVORE**, SETI Institute;  
**PAMELA HARMAN**, SETI Institute

Astronomers observe the universe with telescopes across the EM Spectrum. Build a Galileoscope, and learn how astronomers use telescopes to explore the universe. Free telescope, tripod, lessons, and observing guide.

**Grades: 6-12** **Fee: \$35**  
**EARTH/SPACE SCIENCE, PEDAGOGY/I&E**

## SC17: HANDS-ON TO ELA: USING SCIENCE TO SUPPORT THE NEW CALIFORNIA COMMON CORE CONTENT STANDARDS FOR ENGLISH LANGUAGE ARTS

**CAROL SACKETT**, San Francisco USD; **JOHN MACDEVITT**, Working to Improve Science Education (WISE)

🍷 Learn how to integrate hands-on science instruction with the California common core content standards for English language arts. Participants will investigate using science notebook entries as resources for expository writing.

**Grades: 2-5** **Fee: \$20**  
**MULTIDISCIPLINARY SCIENCE, LITERACY/EL**

## SC18: FROM EVERYDAY TO GOURMET: ENHANCING STUDENTS' SCIENCE EXPERIENCES

**DEB FARKAS**, San Francisco USD; **JUDY SCOTCHMOOR**, UC Museum of Paleontology

Spice up your labs with the real process of science! Learn how you can transform everyday cookbook labs and activities into robust and rigorous experiences for your students.

**Grades: 6-12** **Fee: \$25**  
**MULTIDISCIPLINARY SCIENCE, PEDAGOGY/I&E**

## SC19: STANDARDS-BASED NANOTECHNOLOGY LESSONS FOR SECONDARY SCIENCE TEACHERS

**NANCY HEALY**, Georgia Institute of Technology

Learn how to incorporate into your current teaching topics standards-based science lessons that include nanoscale science and engineering. Lessons will cover secondary science—chemistry, physics, and biology.

**Grades: 9-12** **Fee: \$25**  
**MULTIDISCIPLINARY SCIENCE, STEM/CAREERS/WORKFORCE**

## SC20: WHAT'S IN THAT BOILING WATER? USING INQUIRY TO REVEAL STUDENT MISCONCEPTIONS

**MIKE MCKEE**, NASA Kennedy Space Center

🍷 Inquiry can be easy to implement with simple changes to instruction. Learn how questioning can uncover misconceptions, increase student learning, and have fun teaching! Hands-on, free lessons.

**Grades: K-12** **Fee: \$20**  
**MULTIDISCIPLINARY SCIENCE, PEDAGOGY/I&E**

## SC21: NASA'S SWIFT SATELLITE PRESENTS NEWTON'S LAWS

**KEVIN MCLIN**, Sonoma State University; **LYNN COMINSKY**, Sonoma State University

NASA's Swift mission presents hands-on inquiry-based activities exploring Newton's laws. Participants progress through 25 stations, each presenting a problem that can be solved through application of Newton's laws.

**Grades: 8** **Fee: \$20**  
**PHYSICAL SCIENCE, PEDAGOGY/I&E**

## SC22: EXPLORING HYDROGEN

**REBECCA LAMB**, National Energy Education Development

This session contains hands-on activities that teach students about hydrogen as an energy source. Activities will include: element modeling, electrolysis, fuel cell simulation, and a fuel cell vehicle demonstration.

**Grades: 5-12** **Fee: \$10**  
**PHYSICS, STEM/CAREERS/WORKFORCE**

## VISIT US ONLINE

The CSTA website hosts a wealth of information regarding the 2011 California Science Education Conference. Visit [www.casta-ence.org/csta/conf\\_home11.asp](http://www.casta-ence.org/csta/conf_home11.asp). Use the links on the left and scroll down on the page. There you will find links to on-line registration, hotel reservations, interactive map of the conference area, travel tips, parking information, and much, much more.

Available in October will be an on-line scheduler that will allow you to view and search conference events as well as save them in your own custom schedule. This on-line program will be available during the conference as well and will be accessible from your smartphone, tablet, or laptop.

Scan this QR code with your mobile device to be taken directly to the conference home page:



# FIELD COURSES (🍷=NEW TEACHER)

Field Courses offer hands-on learning experiences at exciting destinations throughout the Pasadena area. They are optional, additional-fee events that require advance ticket purchase, and are open to adult, registered conference participants on a first-come, first-served basis. Ticket prices include round trip bus service between the Pasadena Convention Center and the Field Course site.

Field course buses depart from the Pasadena 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 Pasadena Convention Center 15 minutes prior to the scheduled departure time to ensure an on-time departure. For outdoor activities, participants are encouraged to wear walking shoes, layered clothing, and carry a backpack containing sunscreen, sunglasses, a hat, binoculars, camera, a notepad, and a pen. Lunch will be provided only where noted. CSTA recommends that you bring your own snacks as needed.

## FC01: SCIENCE IN THE STRATOSPHERE: FIELD TRIP TO NASA'S STRATOSPHERIC OBSERVATORY FOR INFRARED ASTRONOMY

**Friday, October 21, 8:30 am – 4:30 pm**

NASA's SOFIA is an airborne observatory built into a 747 that carries a 100" telescope to the stratosphere to do infrared astronomy. It's the world's largest portable telescope! Join this NASA tour to the Dryden Aircraft Operations Facility (DOAF) in Palmdale, CA. You'll hear science and technology talks, tour the observatory and the hangar, participate in a hands-on infrared workshop, and take home a kit of standards-based, classroom materials (\$80 value!). You'll learn new tricks for teaching about the EM spectrum as you explore infrared astronomy. An entertaining bus ride and lunch are included. **Participants must be at least 18 years old and US citizens with a government-issued ID. Registration deadline is September 21 to allow for processing DAOF security pass.** Lunch provided. Tickets are non-transferable after September 21 for this course. **Sponsored by SOFIA.**

**Grades 6 – 12      Fee: \$10**

## FC02: A DAY AT THE CALIFORNIA SCIENCE CENTER: EXPLORE, DISCOVER, INVESTIGATE!

**Friday, October 21, 7:45 am – 1:45 pm**

🍷 Spend the day with us at the California Science Center! Tour the exhibits before they open to the public. Visit the new Ecosystems gallery and get a behind-the-scenes tour with the curator, do hands-on investigations with Science Center educators and then have lunch with the curators! Receive materials and handouts! Lunch provided.

**Grades: Pre-K–12      Fee: \$68**

## FC03: BEAUTIFUL SCIENCE

**Friday, October 21, 8:00 am – 11:00 am**



*Drawing of a flea under magnification, Robert Hooke, Micrographia, London, 1665. IMAGE COURTESY OF THE HUNTINGTON LIBRARY, ART COLLECTIONS, AND BOTANICAL GARDENS*

Visit the beautiful Huntington Library to learn what the history of science reveals about the process of scientific inquiry. Tour the permanent exhibition Beautiful Science: Ideas that Changed the World with the Avery Director of the Library, David Zeidberg. You will see original works showing

key ideas in the development of astronomy, natural history, medicine, electricity, and optics. From Galileo to Einstein, from Aristotle to Darwin, examine the texts and learn about the astonishing leaps of imagination made by scientists throughout history. To ground these ideas in the concrete, hear a presentation from Marieka Kaye, Exhibits Conservator, on the preparation and preservation of the materials in the exhibition. To use the exhibition as an extension of the classroom, take home a workbook that helps students to learn from exhibitions.

**Grades: 6–12      Fee: \$33**

## FC04: SHAKING OUT IN SOUTHERN CALIFORNIA—A TOUR OF THE CALTECH SEISMOLOGICAL LABORATORY

**Friday, October 21, 8:30 am – 2:30 pm**

Visit one of the epicenters of earthquake research in Southern California, the Caltech Seismological Laboratory. A member of the Southern California Earthquake Center, a research consortium made up of over 60 institutions worldwide, Caltech is doing cutting edge research in earthquake early warning and use of supercomputers to simulate seismic events such as the Great California ShakeOut. We will visit the Seismo Lab Media Center and you will learn about how information is distributed after an earthquake. Field course participants will receive a special Shaking Out in Southern California resource packet filled with information about earthquakes, a field guide, an Earthquake Country Los Angeles DVD, and many other surprises. Give-aways valued at over \$50! Lunch provided.

**Grades: 3–12      Fee: \$50**

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

California Science Center  
Caltech  
Eric Scott  
JPL

Huntington Library  
Natural History Museum of  
Los Angeles County  
SOFIA/EPO

# FIELD COURSES (🍏=NEW TEACHER) (continued)

## FC05: THE JET PROPULSION LABORATORY—NASA'S ROBOTIC PATHWAY TO THE SOLAR SYSTEM

Friday, October 21, 8:30 am – 12:30 pm

Join us on a tour of the Jet Propulsion Laboratory (JPL). JPL is NASA's lead center for the robotics exploration of the solar system. During the tour you will learn about the process of space exploration from conception through data analysis; the so-called "life cycle." Tour elements will include an introductory auditorium presentation (video and speaker), tour the JPL visitor center museum, Spacecraft Assembly Facility, Space Flight Operations Facility, and in-door Mars Yard. This visit will introduce you to the big picture, and context, of how missions are developed. This tour will amplify on the regular JPL tour experience by focusing on the project life-cycle actively being pursued on multiple missions.

Grades: 5–12 Fee: \$25

## FC06: OLD BONES, NEW DISCOVERIES—A VISIT TO THE NATURAL HISTORY MUSEUM OF LOS ANGELES

Saturday, October 22, 9:30 am – 5:30 pm



The earth under our feet is packed with the fossilized remains of ancient animals and plants. Even today, new fossil finds in our region are changing how we interpret the distant past. Join Eric Scott, Curator of Paleontology for the San Bernardino County Museum, as he discusses fossil finds new and old on a tour of the George C. Page Museum at the La Brea 'tar pits' and the new Age of Mammals Hall at the Natural History

Museum of Los Angeles County. You'll see the ground beneath us in a whole new light! Lunch provided.

Grades: K-12 Fee: \$58

# PROFESSIONAL DEVELOPMENT STRANDS

The California Science Education Conference offers two unique professional development opportunities for teachers: the No Child Left Behind/Title II and New Teacher Professional Development Strands. Upper division university credit from CSU Long Beach or a certificate of completion from CSTA are available.

## NO CHILD LEFT BEHIND PROFESSIONAL DEVELOPMENT STRAND

**Qualifying Sessions:** All sessions presented at the 2011 conference qualify for the NCLB credit. To earn the unit of university credit, participants will be asked to submit a written assignment along with their professional development passport describing how the sessions they chose to attend will help them in their professional development goal. For the certificate of completion from CSTA, submission of the professional development passport is the only requirement.

## NEW TEACHER PROFESSIONAL DEVELOPMENT STRAND

The New Teacher Professional Development Strand is designed specifically for teachers in their first three years of teaching. The strand is designed to provide new teachers with both content knowledge and pedagogical skills. The strand will cover essential skills for new teachers in classroom management, literacy, materials management, integration, pedagogy, and conceptual understanding.

**Qualifying Sessions:** A preliminary list of qualifying sessions may be found on-line. Qualifying sessions are indicated with an apple icon 🍏. A complete list of qualifying events, including workshops, will be updated continually on the CSTA website and are searchable by professional development strand. All professional development sessions will be printed in the official conference program.

## UNIVERSITY CREDIT FROM CSU LONG BEACH

Participants may apply for only one unit of credit, either the NCLB credit or the New Teacher Professional Development credit, not both. There is an additional tuition fee of \$125 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, 2011. Assignment and registration details will be available online at [www.scienceteaching.org](http://www.scienceteaching.org). The course will appear on your transcript as SCED490: Special Topics in Science Education.

**For more information regarding strand completion requirements please visit [www.cascience.org/csta/conf\\_pd.asp](http://www.cascience.org/csta/conf_pd.asp).**

# CONFERENCE INFORMATION

## LOCATION

The 2011 California Science Education Conference will be held at the Pasadena Convention Center, 300 E. Green Street, Pasadena, CA 91101.

## GENERAL REGISTRATION INFORMATION

To register at the CSTA member rate, your membership must be current through November 1, 2011. 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 (no postmarks, please). Registration forms not accompanied by payment in full will not be processed. Checks and purchase orders may be made payable to CSTA. One purchase order may be used for multiple registrants; please reference the purchase order number on each registration form.

Your registration fee includes over 200 one-hour workshops, the General Sessions, Focus Speaker sessions, evening events, and access to the exhibit hall.

## TICKETED EVENTS

Ticketed events (Awards Breakfast, Short Courses, and Field Courses) 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.

## 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 [www.cascience.org](http://www.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 7, 2011 to receive pre-registration rates. Registration materials are not mailed before the conference. Pre-registered attendees may report directly to the Pre-Registration counter in the lobby of the Pasadena Convention Center Exhibit Hall building to pick up conference materials.

## CONFIRMATION OF PRE-REGISTRATION

Once your registration form and fees are received, 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](http://www.cascience.org) to confirm your registration by logging into your member profile.

## REGISTRATION/PAYMENT OPTIONS

Credit Card Payments: Register on-line or by fax or mail.  
Purchase Order Payments: Register by fax or mail.  
Check Payments: Register by 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.

## ON-SITE REGISTRATION

You may register on site at the conference in the lobby of the Exhibit Hall building of the Pasadena Convention Center. Registration will be open during the following hours:

Thursday, October 20 ..... 4:00 pm – 8:00 pm  
Friday, October 21 ..... 7:00 am – 6:00 pm  
Saturday, October 22 ..... 7:00 am – 5:45 pm  
Sunday, October 23 ..... 7:00 am – 1:00 pm

## ON-SITE TICKET SALES

You may purchase any unsold tickets for Field Courses and Short Courses at Registration in the lobby of the Pasadena Convention Center. 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. Tickets for the Saturday Awards Breakfast and Field Course 01 will not be available for purchase on site.

## 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 7, 2011. Group registrations will not be accepted at on-site registration.

## GUEST RATES

Registration for an accompanying partner/spouse or child allows admission to the exhibit hall, Focus Speakers, and General Sessions only.

## 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 guest registration fee.

## CANCELLATIONS AND TRANSFER OF REGISTRATION

If you need to cancel your registration, you must notify CSTA in writing prior to October 15, 2011 (received date). Cancellations should be directed to the Executive Director and mailed (3800 Watt Ave, #175, Sacramento, CA 95821), 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.

## 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 15, 2011. No refunds will be made for cancellations received after this date. Refunds will be issued based on the manner of payment by December 15, 2011. 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.

## WORKSHOP PRESENTERS

Workshop presenters must register for the conference according to the procedures described in their acceptance packets. Presenters may pick up registration materials at Pre-Registration in the lobby of the Pasadena Convention Center Exhibit Hall building.

## UNIVERSITY CREDIT

Information and forms for university credit will be located at the registration counter in the lobby of the Pasadena Convention Center Exhibit Hall building.

## OVERNIGHT ACCOMMODATIONS

CSTA has negotiated significantly reduced group rates at five Pasadena 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 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> for details.

## PHYSICALLY CHALLENGED

Please check the appropriate box on your registration form if you require reasonable accommodation to participate in conference events. We will contact you by telephone to discuss your needs.

## 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.



Colorado Street Bridge and Court of Appeals. PHOTO CREDIT: CITY OF PASADENA/PASADENA CVB.

# ABOUT PASADENA

**N**estled at the base of the majestic San Gabriel Mountains, just 11 miles northeast of downtown Los Angeles, Pasadena is quintessential Southern California. From mountains caressed by the sun, through gardens radiant with roses, to extraordinary turn-of-the-century architecture, there is nowhere else quite like Pasadena.

**Paseo Colorado is Pasadena's three-block open-air urban village located directly across the street from the Pasadena Convention Center.** With its Mediterranean architecture, lush pedestrian promenades, courtyards and terraces, Paseo Colorado is anchored by a 14-screen cinema complex, Spa & Salon, and Macy's. Its 65 distinct specialty retail shops and restaurants include Coach, BCBG Max Azria, Tommy Bahama, the Yard House, and P.F. Chang's.

Pasadena truly is a pedestrian-friendly city. Visitors can stroll along beautiful tree-lined South Lake Avenue, known as Pasadena's premier shopping district, while an eclectic mix of antique stores, galleries and specialty shops can be found in the Playhouse District.

Old Pasadena, a 22-block historical area featuring 19th century structures and quaint alleyways, is one of Southern California's hottest main-street entertainment districts. With 200 specialty shops, antique havens, boutiques, bistros and entertainment venues, Old Pasadena offers something for everyone and is just a short walk from the convention center.

With its enviable location and a population of only 140,000, Pasadena offers visitors a friendly and safe enclave. The city's mild Mediterranean climate also makes for ideal sightseeing conditions. Year-round temperatures average 76 degrees Fahrenheit.

In addition to all of this, Pasadena is easily accessible to all Los Angeles area airports, freeways, and other Southern California attractions, including Universal Studios, Disneyland and local beaches. To make sightseeing even easier, visitors can hop aboard the Gold Line light rail system. The 13.7-mile Gold Line transports passengers from Pasadena to downtown Los Angeles and points in between. With six stations throughout Pasadena, including two in the popular Old Pasadena shopping/entertainment district, catching the train is a snap.



# REGISTRATION FORM

## 2011 CALIFORNIA SCIENCE EDUCATION CONFERENCE • PASADENA • OCTOBER 21 – 23

Please see Conference Information for complete details and instructions for filling out this form. Submission of this form is acknowledgment that you have read the Conference Information. To check the status of your membership, the availability of additional-fee events, or to register online with a credit card, please visit [www.cascience.org](http://www.cascience.org). Incomplete forms and forms not accompanied by payment will not be processed. One registrant per form, please. Forms must be received by October 7, 2011 to guarantee pre-registration. Please type or print neatly. See you in Pasadena!

### REGISTRANT INFORMATION

FIRST NAME: \_\_\_\_\_ LAST NAME: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ CITY: \_\_\_\_\_  
 Home  Work  
 STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_ COUNTY: \_\_\_\_\_ EMAIL\*: \_\_\_\_\_  
 CSTA MEMBER #: \_\_\_\_\_ HOME TEL: \_\_\_\_\_ WORK TEL: \_\_\_\_\_  
 SCHOOL DISTRICT: \_\_\_\_\_ SCHOOL: \_\_\_\_\_ GRADE: \_\_\_\_\_

Physically challenged—will require assistance during conference. Must allow 3 weeks' notice if you require reasonable accommodation.

### REGISTRATION

	Regular (by October 7, 2011)	On-Site (On or after October 7, 2011)
<b>CSTA Members</b> ( <i>Membership paid thru November 2011 or later.</i> )		
<input type="checkbox"/> Full Registration	\$123	\$138
<input type="checkbox"/> Weekend Only	\$98	\$113
<input type="checkbox"/> Student Full Registration	\$83	\$98
<input type="checkbox"/> Student Weekend Only	\$40	\$45

### Non-Members

<input type="checkbox"/> Full Registration	\$173	\$188
<input type="checkbox"/> Weekend Only	\$148	\$163

### Join/Renew Today and Save! (*Savings indicated vs. paying non-member rates.*)

<input type="checkbox"/> Full Registration with one year CSTA membership	\$162 (Save \$11)	\$177 (Save \$11)
<input type="checkbox"/> Weekend Only with one year CSTA membership	\$137 (Save \$11)	\$152 (Save \$11)
<input type="checkbox"/> Student Full Registration with one year CSTA student membership	\$108 (Save \$65)	\$123 (Save \$65)
<input type="checkbox"/> Student Weekend Only Registration with one year CSTA student membership	\$65 (Save \$83)	\$70 (Save \$93)

### Guests & Groups

<input type="checkbox"/> Guest Registration	\$83	\$98
Name: _____	_____	Friday Movie Ticket? <input type="checkbox"/> 1-free
<input type="checkbox"/> Group Registration (20 or more, single payment)	\$100/person	N/A

### TICKETED EVENTS

	Course #	Fee	Course #	Fee	Course #	Fee
Short Courses	_____	\$ _____	_____	\$ _____	_____	\$ _____
Field Courses <input type="checkbox"/> Vegetarian	_____	\$ _____	_____	\$ _____	_____	\$ _____
Awards Breakfast with <b>SHIRLEY CORRIHER</b> # attending _____ <input type="checkbox"/> Vegetarian ( <i>Breakfast tickets not available onsite.</i> )	_____	\$25 per _____	_____	_____	_____	_____
Evening Function: Cheesy Science Fiction Movie Night <input type="checkbox"/> 1-free	_____	_____	_____	_____	_____	_____

### MEMBERSHIP

	1-year	3-year	Lifetime	Student
<input type="checkbox"/> New <input type="checkbox"/> Renewal	\$39	\$85	\$365	\$25

### PAYMENT INFORMATION

**TOTAL FEES: \$ \_\_\_\_\_**

Payment may be made by check, purchase order, Visa, MasterCard, American Express, or Discover.

#### CHECK ENCLOSED, PAYABLE TO CSTA

CHECK # \_\_\_\_\_ DATE: \_\_\_\_\_ AMOUNT: \$ \_\_\_\_\_

#### PURCHASE ORDER ENCLOSED, PAYABLE TO CSTA

PO# \_\_\_\_\_ DATE: \_\_\_\_\_ AMOUNT: \$ \_\_\_\_\_

DISTRICT OR SCHOOL: \_\_\_\_\_

CHARGE MY:  VISA  MASTERCARD  AMERICAN EXPRESS  DISCOVER

ACCOUNT # \_\_\_\_\_ EXP. DATE: \_\_\_\_\_

SIGNATURE \_\_\_\_\_

\* By providing your email address, you are consenting to be communicated with electronically by CSTA. Your consent may be revoked by notifying CSTA.

Pre-Registration Deadline: **OCTOBER 7, 2011**

Mail registration form with payment to CSTA at:

3800 Watt Avenue, Suite 175, Sacramento, CA 95821

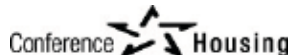
Fax: (916) 979-7023 (for forms with credit card or P.O. only)

Tel: (916) 979-7004

CONFERENCE E-MAIL: [registration@cascience.org](mailto:registration@cascience.org)

REGISTER ONLINE: [www.cascience.org](http://www.cascience.org)

See Conference Information section for complete details.



# Housing Reservation Form

California Science Education Conference  
Pasadena, CA October 21 – 23, 2011

**Reserve Early to Guarantee  
your Hotel Choice**

<b>Reserve Online:</b> For immediate confirmation of your hotel and dates reserve online at <a href="http://www.cascience.org">www.cascience.org</a>	<b>Reserve by Fax:</b> 1-877-385-9595	<b>Reserve by Mail:</b> Conference Housing 11956 Bernardo Plaza Dr. No. 337 San Diego, CA 92128
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**Conference Housing Toll Free 1-877-385-9595**

## 1. PARTICIPANT INFORMATION:

First Name:		Last Name:			
Address: (We recommend your home address)			City:		State:
Postal Code:	Phone:	Fax:		Email:	
School or Organization:			School District:		

## 2. HOTEL REQUESTS: (Hotel preferences are requests only and will be accommodated by the hotels as best as possible)

Arrival Date	Departure Date	Room Type	Special Requests	Roommate(s) Name(s)												
10/ /2011	10/ /2011	<input type="checkbox"/> Single 1 Bed / 1 Person <input type="checkbox"/> Double 1 Bed / 2Persons <input type="checkbox"/> Double/Double 2 Beds / 2 Persons <input type="checkbox"/> Triple 2 Beds / 3 Persons <input type="checkbox"/> Quad 2 Beds / 4 Persons <input type="checkbox"/> Suite – Contact us for Rate & Info	<input type="checkbox"/> Smoking <input type="checkbox"/> Non-Smoking <input type="checkbox"/> Handicap Accessible <input type="checkbox"/> _____	2.												
2011 Calendar <table border="1" style="font-size: small; border-collapse: collapse;"> <tr><td>TU</td><td>W</td><td>TH</td><td>FRI</td><td>SAT</td><td>SUN</td></tr> <tr><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td></tr> </table>				TU	W	TH	FRI	SAT	SUN	18	19	20	21	22	23	3.
TU	W			TH	FRI	SAT	SUN									
18	19			20	21	22	23									
		4.														

## 3. HOTEL PREFERENCE: Rates do not include State and Local taxes, currently 15% + \$.20 per night

	Hotel	Address	Room Rate (Single/Double)	Room Rate (Triple/Quad)	Distance to Convention Center	Notes <small>Parking Subject to Change</small>
Please Note your 1 <sup>st</sup> & 2 <sup>nd</sup> choice	Sheraton	303 Cordova St	\$155	\$165 / \$175	Attached <small>NO Shuttles Provided</small>	\$13 Self
	Hilton	168 S Los Robles Ave	\$149	\$149	2 Blocks (.25 Miles) <small>NO Shuttles Provided</small>	\$15 Self \$21 Valet
	Courtyard by Marriott	180 North Fair Oaks Ave	\$124 – King Bed \$139 – Two Queens	\$139	8 Blocks (.7 Miles) <small>CSTA Shuttles available to/from Center</small>	\$15 Self \$17 Valet
	Pasadena Inn	400 S Arroyo Parkway	\$95 – King Bed \$119 – Two Doubles	\$119	4 Blocks (.5 Miles) <small>CSTA Shuttles available to/from Center</small>	Complimentary Parking Complimentary Light Breakfast Complimentary Internet Access
	Vagabond Inn Executive	1203 E Colorado Blvd	\$95	\$105 / \$115	1 ½ Miles <small>CSTA Shuttles available to/from Center</small>	Complimentary Parking Complimentary Light Breakfast Complimentary Internet Access

## 4. CANCELLATION AND DATE CHANGE POLICY:

**Prior to October 6, 2011-**  
 All hotel reservations, date changes, name changes and cancellations must be submitted to Conference Housing.  
 Contact us at [info@conferencehousing.com](mailto:info@conferencehousing.com) or fax to 877-385-9595.

**On or After October 10, 2011 -**  
 Contact the hotels directly for all arrival/departure changes or name changes.  
 Please contact Conference Housing with any cancellations as we will try and use the room for another attendee.

Cancellations must be received prior to 7 days of your arrival or a one-night room charge may apply.

If you do not show up on your scheduled arrival date a one-night room charge may apply.

## 5. FORM OF GUARANTEE: Your credit card will not be charged prior to the event - Payment will be requested at check in by the hotel

<input type="checkbox"/> Visa	<input type="checkbox"/> MasterCard	<input type="checkbox"/> American Express	<input type="checkbox"/> Discover	<input type="checkbox"/> Diners Club
Credit Card Account Number: <input style="width: 200px;" type="text"/>			Expiration Date (must be later than 10/11) <input style="width: 100px;" type="text"/>	
Cardholder Name: (Please print) _____			Cardholder Signature: _____	

## 6. OPTIONAL PAYMENT BY CHECK:

**A Credit Card is the preferred method to guarantee your reservation.**  
 Conference Housing will not charge your credit card. All payments will be made directly to the hotel upon check-in.

If you are paying by check for your stay you must pay the hotel directly prior to check-in. Please send all future funds no earlier than October 1, 2011 directly to the hotel with your reservation name, arrival date, departure date, and include the event name "California Science Education Conference".

## 7. CAR ASSISTANCE

**AVIS** To reserve an Avis car call 1-800-331-1600 or use your AVIS Discount Code **J996997** on [avis.com](http://avis.com).

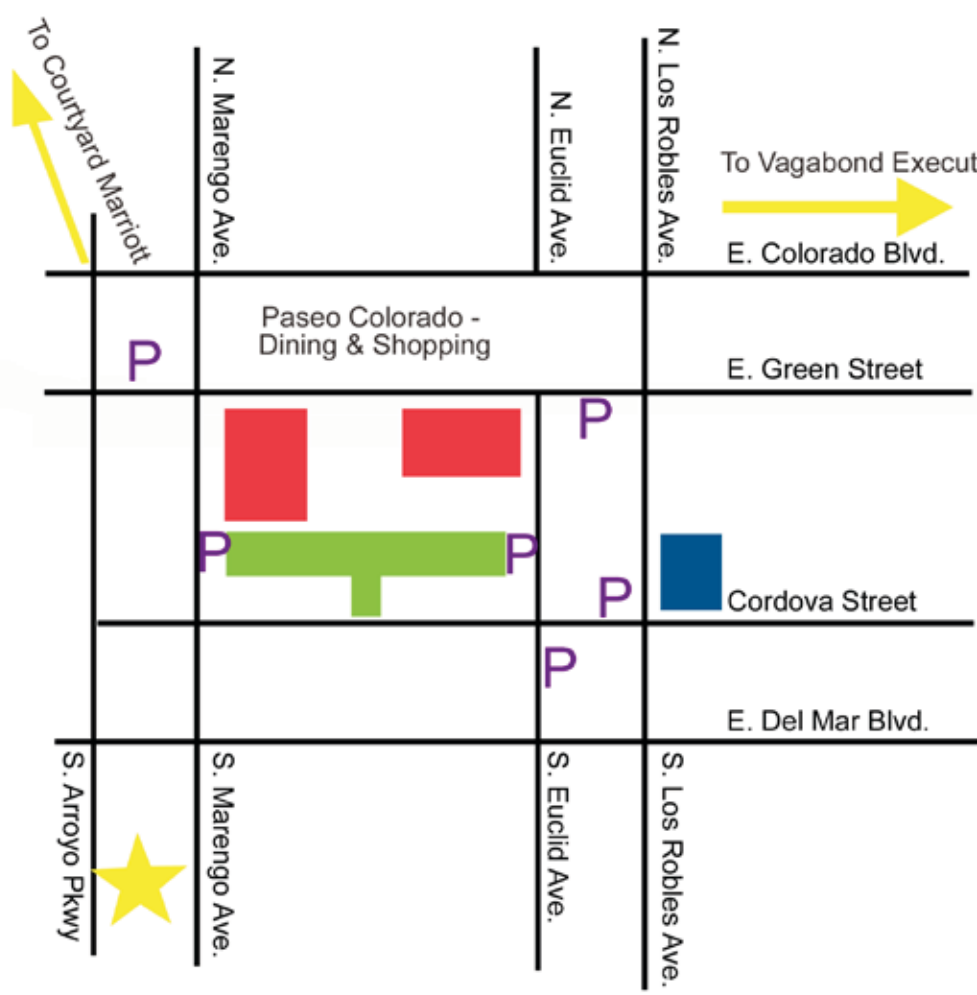
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3800 Watt Avenue, Suite 175  
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**CSTA THANKS THE FOLLOWING COMPANIES WHO PROUDLY SUPPORT THE CALIFORNIA SCIENCE EDUCATION CONFERENCE**



**PASADENA**



**LEGEND** (Map not to scale.)

- **Pasadena Convention Center**  
300 E. Green Street
- **Sheraton Pasadena Hotel**  
303 Cordova St.
- **Pasadena Hilton**  
168 South Los Robles Avenue
- Courtyard—Old Pasadena**  
180 N Fair Oaks Ave
- ★ **Pasadena Inn**  
400 S Arroyo Pkwy
- Vagabond Inn**  
1203 E Colorado Blvd
- P **Parking**