

## INFORMATIONAL BULLETIN # 5424

9300 Imperial Highway, Downey, California 90242-2890 • (562) 922-6111 Debra Duardo, M.S.W., Ed.D., Superintendent

August 27, 2021

TO: Directors of Curriculum and Instruction

Principals of Middle and High Schools

Science and Mathematics Department Chairs

Los Angeles County School Districts

FROM: Yvonne Contreras, Ed.D., Director III

Division of Curriculum and Instructional Services

Anthony Quan, Consultant III, STEM

Division of Curriculum and Instructional Services

SUBJECT: 72<sup>nd</sup> Annual Los Angeles County Science & Engineering

Fair Grades 6 through 12

The 72<sup>nd</sup> Annual Los Angeles County Science & Engineering Fair will be held virtually in March 2022. The Los Angeles County Office of Education (LACOE) is pleased to again partner with the Los Angeles County Science & Engineering Fair organization on this annual event. The Science Fair website at <a href="http://lascifair.org">http://lascifair.org</a> provides all the essential information and resources needed by teachers and students. Each participating school may submit thirteen projects, 3 of which may be a "team project" of 2-3 students.

#### **Important Information:**

An Enrollment Fee of \$300.00 will be assessed per middle school. High schools will be assessed based on the number of projects sent. Home schools are \$50.00 per entry. *A 20% "Early Bird" discount is given if enrollment fees are received by October 30, 2021. A 10% "Advanced" discount is given if enrollment fees are postmarked by November 30, 2021.* Fee Waivers are available as well. All Fee Waiver documents must be submitted by January 31st, 2022 to be eligible. No Fee Waivers will be accepted after this date. The Enrollment Fee/Waiver Form is available for download from the website and must accompany payment before March 1, 2022 or a late fee of \$100.00 will be assessed.

School Enrollment will be available online beginning **September 6, 2021**. Site Coordinators must view a Power Point and take (and pass with a 100% grade) an online quiz before the school can be enrolled. The Power Point and other Enrollment information is available on the website.

All student projects must be virtually submitted by **11:59 PM on Wednesday, March 9, 2022**, otherwise the projects will not be accepted for entrance into the Science Fair. *Please note: A virtual submission must include a 3-minute video, a Science Project report, a digital display board, and pictures of original data pages from the logbook.* 

All Judging will take place during the week of March 14, 2022. More detailed information with specific times will be given to students prior to the Fair.

In lieu of the traditional Award's Ceremony, all awards will be mailed to each school to be distributed by each school's Site Coordinator.

Free virtual Teacher Workshops are scheduled for September & October 2021. Please see the following flier for more detailed information and how to register.

All students are required to register online for the Science Fair. Online registration procedures are included in the Site Coordinator information packet, to be emailed in January 2022. The student online registration will be open until **February 14, 2022**. No late registrations will be accepted under any circumstances.

Following are Important Dates and Deadlines applicable to all participants in the  $72^{nd}$  Annual Los Angeles County Science & Engineering Fair and a listing of all the potential Special Awards complete with organizations, criteria, and awards for this year.

#### **Important Reminder:**

Any student who plans a project involving tissues/cell lines, human subjects (including surveys), vertebrate animals, hazardous materials (including lasers), or microbes must receive pre-approval by the Los Angeles County Science & Engineering Fair Scientific Review Committee (SRC) prior to beginning research on any project destined for the Fair. Some projects require pre-approval before students can begin experimentation. Information regarding applying for Pre-Approval is available on the website. Any project in which research or experimentation is begun before pre-approval is received, will not be allowed into the Los Angeles County Science & Engineering Fair.

## **72<sup>nd</sup> Annual Los Angeles County Science & Engineering Fair**

#### 2021-2022 IMPORTANT DATES AND DEADLINES



September 6, 2021	School and Site Coordinator Enrollment opens; Complete online enrollment and send in payment.		
October 8, 2021	<b>D</b> <sub>EADLINE</sub> for <b>Fall SRC* Submission</b> for proposed Student Experimentation/Research.		
October 18, 2021	<b>Notification</b> available to St and SC regarding approval/disapproval of <u>Fall</u> Research Plans.		
October 30, 2021	DEADLINE FOR EARLY-BIRD SCHOOL ENROLLMENT FEE PAYMENT POSTMARK** 20% discount Can also pay via PayPal from our website		
November 12, 2021	<b>D</b> <sub>EADLINE</sub> for <b>Winter SRC* Submission</b> for proposed Student Experimentation/Research Note: this is the <b>LAST</b> opportunity for students to submit a proposal.		
November 22, 2021	<b>Notification</b> available to St and SC regarding approval/disapproval of <u>Winter</u> Research Plans.		
November 30, 2021	DEADLINE FOR ADVANCED SCHOOL ENROLLMENT FEE PAYMENT POSTMARK** 10% discount Can also pay via PayPal from our website		
December 10, 2021	Final Deadline for Re-Submission of Revised Student Experimentation/Research Plan  Note: this is for projects that were not approved on a prior submittal, no new submissions accepted- students may only re-submit their Research Plans once		
December 17, 2021	Notification available to St and SC regarding approval/disapproval of Revised Research Plans		
January 3, 2022	STUDENT/PROJECT AND VOLUNTEER ON-LINE REGISTRATION OPENS		
January 7, 2022	<b>Deadline</b> for any <u>CHANGES</u> in procedure or protocol for <u>Previously-Approved</u> Research Plans (Not applicable to all students.)		
January 14, 2022	<b>Notification</b> available to St and SC regarding approval/disapproval to Research Plan changes.		
January 31, 2022	School Online Enrollment Closes / All Fee Waiver Forms due		
February 14, 2022	Student/ Project Online Registration Closes (Schools must have already enrolled.)  Note: SRC Project Approval does NOT mean you are registered.		
February 16, 2022	DEADLINE for Site Coordinator to approve of students representing school		
February 28, 2022	Final Deadline - School Enrollment Fee Payment must be postmarked by March 1, 2021.		

- St → Student
- ullet SC o Site Coordinator; this is the  $\underline{one}$  contact person that LACSEF will have with your school
- SRC→ Science Review Committee; this is a trained group of adults that make sure that students experimentation/research falls within the California EdCode and expected safety guidelines.
- \*SRC Approval must be attained by students doing experiments involving tissues/celllines, human subjects, vertebrate animals, hazardous materials and/or microbes.
- \*\*Participation Fees: (A 20% discount is given if payment is postmarked by October 30, 2021 or a 10% discount is given is payment is postmarked by November 30, 2021.)
  - o Mail to: 1107 Fair Oaks Ave. #94 South Pasadena CA 91030-3133

# 71st Annual Los Angeles County Science & Engineering Fair



## VIRTUAL SCIENCE FAIR SCHEDULE

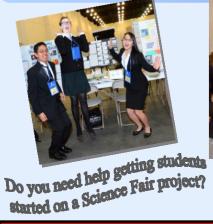
Wednesday, March 9	<ul> <li>All Project Virtual Submissions due by 11:59pm</li> <li>Report; video; pictures of log book; &amp; digital display board.</li> <li>See Final Information Packet 2022 (available in February 2022)</li> </ul>
	Category Judging & Student Interviews     Students will be invited to interviews by Group # & must be present for the interviews
Week of March 14th	Special Awards Judging & Student Interviews     Students will be invited to interviews by Group # & must be present for the interviews
	Exact dates and times will be announced in January 2022.



## Los Angeles County Science & Engineering Fair

# VIRTUAL TEACHER WORKSHOPS

2021-2022







FREE!

Do you want to improve the quality of student research?

#### On Zoom, Teachers Will Learn How To:

- Facilitate choosing a topic
- Implement research
- Track student progress
- Produce award-winning science fair displays
- Use science/engineering fair projects as a venue to support NGSS and 21st Century Skills

### Workshops will meet the needs of:

- First Time & Veteran Coordinators and/or Educators
- \*\* Limited to 50 people per Zoom Workshop

Workshops include digital resources via **Padlet** with PowerPoint presentations for motivation and instruction, extensive curriculum and Internet links.

- The workshops will also address the <u>ONLINE Pre-approval Certification process</u> for projects proposals involving Tissues/Cell Lines, Human Subjects, Vertebrate Animals, Hazardous Materials and Microbes.
- Workshops and resources are designed specifically for 6th grade, Middle School and High School participants, NOT K-5

You will be able to download resources at home, from a Padlet URL given at the training

## Zoom invite with ID# and password will be sent the week before each workshop

CHECK OUT THE FAIR AT: HTTPS://WWW.LASCIFAIR.ORG INSTAGRAM FACEBOOK Twitter

Sessions	Date
Session 1 - New & Veteran Science Fair Training. Register at: <a href="https://tinyurl.com/cx43c8yc">https://tinyurl.com/cx43c8yc</a>	<b>Sat, Sept 11,</b> 2021 9:00am-11:30am
Session 2 - New & Veteran Science Fair Training. Register at: <a href="https://tinyurl.com/2ufdaehk">https://tinyurl.com/2ufdaehk</a>	<b>Sat, Oct 2</b> , 2021 9:00am-11:30am
Session 3 - New & Veteran Science Fair Training. Register at: <a href="https://tinyurl.com/3r4hjumd">https://tinyurl.com/3r4hjumd</a>	<b>Sat, Oct 16,</b> 2021 9:00am-11:30am
Session 4 - New & Veteran Science Fair Training. Register at: <a href="https://tinyurl.com/3th5zk52">https://tinyurl.com/3th5zk52</a>	<b>Sat, Oct 30,</b> 2021 9:00am-11:30am

Upon registration, you will receive a confirmation and a follow-up email with details a week before the training.

If you have questions, please contact: Annie Maben, LACSEF Workshop Coordinator at: afmaben@gmail.com

# **Special Awards**

The following Special Awards will be presented at the Awards Ceremony if their criteria are met.

Organization	Name of Award	Criteria	Prize
American Meteorological Society	Certificate of Outstanding Achievement for Ability and Creativity in an Atmospheric Science Exhibit	Grades 6-12. Project showing excellence in atmospheric & related oceanic & hydrologic sciences	Certificate & invitation to LA- AMS Annual Banquet
American Psychological Association	Certificate of Award for Achievement in Research in Psychological Association	Grades 6-12. Best psychology-related project. Behavioral & Social Sciences / Animal Sciences /Biochemistry / Computer Sciences / Environmental Sciences / Math / Medicine & Health Sciences	Certificate
American Vacuum Society	Excellence in Vacuum or Surface Chemistry	Grades 6-12. Projects related to vacuums, thin films, or surface chemistry.	Cash Award
Association for Women Geoscientists	Student Awards for Geoscience Excellence	Female students only; Grades 6-12. Projects that increase public awareness of geosciences, illustrate the interdisciplinary nature of the geosciences, or promote the sensitivity to the Earth as a global system.	Certificate
ASM Materials Education Foundation	Most Outstanding Exhibit in Materials Science Award	Grades 6-12. Best materials engineering project.	Certificate & Ribbon
Broadcom	Broadcom Finalist	Grades 6-8. Top 10% of all Junior Projects	Certificate + Eligibility to enter Broadcom MASTERS competition
California Association of Professional Scientists (CAPS)	CAPS Outstanding Young Scientist Award	Grades 7-11. For the project best illustrating good scientific methodology in a discipline represented by members of CAPS, including physics, chemistry, biological & environmental science, toxics & energy resources	Certificate, \$100, & Eligibility to compete for CAPS Outstanding YoungScientist Award
The Campaign for Recycling Awareness	Student Award for Recycling Innovation	Grades 9-12. For the project that best establishes, creates or improves upon a way to increase the recycling rate of #1 #2 and #5 plastics in the U.S.	Cash Award
The Cheryl Saban Self- Worth Foundation for Women & Girls	The Cheryl Saban Self-Worth Foundation Scholar Prize	Grades 6-12. Top projects by female scholar with a focus on providing a positive impact to her community.	Cash Award + CrystalAward
The David Park Foundation for Innovation & Technology	The David Park Foundation Scholar Award	Grades 9-12. Most outstanding projects related to innovation & technology	Cash Awards
Department of Defense	DoD STEM Leadership Prize	Grades 6-8. Excellence in STEM, as well as the problem-solving skills and determination to overcome challenges throughout the research project.	Certificate & \$100
Greater Los Angeles Teachers Science Association	Darrell Smedley Award	Grades 6-12. "I Did It Myself"An exemplary project completed entirely by a student with no assistance from parents, teachers, other adults or peers.	Plaque & \$100
ICP DAS USA, Inc.	Southern California Social Impact Award	Grades 6-12. Best new innovations carefully crafted, researched, built, and experimented to help better the environment and quality of life on the planet.	Cash Award
The Lemelson Foundation	The Lemelson Early Inventory Prize	Grades 6-8. Problem-solving, empathy, entrepreneurial, and environmentally-responsible invention.	Certificate & \$100
MU Alpha Theta	Mu Alpha Theta Award for the most challenging, original, thorough, & creative investigation of a problem involving mathematics	9th - 12th Grade Student Only. Most outstanding project exhibiting in the area of mathematics.	Certificate
National Aeronautics & Space Administration	NASA Earth System Science Award	Grades 6-12. Project that offers greatest insight into Earth's Interconnected Systems and demonstrates excellence in inquiry.	Certificate

Organization	Name of Award	Criteria	Prize
National Oceanic and Atmospheric Administration	NOAA's Taking the Pulse of thePlanet Award - for presenting research that demonstrates thePrinciples & Technical Innovations that offer the greatest potential for an improved understanding of Earth's dynamic processes	Grades 6-12. Best project related to understanding and predicting changes in climate, weather, oceans, and coasts. Conserving and managing coastal and marine ecosystems.	Letter & Certificate
Nuclear Society	Nuclear Society Award	Grades 6-12. Best project representing a field of nuclear science, nuclear technology, nuclear medicine, nuclear engineering, radiation, or health physics.	Cash Award
Office of Naval Research (U.S. Navy / U.S. Marine Corps)	The Office of Naval Research Naval Science Award	Grades 6-12. Any project which shows excellence in science or engineering. No Team Projects!	Jr. Certificate & Medal Sr. Certificate, Medal, & \$50
Professional Engineers in California Government	Honorable Mentions Marylin Jorgenson-ReeseAward for Excellence James E. Roberts Award for Excellence	Grades 6-12. Best engineering related projects	Gift Card & Honorable Mention Medal, Cash Awards
Regeneron Science Talent Search	Invitation to Compete in the Intel Science Talent Search	Grades 9-12. Excellence in Science	Invitation to Enter Contest
Ricoh USA, Inc.	Ricoh Sustainable Development Award	Grades 6-12. For presenting research that demonstrates the Principles & Technical Innovations that offer the greatest potential for Sustainable Development	Certificate
The Scientist	Outstanding Achievement in Exploring Life and Inspiring Innovation	Grades 9-12. Achievement in exploring science and inspiring innovations for the future Life Science community.	Certificate, \$100, and subscription to The Scientist magazine
Society of Petroleum Engineers – LA Section	Award for any project that demonstrates a principle of energy, fluid and gas production & handling, or other technologies or science related to the Petroleum industry	<b>Grades 6-12.</b> Energy, fluid and gas production and handling, or other technologies or science related to the Petroleum industry.	Letter, Certificate, & \$100
Society for In Vitro Biology	Society for In Vitro Biology Award	11th Grade Student Only. Most outstanding project exhibiting in the areas of plant or animal invitro (artificial environment) biology or tissue culture.	Certificate
South Bay Business Environmental Coalition	South Bay Business Environmental Coalition Award for Innovation in Sustainability	Grades 6-12. Best project related to the SBBEC's mission of promoting sustainable environmental practices within the realm of business	Gift Card
Southern California Paleontological Society	Southern California Paleontological Society Award for Academic Excellence	Grades 6-12. Best project related to paleontology or geology, earth science, paleobiology, or similar categories	Cash Prize, Certificate, Possibility of Publication in Society's Journal 1-yr honorary membership to society, Tour of La Brea Tar Pits
Stockholm Junior Water Prize	Regional Water Prize Award - Award of Excellence for a Water-Related Science Research Project	Grades 9-12 only. Outstanding water-related research at the high school level which focuses on relevance in terms of science, the environment, & society, creativity of the project, methodology, subject knowledge, practical skills, & report & presentation.	Certificate + Nomination to State SJWP Competition
UCLA Brain Research Institute	Award - for outstanding projects related to Neuroscience	Grades 6-12. For outstanding projects related to Neuroscience	Gift Card & Certificate
U.S. Agency for International Development (USAID)	Science Champion Award	Grades 6-12. Scientific excellence and using science innovatively to create a potential solution to international development challenges.	Certificate
U.S. Air Force	The U.S. Air Force Science Award	<b>Grades 9-12.</b> Projects exemplifying STEM-related research	Certificate
U.S. Metric Association	U.S. Metric Association Award forthe best use of SI Units in a Science Fair Project	Grades 9-12 only. Any project which involves measures and expresses those measures consistently and correctly in SI metric units; A project in which the measures were integrally important to the research.	Certificate
Yale Science and Engineering Association	Most Outstanding Exhibit	Grade 11 only. Outstanding Exhibit in Computer Science, Engineering, Physics, or Chemistry	Certificate & Medallion