



**March 24, 2024**

***Announcing the PECG Special Awards Winners of the 2024 LA County Science & Engineering Fair***

The in-person Annual Los Angeles County Science & Engineering Fair was held on March 11, 2024, at the Shrine Expo Hall in downtown Los Angeles and was concluded with many remarkable accomplishments by up to 1,000 student exhibits who proudly displayed their projects in one of the nation's largest student competitions for excellence in STEM education.

State engineers from various agencies interviewed, evaluated, and scored projects before selecting the finalists after reviewing the student entries online, days before the interviews. Projects were judged on creativity, scientific thought, thoroughness, skill, clarity, and presentation. In addition to sponsoring the fair and offering various prizes, PECG provides two prizes of \$1,000 each that honor former Caltrans Engineers, James E. Roberts, who pioneered the Caltrans Bridge Retrofit Program, and Marilyn J. Reece, who was the first female licensed Engineer in California.

The special awards judges selected the finalists, who won based on receiving the highest scores among all students. Out of hundreds of entries reviewed, several dozen projects were shortlisted and advanced to further interviews to establish a rank for the final award selections. The finalists will receive Recognition Certificates, Science Fair medals and gift cards from PECG. More information about the fair with photos will soon be available on our website at <https://lapecg.org/>.

***The Final vote for the winners of the 2024 LACSF-PECG special awards was as follows:***

***\$1,000 Marilyn J. Reece Special Award split between:***

1. \$500 Cash Award to student **Rachel Lee, Gr.11 (S0826)**, Engineering Applications, Sr.  
*Project Title – Enhancing Sustainability and Performance of Building Materials with Water-Resistant HempBased Concrete Bound by Magnesium Oxychloride Cement*
2. \$500 Cash Award to student **Mary Tomooka, Gr.8 (J1008)**, Engineering Applications, Jr.  
*Project Title – Testing Which Bridge Will Hold the Most Weight During an Earthquake*

***\$1,000 James E. Roberts Special Award split between:***

1. \$500 Cash Award to student **Aleksander Ajamian, Gr.7 (J1804)**, Physics-Electricity-Magnetism, Jr.  
*Project Title - How to Stop a Maglev Train*
2. \$500 Cash Award to student **Theodore Demetriades, Gr.11 (S0917)**, Engineering Research, Sr.  
*Project Title - Pioneering Ultra-Lightweight, High-Strength Materials and Their Multifaceted Applications*

***The Honorable Mention Awards Winners:***

1. **Elizabeth Paladian, Gr. 7 (J0601)**, Chemistry Applied, Jr.
2. **Jordan Rowe, Gr.8 (J0618)**, Chemistry Applied, Jr.
3. **Sophie Herbert, Gr.8 (J0917)**, Ecology, Jr.
4. **Evelyn Kruger, Gr.8 (J1320)**, Materials Science, Jr.
5. **Shahzad Dardashti, Gr.8 (J1320)**, Materials Science, Jr.
6. **Margaux Lane, Gr.8 (J1126)**, Engineering Research, Jr. .

**Brief History:** Since 2004 PECG has sponsored the LA County Science Fair by contributing funds, while our engineers from various state agencies have served as members of the fair's executive board and as judges to select entries for special prizes and awards. The fair involves a yearlong effort by sponsors, organizers and community volunteers, who plan and execute the fair annually, while allowing schools, private, public and parochial, and students from the intercity to compete for excellence.

The LA County's student population is very diverse, is the largest in the nation, and has about one-third of all students in the State. Winning students from this fair advance to compete in the State Science Fair or may advance to the Intel® International Science and Engineering Fair (ISEF), which is the premier global science competition that gives over \$15 million in award prizes annually to students. This is a forum where agencies and organizations like PECG are rendering support to promote STEM education.

The Los Angeles County Science Fair, since 1968, is the oldest regional science fair in the Western United States and has up to a thousand student entries each year from about 200 schools, competing in Junior and Senior Divisions, and in 38 different areas of study. Their topics range from Physics to Chemistry, Materials Science to Mathematics, Environmental Management to Engineering Research and from Engineering Applications to Molecular Biology. Projects are judged on creativity, scientific thought, thoroughness, skill, clarity, and presentation.

More information about the fair is available on our website at <https://lapecg.org/>.

**Overall, thanks to the volunteers and all others who supported this effort, the fair went on smoothly and as always was a remarkable success, the students got a chance to showcase their projects and win prizes!!**



## **74<sup>TH</sup> ANNUAL LOS ANGELES COUNTY SCIENCE AND ENGINEERING FAIR**

*Held on Monday, March 11, 2024*

### **ACKNOWLEDGEMENTS**

TO OUR VOLUNTEERS AND FOR THE INVALUABLE SUPPORT FROM STATE AGENCIES INCLUDING CALTRANS, DIR, ARB, DGS, CDPH, OSHPD, AND THE RWQCB STATE PUBLIC AGENCIES



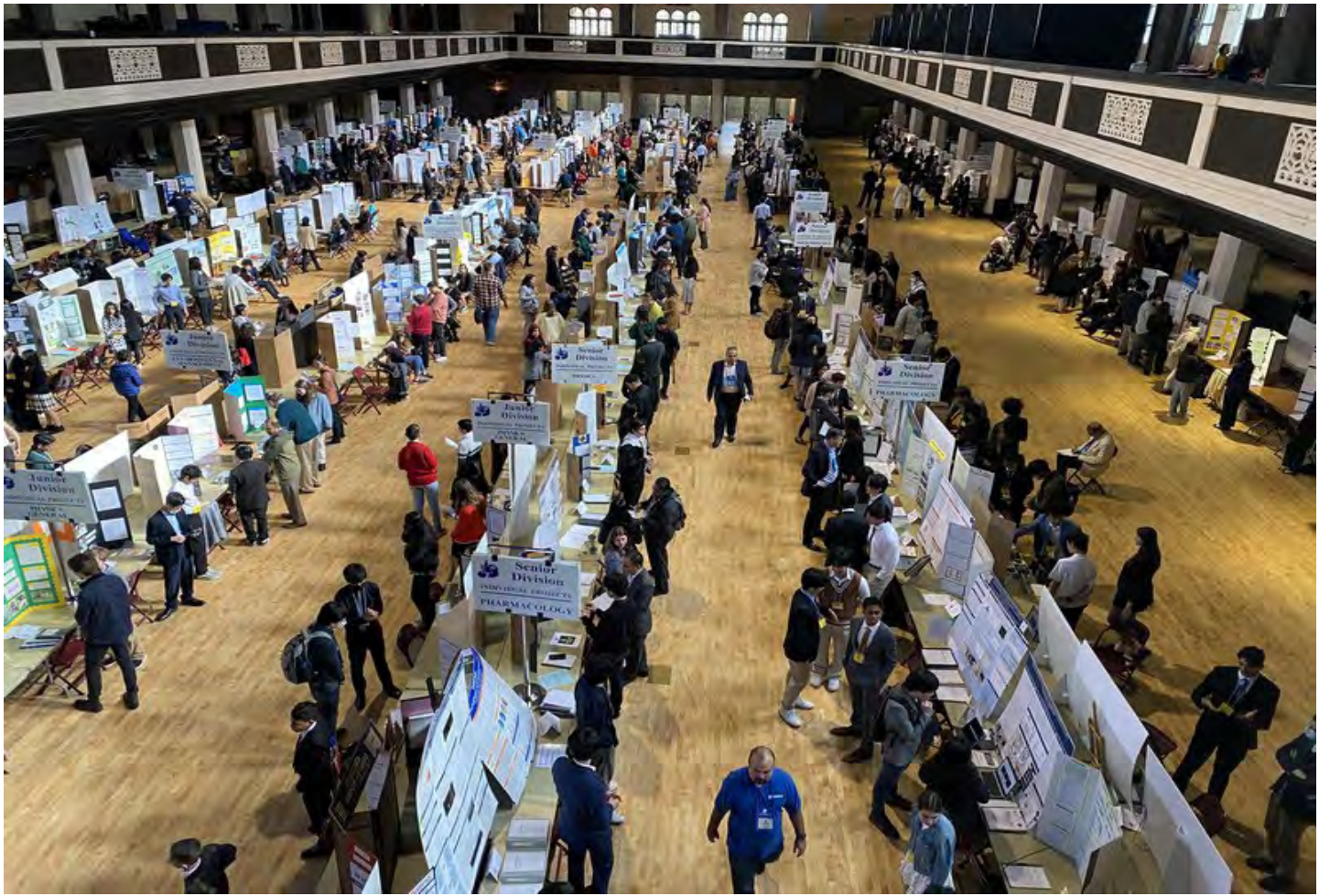
## \* 74<sup>th</sup> Annual LA County Science and Engineering Fair Medals & Trophies \*

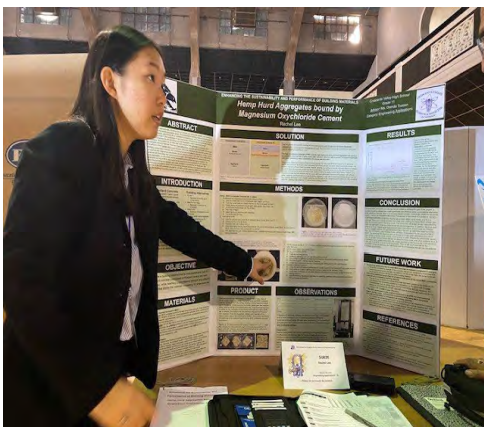
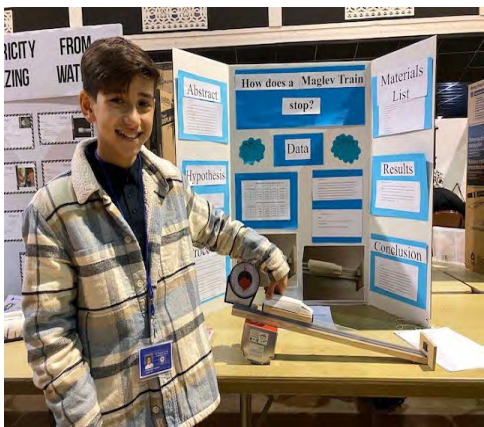
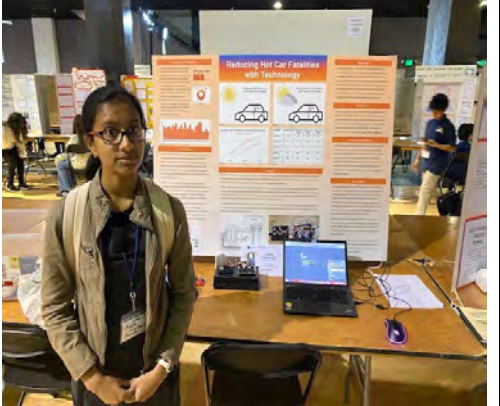
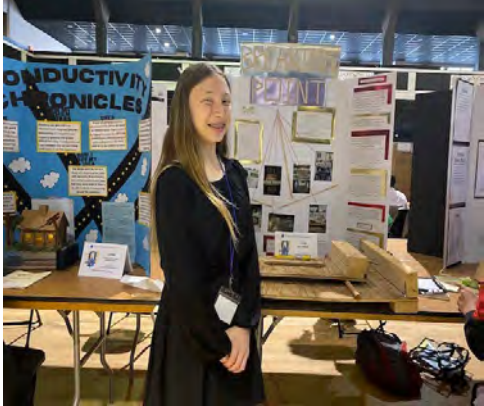
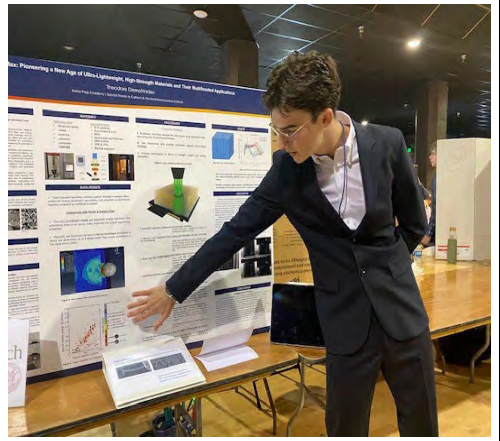


### 2024 PECG SPECIAL AWARDS' & HONORABLE MENTION WINNERS



*The Marilyn Jorgensen Reece Award (\$1,000 cash) and the James E Roberts Award (\$1,000 cash) are presented to the top male and female engineering students, either in the senior or junior divisions. Following the judging and scoring of all student entries, the students receive their awards' notices first and are then invited to the Caltrans District 7 Office Building in Downtown Los Angeles to the official awards ceremony where the winners receive their Awards. Each year all award-recipients' names are engraved and installed on the perpetual plaques that show all the PECG Awards winners since 2009 when the two awards were established by the Los Angeles Section of PECG. The name tags are installed on the two perpetual plaques right next to the memorial plaques of James Roberts and Marilyn Reece.*





**2024 ANNUAL LACSF – PHOTOS OF PECG SPECIAL AWARDS' JUDGING**

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