



2016 DATES AND LOCATION ANNOUNCED!

In case you missed it, the wait is **FINALLY** over!

American River College is set to host the 2016 Synopsis Sacramento Regional STEM Fair on April 2, 2016!
(Set up day April 1st)

Click one of the links below to register for this exciting event! More information about the event can be found on our website at www.sacSTEMfair.org. We can't wait to see you there!

- [Register student project for the Competing Division](#)
- [Register student project for the Showcase Division](#)
- [Sign up to be a Judge](#)
- [Sign up to be a General Volunteer](#)
- [Sign up as a College & Career Expo Exhibitor](#)

PIN CONTEST

Do you consider yourself somewhat of an artist? If so, we want you to help us design our 2017 STEM Fair pin! Each year, the NorCal STEM Education Foundation provides pins to participants at the Synopsis Sacramento Regional STEM Fair to commemorate the event. These pins travel with the winners who go on to compete in the Intel International Science and Engineering Fair and are traded among competitors from all over the world! Imagine YOUR design traveling to Europe, Asia, even Australia!

The contestants for the Pin Design Competition will be featured on-site at this year's Synopsis Sacramento Regional STEM Fair and the winner will be named at the Awards Ceremony that evening.

All you have to do to enter is [submit your contact information and design here](#).

All designs should be scalable (submitted in EPS format). Designs will be displayed in color in two sizes for voting. Designs will be displayed on one side of one 8 ½ by 11-inch piece of paper. Designs will be shown in a print area of 4x6 and a pin preview thumbnail of 1 ½ by 1 ½ inches. Winning pins will be manufactured no larger than 1 ½ x 1 ½ inches. Pin designs should state "2017" and "Synopsis Sac Regional STEM Fair."

The chosen pin is subject to change to reflect the name of the 2017 Fair.

Individual submissions only. Contest is limited to students in grades 5-12 that reside in the NorCal STEM Education Foundation's service area. To view our service area, [visit our website](#).
Here are some of our past pins for inspiration!



CALENDAR OF EVENTS

- January 11** - Student Project Registration Deadline
- January 27** - EXTENDED Registration for Exhibitor Early Bird prices
- February 10** - Volunteer & Judge Registration Deadline
- April 1** - Project Set up & Judge Orientation at American River College
- April 2** - Synopsis Sacramento Regional STEM Fair and College & Career Expo at American River College

SPECIAL THANK YOU TO OUR SPONSORS

We'd like to extend a special THANK YOU to our most recent sponsor for this Fiscal Year, SAFE Credit Union.



We would like to welcome SAFE Credit Union as a new sponsor! SAFE Credit Union will be supporting the Foundation by providing a great hands on workshop at the Regional STEM Fair and water bottles to all participants. We look forward to future support from SAFE!

EXHIBITOR REGISTRATION AT EARLY BIRD PRICES EXTENDED!

Good news! The Foundation has extended the Early Bird Registration prices for the College and Career Expo! Be sure to sign up today and join us for the 3rd Annual College and Career Expo at American River College. [Sign up here now!](#)

ARE YOU A STATE WORKER LOOKING TO DONATE THROUGH "OUR PROMISE" (formerly CSECC)?

The donation website for "Our Promise" has been taken offline, but state employees can still make their donations the old-fashioned way! The Sacramento Regional Science & Engineering Fair Foundation (dba NorCal STEM Education Foundation) hopes you will elect to donate to our organization! We've even prepared the form for you with our information to make it simple. [Use the Our Promise form with our information here](#).

THE JUDGING PROCESS

We know that it can sound scary, but being interviewed by STEM judges isn't so bad! The judges who volunteer for the Synopsys Sacramento Regional STEM Fair are local professional scientists, engineers and technology experts - they're from Northern California, just like you! The Foundation has heard that judging can be confusing to new students participating in the Fair and we wanted to make sure to clear up the confusion before the day of the event.

We've heard the rumors - but trust us, being interviewed by more judges is not an indication of your score. Students will not know how many times they have been judged by category award judges - the reason? We have SO many different kinds of judges: category award judges, Special Award judges, tie breaker judges, and final review judges!

Your category judges will typically interview you in teams of 2 or 3; however, if your project qualifies for a Special Award, you could have multiple teams of judges approach you! To see a list of our typical Special Awards to see if you can identify which you would like to qualify for, please visit: sacSTEMfair.com/awards.

Our judges are given name tags during their orientation which takes place on the Friday night before the Fair. At this Orientation they are also given their basic assignments so they can preview the projects they will be judging the next day. All judges will have a colored name tag around their neck, but they will not say what kind of judge they are.

Be sure that you are speaking with judges during the judging hours - parents and public attendees are not allowed in the project rooms because we want to make sure that everyone gets a fair chance at presenting to their judges without assistance or distractions.

Overall, the judging process happens quickly with a whirlwind of people approaching your project. Remember - don't try to count the judges to determine if you are done being judged because you might need one or more tie breaker judges who would come in later than the rest! You also want to make sure to stick around to enable all Special Award judges a chance to see you in action at your project.

We hope this clears up some confusion and we look forward to seeing you all at the Fair!

JUDGE THE 2016 STEM FAIR AT ARC

Join the greater Northern California region in encouraging and inspiring our future scientists, technology experts, engineers, mathematicians and more! Support our program by volunteering as a judge today! See "STEM professionals-to-be" experiment and design projects that expose new ideas and have a chance to discuss content, development, and design with these future scientists and engineers.

If you are a scientific, technological, engineering or mathematical (STEM) professional, a professor or even a STEM undergrad, we're looking for you! If you have a background in any STEM subject, you will be delighted at this opportunity to see great examples of experimentation from our student participants. Never judged before? Don't worry - we provide training for judges.

Judges are responsible for evaluating projects in their assigned category, which is determined dependent upon the judge's area of study and field work. Judges are encouraged to provide clear and impartial verbal feedback to each student they interview. See the [full list of categories under which a project can be entered here](#).

The Judges Orientation Dinner is tentatively scheduled for Friday, April 1, 2016 beginning at 6:00PM at American River College (room location to be determined) and will take approximately 2 hours, where judges will be served dinner, be trained on the judging



SUPPORT THE FOUNDATION SIMPLY BY SHOPPING FOR GROCERIES

Do you shop at Raley's, Bel-Air, or Nob Hill? If so, please join the Extra Credit program for the Sacramento Regional Science and Engineering Fair Foundation. [See instructions on how to sign up here](#). It's all online and just a few simple clicks to support the Foundation!

FEATURED EXHIBITORS

Thank you to our registered exhibitors! The US Army and SAFE Credit Union have signed up to exhibit at the College & Career Expo in 2016!



SCIENCE SPOTLIGHT

Warm Blooded Fish Discovered

We've known since elementary school that fish are cold blooded. It just goes to show you how little humans truly know about the world around us, and why we need to keep learning! A scientist at the National Oceanic and Atmospheric Administration (NOAA), Nicholas Wegner, published his findings this year about a warm-blooded fish known as the Opah. The opah (also known as a Moonfish) is a rounded predatory fish that hunts in the deep, dark waters of the ocean, approximately 1,000 feet below the surface. Scientists were first interested in the opah because although it lives in deep water, it actively hunts for its prey - where most deep-sea predatory fish lie in wait for their prey to swim by. The reason it is able to be so active, it turns out, is that it is a warm-blooded fish! Their vessels are reminiscent of the way a car radiator removes heat from the engine - but in reverse - it warms up the blood before it gets to the organs.

[Read more about the Opah here.](#)

Wifi-enabled Sidewalks

The small town of Chesham in Buckinghamshire, England, UK (population 21,483) is now much more high-tech than much of the rest of the world! Thanks to Virgin Media, the concrete sidewalks in the center of town now host "a series of submerged access points." And they're not slow either! The wifi is fast enough to allow a person to download a 45-minute video in approximately thirty seconds! [Learn more about this fantastic pilot program here](#). If they can do it in a small town in England, what's next, NYC? LA? Who knows?!

Robo-eyes

People could be walking around with bionic eyes as early as 2017! That's what Ocumetics Founder and CEO Dr. Garth Webb believes. His company has developed bionic lens implants which could improve patients' vision to better than 20/20! The outpatient procedure should be totally painless and take less than eight minutes. The bionic lens implant covers the patient's existing lens. Dr. Webb states that his patients' vision is improved immediately after the procedure. An added benefit is that patients are safeguarded against cataract surgery in the future, as the bionic lens strengthens the patients' natural lens, which is often prone to decay. If you'd like to learn more about Dr. Webb's bionic lenses, visit this website here: ocumetics.com.

process and encouraged to review student project boards without students present. We estimate that judges may devote a maximum of 5-8 total hours for judging Friday through Saturday. [Sign up now!](#)

WORKSHOP AT THE FAIR: SAFE CREDIT UNION BRINGS REAL LIFE TO YOU!

SAFE Credit Union will be hosting their "Reality Fair" at the 2016 Synopsys Sacramento Regional STEM Fair hosted by American River College! During the Reality Fair, students will be given a "background" (what kind of job you get, will you have kids?, a spouse?, etc.), then students will be sent on their way to budget and "buy" a car, housing, entertainment, babysitting (if necessary), and other essentials using their "monthly income" that was previously established for them in their "background." Its lots of fun and highly educational!

The workshop takes approximately two hours, and space is limited, so look out for the email announcing sign-ups soon!

****Applicants do NOT need to be registered for the 2016 Synopsys Sacramento Regional STEM Fair to participate. Space is limited!**

STUDENT SCHOLARSHIPS: OWLPAK SCIENCE FAIR KITS

The Synopsys Sacramento Regional STEM Fair has received in-kind donations from OWLPAKS - a great organization and we are offering the donations to students as scholarships for their Synopsys Sacramento Regional STEM Fair projects!

OWL PAK -- What is it? Everything you need to create your project board for the STEM Fair. The trifold board, photo paper, vinyl lettering, scissors, markers, glue and more! Get your board supplies delivered right to you!

How to apply: Please send Nadia a request at ncompton@sacSTEMfair.org. Please include your need, your grade, and your school & teacher's name.

****Applicants MUST be registered for the 2016 Synopsys Sacramento Regional STEM Fair. Supplies are limited!**

CALL FOR VOLUNTEERS

The Foundation is supported by our dedicated volunteers. They provide a broad source of expertise, talent, and people-power for our programs. We welcome all enthusiastic volunteers who believe that STEM learning is not only an enjoyable experience, but also necessary for today's youth.

Make an exciting difference in the educational future of local 5th to 12th grade students by volunteering for the Synopsys Sacramento Regional STEM Fair in 2016! Volunteers can assist with judging, registration, crowd control, food services, awards, and much more. We've made it simple - you can sign up on-line to be a volunteer and only commit to hours that work for you. Check out the Volunteer Guide (<http://www.sacstemfair.org/judges--volunteers.html#generalvolunteer>) to view what duties you can sign up for or [sign up here](#).

We appreciate any time you would like to devote and we would like to invite you to visit the STEM Fair as well as the College & Career Expo. Students can volunteer at the Fair to fulfill community service requirements for many area middle and high schools, too!

OTHER COMPETITIONS & SCHOLARSHIPS

Featured Scholarship: SME Education Foundation

The Foundation's scholarships offer students a powerful reason to choose a manufacturing focused education. The generosity of our many corporate partners has enabled us to provide millions in scholarships attracting thousands of new students to manufacturing every year.

Our scholarships are awarded annually, so students can re-apply every year. Scholarships range from \$1000- \$6000 and can be used for tuition, books or lab/course fees related to attaining a technical or engineering education. Eligible students include high school seniors, undergraduates, graduate students pursuing degrees in advanced manufacturing and related fields at two- and four-year colleges.

SME is accepting applications for scholarships. Information at: <http://www.smeef.org/scholarships/>.

Deadline for filing is the end of January.