## Cal ACS at the Bay Area Science Festival 2018

Since 2011, the Bay Area Science Festival has made its mark all around the San Francisco Bay Area, offering exceptional opportunities for public outreach at numerous events spread over the last week of October and the first week of November. This year, Cal ACS participated in two full-day festival events, North Bay Science Discovery Day in Santa Rosa on October 27<sup>th</sup>, and Science Discovery Day at AT&T Park in San Francisco on November 3<sup>rd</sup>. At each event, our volunteers presented the National Chemistry Week theme activities, "Creating Oxygen to Breath in the Space Station" and "The Sun and Ultraviolet Light: Make Your Own UV Wristband."

Al Verstuyft arrived early at the Sonoma County Fairgrounds in Santa Rosa, where Mark Frishberg assisted with setup at a prime location outdoors, literally at the crossroads of the fairgrounds, assuring a steady stream of visitors throughout the day. They were joined by Janice Crowley and John Branca, who stayed to help me pack up at the end of the day. This festival attracts educators, companies, and civic organizations from across Marin and Sonoma Counties, and the excitement was palpable. The weather was perfect for demonstrating the sensitivity of UV-color-changing beads to solar radiation, and our solar panels put out a steady stream of oxygen (and hydrogen) from the electrolysis of water. Visitors could experiment with electrolysis using 9V batteries and solutions contain red cabbage indicator, providing colorful evidence for the formation of acid at the anode and base at the cathode. Just about every young visitor wanted to string some beads, and we gave away at least 6000 altogether, mixing UV-detecting beads with other colors that don't fade indoors. Most visitors also took copies of Celebrating Chemistry, as well as the latest 118-element version of the Periodic Table in wallet-sized format.





Our team at AT&T Park the next weekend was equally successful, although our location on the Promenade level limited the sunlight reaching our solar panels. With over 200 exhibitors, this event is BASF's grand finale, and the premier STEM education event in the SF Bay Area. Section Chair Greti Séquin, along with Trudy Lionel, Michael Cheng, and Elaine Yamaguchi, assisted me in setting up, and we were soon joined by our neighbors from the Silicon Valley Section. It's hard to say whether our UV-bead bracelets or the Silicon Valley Section's slime was the more popular offering; what's certain is that we were busy with a crowd of visitors from start to finish. We gave away another 6000 beads, and would have run out entirely, but fortunately the Silicon Valley Section had a reserve supply that they generously shared with us. Additional thanks to Marla DeKlotz, who joined us in the afternoon, and to Sheila Kanodia and San Francisco State University student Chimara Stancill, who were there until the end to help me pack up. There's little doubt we inspired some future astronauts, as well as hundreds of young scientists.





