



Congratulations
to our 2018
Sacramento
Regional
STEM Fair
Winners!

Special Awards

AMERICAN METEOROLOGICAL SOCIETY AWARD

Ameya Naik

Determining the Effect of Ground Terrain on Sacramento Valley Supercells

Mira Loma High School

AMERICAN PSYCHOLOGICAL ASSOCIATION AWARD

Austin Brackett

How does Social media affect mental Health in Adults

E.V. Cain Charter Middle School

ASSOCIATION FOR WOMEN GEOSCIENTISTS AWARD

Esperanza Rodriguez & Athena Chaparro

PLASTIC BAG "BIODEGRADE"

River City High School

ASU ROB AND MELANI WALTON SUSTAINABILITY SOLUTIONS AWARD

Nishita Bagaria, Prianka Venkatesh & Mai-Linh Nguyen

Biofuel: Turning Grease Into Gas

Vista Del Lago

Rithvik Murali & Anirvin Bommaraju

What Chemical Makes a Stevia Plant Grow the Fastest?

Oak Ridge High School

CALIFORNIA ASSOCIATION OF PROFESSIONAL SCIENTISTS (CAPS)

SCIENCE ACHIEVEMENT AWARD

Jacqueline Prawira

Bio.fiber.plastic: The Effect of Lignocellulosic Fiber in Reinforcing the Tensile Strength of Rice Bioplastic

Altamont Elementary School

Special Awards

CALIFORNIA AIR RESOURCES BOARD AWARD

Science Project Award

Yahvin Gali

*Hydro Energy Sphere- Bouyless Biomimetic Versatile Hydrokinetic energy
Harvester Using Electromagnetic Induction (Novel Design)*

California Connections Academy

Honorable Mentions

Brittany Saetern

Reducing Global Warming

River City High School

Kayla Page

Soot Hurts

River City High School

Jordan Prawira

Stacked-a-Wind: Developing Vertical-Axis wind Turbine for Various Wind Speed

Altamont Elementary School

Kim Pham and Sabrina Terando

Food Waste to Ethanol

Vista Del Lago High School

Priyanka Venkatesh, Nishita Bagaria, & Mai-linh Nguyen

Biofuel: Turning Grease Into Gas

Vista Del Lago High School

Khadeeja Baqui

Creating a Program to Help COPD Patients Avoid Hospitalization

Al Arqam Islamic School

Special Awards

GENIUS OLYMPIAD

Rhithishah Yuva Raju

*Reducing Test Anxiety To Increase Academic Performance Through Novel
Breathing Techniques and Digital Visualization*

Mira Loma High School

Angel Gutierrez & Kristofer Thomas

Hydro Wheel

School of Engineering and Sciences

INTEL EXCELLENCE IN COMPUTER SCIENCE AWARD

Patrick Song

*Predicting Alzheimer's Disease: A Neural Network-Based Classification of MRI
Data*

Davis Senior High School

MU ALPHA THETA NATIONAL MATHEMATICS HONOR SOCIETY

Ameya Naik

Determining the Effect of Ground Terrain on Sacramento Valley Supercells

Mira Loma High School

NASA EARTH SYSTEM SCIENCE AWARD

Ameya Naik

Determining the Effect of Ground Terrain on Sacramento Valley Supercells

Mira Loma High School

NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION AWARD

Ameya Naik

Determining the Effect of Ground Terrain on Sacramento Valley Supercells

Mira Loma High School

Special Awards

NORTHERN CALIFORNIA SOCIETY OF TOXICOLOGY

Senior Division

Sabrina Yarzada

Henna as an Antifungal

Sacramento School of Engineering and Sciences

Junior Division

Ashlyn Roice & Alicia Roice

Radical Terminators

Altamont Elementary School

Honorable Mentions

Hadley Reed

The effect of Green detergent and Tide on yeast cell health

E.V. Cain Charter Middle School

Elena Moreno & Karla Leal

The truth about toothbrushes

River City High School

Jamison Celio

How much time of exposure to ultraviolet rays will kill E. coli

E.V. Cain Charter Middle School

Corrie Wilson

Teeth Whitening Without Discomfort

Bradshaw Christian High School

Special Awards

NORTHERN CALIFORNIA SOCIETY OF TOXICOLOGY

Honorable Mentions

Pavithra Sundaravaradian

Cheaper Cancer Detection: Using the Alpha Fetoprotein and the CA-125 Protein to create a cheap, accurate and effective test for cancer

Mira Loma High School

Mason Strawn and John Van Parys

Is your water clean?

Our Lady of the Assumption

Jacqueline Priawira

Bio.fiber.plastic: The Effect of Lignocellulosic Fiber in Enhancing the Formation and Tensile Strength of Rice Bioplastic

Altamont Elementary School

Will Myatt

How do fertilizers affect microorganisms that live in water?

W.E. Mitchell Middle School

Special Awards

OFFICE OF NAVAL RESEARCH AWARD

Guadalupe Bernal

Deep Learning Based Collision Avoidance Algorithm for Mobile Robots in Pedestrian Environments
Folsom High School

Anish Singhani

SAE Level 5-Conformant Self-Driving Car Using Deep Learning and Path Planning Algorithms Without Requiring LIDAR
Monte Vista High School

Grace Hanson

Testing Building Designs With A Wind Tunnel
Brookfield Middle School

Anna Soares

Watts up in your house?
E.V. Cain Charter Middle School

Yahvin Gali

Hydro Energy Sphere - Bouyless Biomimetic Versatile Hydrokinetic Energy Harvester using Electromagnetic Induction (Novel Design)
California Connections Academy

Jacqueline Prawira

Bio.fiber.plastic: The Effect of Lignocellulosic Fiber in Reinforcing the Tensile Strength of Rice Bioplastic
Altamont Elementary School

Special Awards

PROFESSIONAL ENGINEERS IN CALIFORNIA GOVERNMENT (PECG) EXCELLENCE IN ENGINEERING AWARD

Guadalupe Bernal

*Deep Learning Based Collision Avoidance Algorithm for Mobile Robots in
Pedestrian Environments*

Mira Loma High School

RICOH SUSTAINABLE DEVELOPMENT AWARD

Henry Tsai

Modular Solar-Powered Water Pumps

Folsom High School

SMUD BEST IN ENERGY

Elijah Reeves

Changing the Electrical Resistance of Water

W.E. Mitchell Middle School

Angel Gutierrez & Kristofer Thomas

Hydro Wheel

School of Engineering and Sciences

SOCIETY FOR IN VITRO BIOLOGY AWARD

Sabrina Yarzada

Henna as an Antifungal

School of Engineering and Sciences

Special Awards

STOCKHOLM JUNIOR WATER PRIZE

Henry Tsai

Modular Solar-Powered Water Pumps
Folsom High School

Haley Sais & Johnna Whipple

Aquaponic Farming
River City High School

US AIR FORCE AWARD

Ameya Naik

Determining the Effect of Ground Terrain on Sacramento Valley Supercells
Mira Loma High School

Guadalupe Bernal

Deep Learning Based Collision Avoidance Algorithm for Mobile Robots in Pedestrian Environments
Folsom High School

Nikolas Agadjanian

The Zipf's Law Mystery
River City High School

Gautam Pradeep

Determination of the Orbital Elements of Near-Earth Asteroid 1999 L028 Using The Method of Gauss
Mira Loma High School

Special Awards

U.S. METRIC ASSOCIATION

Henry Tsai
Modular Solar-Powered Water Pumps
Folsom High School

YALE SCIENCE AND ENGINEERING ASSOCIATION

Sydney Walthall
Solar Powered Angles
C.K. McClatchy High School

The following award winners are to be posted:

CALIFORNIA DEPARTMENT OF WATER RESOURCES AWARD

Congratulations again to all our Winners!

All participating students developed AMAZING projects for our judges to view.

You have ALL accomplished so much.
We hope to see you ALL in 2019!

Northern California



Education Foundation
Science • Technology • Engineering • Math