

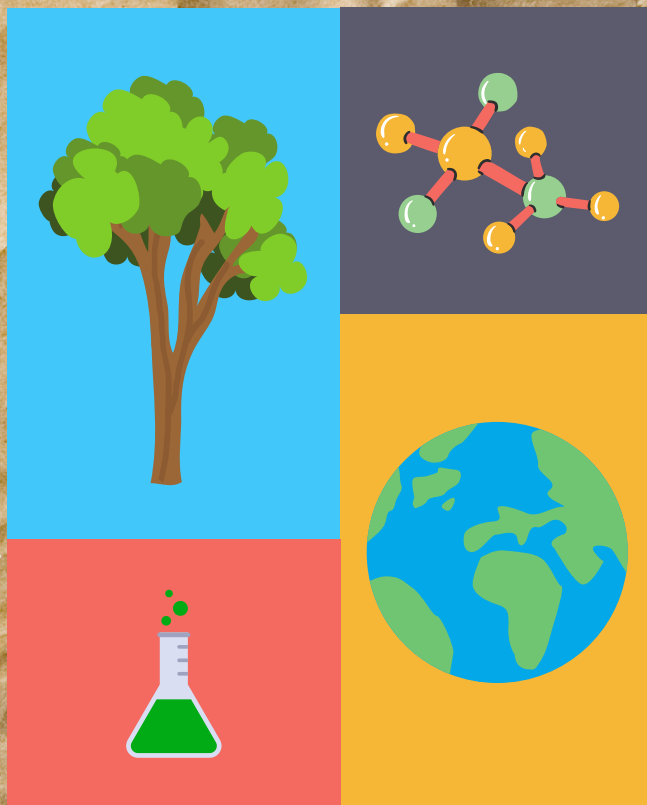


ACS
Chemistry for Life®

The San Diego Chemist

San Diego Section

Volume 35, Number 4 | April 2023



CREEK TO BAY CLEANUP WITH THE SAN DIEGO LOCAL SECTION

9:00 AM-12:00 PM

APRIL 22, 2023



ACS
Chemistry for Life®

Dear esteemed members,

Did you know that the first Earth Day started 53 years ago? This momentous day was organized by Wisconsin Senator, Gaylord Nelson, to bring attention to the pollution and environmental damage caused by industrialization. Earth Day quickly grew to become a nationwide event and inspired the modern environmental movement. Today, millions of people from around the world celebrate Earth Day by holding events and activities focused on raising awareness about climate change, sustainability, and other pressing environmental issues. To celebrate this year's Earth Week, the Local Section will participate in the **Creek to Bay Cleanup**, organized by **I Love a Clean San Diego**. Join us on the morning of April 22 and connect with other Local Section members while doing something good for the planet. [Click here to register for our event.](#)

Thank you to **Don Lewis** for delivering a fascinating seminar on the backstory of last year's Nobel Prize in Chemistry. I enjoyed learning some juicy tidbits that only someone with intimate knowledge of Barry Sharpless and his collaborators would know. I would never have guessed that vitamin C tablets from Trader Joe's were the key ingredient to modify the oxidation state of the catalyst, which made the click reaction possible. Despite the intermittent rain that day, we had a great turnout, and there was a lively Q&A session at the end of the presentation. Many thanks to **Ryan Smith** and **Julann Miller** for their behind-the-scenes work, which made this meeting possible.

Did you make it out to Super STEM Saturday last month? Almost 12,000 attendees descended on CSU San Marcos for a day of family fun and science. Seven **ACS Student Affiliate Chapters**, including multiple STEM-themed student organizations, provided a small army of volunteers to run booths and exhibits. One of our Local Section's most well-known members, **Robyn Araiza**, was instrumental in organizing and coordinating the volunteers. The activity table ran by the **Southwestern College Student Affiliate Chapter**, "Freaky Foam Faces," was among the most popular and served around 2000 kids.

Additionally, I would like to recognize the ACS winners of this year's Greater San Diego Science and Engineering Fair.

- Junior Division 1st Place - **Ethan Leem**; "Most Effective Natural Anti-Bacterial Agent"
- Junior Division 2nd Place (Team) - **Adam Jaimovich, Zakari Sayed** from The Rhoades School; "Efficacy of Various Spice Extracts in Combating Potential Stimulant Hazards"
- Junior Division 3rd Place - **Yusra Qarar** from Bright Horizon Academy; "Will Soaking Food in Water Before Cooking Remove Starch from It?"
- Senior Division 1st Place - **Andrew Tsui** from Canyon Crest Academy; "Novel High-Throughput Screening and Identification of FDA-Approved Drugs for Alzheimer's Disease Treatment"
- Senior Division 2nd Place - **Rishika Kulkarni** from the Francis Parker School; "Novel PSS-Driven Ligand Exchange on the Surface of Gold Nanocubes"
- Senior Division 3rd Place - **Anirudh Kalyanaraman** from Mt. Carmel High School; "Cobinamide - A Novel Antioxidant to Protect Against Polyaromatic Hydrocarbon-Induced Cardiac Cytotoxicity"

Lastly, on behalf of our Section, I would like to congratulate **Prof. Jefferey Kelly from Scripps Research Institute** for being this year's Wolf Prize in Chemistry recipient for his work in protein-folding mechanics. Dr. Kelly's work is credited with helping to develop therapies for certain severe neurodegenerative and cardiovascular diseases. Keep an eye out for Dr. Kelly, as the Wolf Prize is often a good predictor of a future Nobel Prize.

I wish you and your loved ones a prosperous and environmentally aware month of April.

With gratitude,

Juan Gonzalez

2023 Chair, San Diego Section of the American Chemical Society

Discord: @g-orbital

E-mail: jpgg@sandiegoacs.org

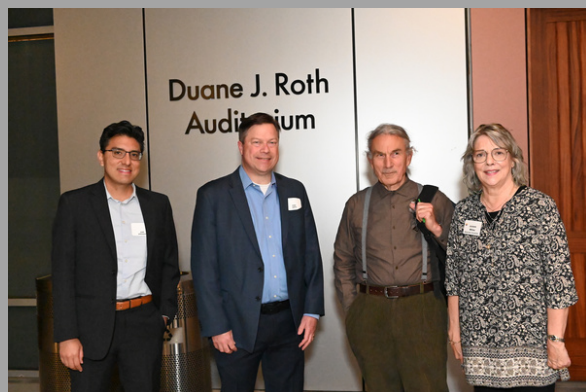
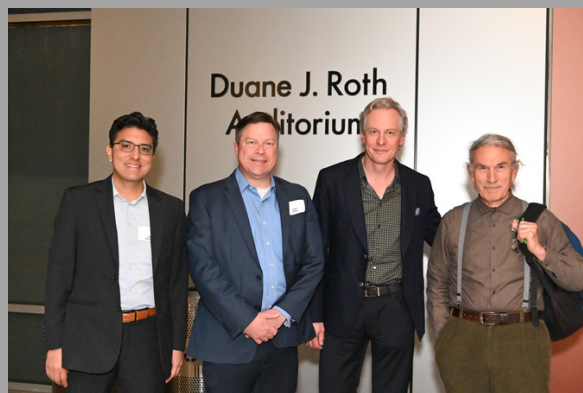
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THE BACKSTORY OF THE CLICK CHEMISTRY PATENT

While many of us were attending the ACS National Meeting last Wednesday, the Chemistry and Law Committee of the San Diego Section of the ACS hosted a talk by Dr. Don Lewis on the backstory of the click chemistry patent (the subject matter for which Professor Barry Sharpless at Scripps Research was awarded his SECOND Nobel Prize last year). Dr. Lewis is not only the patent attorney who drafted the click chemistry patent and was involved with its early commercialization, but he is also the founder of the SDACS Chemistry and Law Committee, co-founder of the National ACS Chemistry and Law Section, and co-founder of the Royal Society of Chemistry Law Section (for which he was named a Royal Fellow). Dr. Lewis provided the etiology of the click chemistry discovery, development, and practical application to just one of Professor Sharpless' many contemplated future chemical reactions. For example, we were regaled with a story of how (now U.S.C. Professor) Valery Folkin side-stepped his institution's purchasing department to obtain a bottle of vitamin C from a local Trader Joe's, and that reagent was proven to be essential for the facile use of the commonly available Copper(2+) reagent in one of the most common formats of the click chemistry reaction. The lessons from this backstory of the click chemistry reaction may be helpful in expediting the development of many future chemical reaction schemes prophesized by Professor Sharpless as discussed in Dr. Lewis' presentation.

This in-person event held at the Roth Auditorium tested our section's attendance levels and proved to be very successful at engaging our section with historic events in the advancement of chemistry.

THE BACKSTORY OF THE CLICK CHEMISTRY PATENT



2023 Super STEM Saturday

San Diego showed up for some great fun with science at Super STEM Saturday, the closing event of the San Diego Festival of Science and Engineering on March 11, 2023. The event was held on the Cal State San Marcos (CSUSM) campus and co-hosted by the Classical Academies and CSUSM. With more than 11,000 attendees, the 8 Chemistry Club/ACS tables were swamped the entire day. The volunteers included students, faculty, and even alumni from chemistry programs at CSUSM, UCSD, SDSU, Southwestern Community College, Palomar Community College, Mesa Community College, Mira Costa Community College, & Grossmont College! Robyn Araiza, Lecturer in Chemistry & Biochemistry at CSUSM, coordinated more than 20 tables and organized the roughly 300 volunteers needed to put on the event. Drs. Robert Iafe and Kang Du coordinated a “Better Than Magic” Chemistry Show that demonstrated some of our favorites, including luminol, screaming gummy bears, and thermite reactions. Overall, kids of all ages were able to get their hands on chemistry and other fields of STEM throughout the day, and ACS members and future ACS members were a big part of making it all happen.

2023 Super STEM Saturday



Report – 2023 Greater San Diego Science & Engineering Fair

- Eighteen (18) volunteers signed up for science fair judging
- Due to scheduling, weather & other factors fourteen (14) volunteers were present for judging
- Number of participating students were much fewer (by at least 20-30% based on visual inspection)
- Number of professional society judges also seemed fewer, although some probably judged virtually (available option)
- Students were dismissed earlier than scheduled therefore no photos of winners or of winning posters

SD-ACS Winners:

Junior Division 1st Place - Ethan Leem

JR-803: Most Effective Natural Anti-Bacterial Agent

Junior Division 2nd Place (Team) - Adam Jaimovich, Zakari Sayed

JR-607: Efficacy of Various Spice Extracts in Combating Potential Stimulant Hazards

Junior Division 3rd Place - Yusra Qarar

JR-585: Will Soaking Food in Water Before Cooking Remove Starch from It?

Senior Division 1st Place - Andrew Tsui

SR-144: Novel High-Throughput Screening and Identification of FDA-Approved Drugs for Alzheimer's Disease Treatment

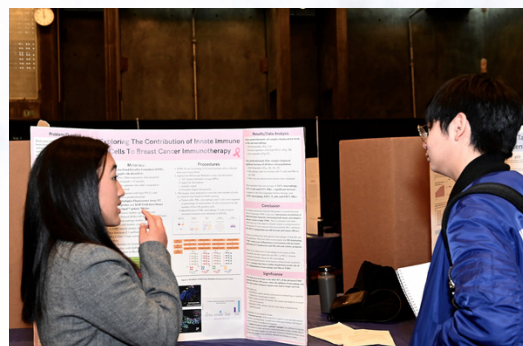
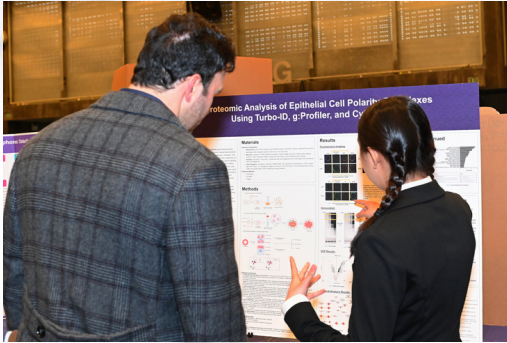
Senior Division 2nd Place - Rishika Kulkarni

SR-191: Novel PSS-Driven Ligand Exchange on the Surface of Gold Nanocubes

Senior Division 3rd Place - Anirudh Kalyanaraman

SR-155: Cobinamide - A Novel Antioxidant to Protect Against Polyaromatic Hydrocarbon-Induced Cardiac Cytotoxicity

2023 Greater San Diego Science and Engineering Fair (GSDSEF)



Engineering Polymers that Prevent Rejection of Gene Therapy and 3-D Printed Implants

ACS Webinars

April 13, 2023 2:00 PM PDT

[Click here!](#)

The Newest Alternative to Animal Testing Method for Skin Sensitization

April 26, 2023

8:00 a.m. PDT

[Click here!](#)

An Indian Millennial Journey: Engineering to UPSC to MBA

ACS Webinars

April 14, 2023 @ 5:30 AM PDT

[Click here!](#)



c&en
CHEMICAL & ENGINEERING NEWS

Accelerating the Design of Asymmetric Catalysts with a Digital Chemistry Platform

ACS Webinars

April 18, 2023 @ 10:00 AM PDT

[Click here!](#)

Achieving the Pesticide MRLs with GC/MS/MS Using Hydrogen Carrier Gas

April 20, 2023

8:00 a.m. PDT

[Click here!](#)

Executive Committee Meeting

Dates 2023

6:30– 8:00 PM

May 4

June 1

July 6

August 3

September 7

October 5

November 2

December 7

[Zoom Meeting](#)



The San Diego Section of the American Chemical Society would like to thank our Corporate Sponsors.

NON-PROFIT ORGANIZATIONS!

Does your non-profit organization have an upcoming event that might be of interest to members of the ACS – San Diego Section? If so, please send your announcement to our 2022 Chair, **Juan Gonzalez-Gonzalez** at jpgg@sandiegoacs.org. Once approved, Juan will see that your announcement is published on our website (www.sandiegoacs.org) and, if received by the 20th of the month before the event, in The San Diego Chemist newsletter. This is a free service of the ACS – San Diego Section. Take advantage of it!

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For more information, please contact:
Carolina Ibarra at cibarra@sandiegoacs.org

THE SAN DIEGO CHEMIST, the official newsletter of the San Diego Section of the American Chemical Society, published on a monthly basis, can be viewed at

<http://www.sandiegoacs.org/newsletter/>.

All contents are published at the discretion of the Section's Executive Committee. Events of interest to chemistry professionals in the community may be included in the events calendar as space permits and are subject to editing for brevity. Advertisements and announcements from the chemistry community are accepted at published rates. The deadline for items submitted is the 20th of the month for publication by the end of that month.

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8.5" x 5.5"	\$400	\$360	\$310
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ATTENTION COMPANIES!

Do you hire student workers?

If you have open positions in chemistry and biochemistry that would be of interest to college students, such as summer internship opportunities, here is a list of contacts you'll want to keep handy. The people listed below are the faculty advisors of the ACS Student Affiliate groups for all chemistry programs in San Diego County. These professors can get the word out to all chemistry and biochemistry majors at their schools about jobs, career fairs, open houses, etc.

California State University, San Marcos

Jacqueline Trischman
trischma@csusm.edu
760-750-4206

Point Loma Nazarene University

Vacant

San Diego Mesa College

Synthia Chang
schang001@sdccd.edu

San Diego Miramar College

Vacant

Southwestern College, Chula Vista

Juan Gonzalez
jgonzalez3@swccd.edu
619-421-6700x5947

University of California, San Diego

Jeremy Klosterman
jkk@ucsd.edu

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**San Diego Section, American Chemical Society
Executive Committee – Zoom Meeting
Mar. 2, 2022, 6:30 p.m.**

Attendees: Sean Anderson, Surya De, Juan Gonzalez-Gonzalez (Chair), Carolina Ibarra, Val Kuck, Julann Miller, Ken Poggenburg, Joan Schellinger, Jim Shih, Ryan Smith, Bill Tolley (Secretary), Christina Vialva.

Visitor: Jeremy Entrator

ExComm Minutes for February (BT / JGG) – Approved

Treasurer's Report (DG) – Receipts: \$260 from Eventbrite for January seminar – Brewery Chemistry; \$29.11 SDCCU interest for Feb 2023; expenses: \$132.60 storage locker; \$225 February newsletter prep; \$215 social media; \$2435.10 for Cooking Chemistry paid from IPG money; Mark O'Brien – ACS National – requesting copies of tax statements for three years; Annual Report to National was written, reviewed and accepted, making the Section eligible for the annual allotment \$1,9991.69

Chemistry of Cooking – February Seminar (JGG) -- 60 logged in, 26 responded to post-event survey -- ~60% of attendees were ACS members, ~95% thought it on a level that attendees could understand, ~60% deemed the presentation as outstanding, 100% would attend a similar event; some attendees sent photos of their finished products; Juan and Robyn discussing repeat events, grant funds supplied materials for 32 of the attendees.

Super STEM Saturday (JGG) – Mar. 11, CSUSM, 10 a.m., SDACS facilitating recruitment of volunteers.

Greater San Diego Science & Engineering Fair (JS) – 18 judges have volunteered, some new to this event; event coordinator will send list of exhibits for the judges to review; Jim will submit list of names of judges to coordinators; Jim also will send parking passes to judges.

Law Seminar – Back Story of CLICK Chemistry (RS) – Don Lewis, formerly ExComm member, was attorney who drafted the patent, tentatively planning for Roth Auditorium, must rent the auditorium, April 12, 6 p.m., capacity of 100 attendees.

Project SEED (VK) – Val has 4 mentors, working to recruit students.

Chemistry Olympiad (Joan S) -- Mar 18-19, virtual proctoring, 2 hours volunteers needed (many students express interest but very few actually participate), National exam will be April 16 in person, 3 parts including a written and then lab component.

Earth Week (JGG) – Juan working to repeat event similar to last year's of cleaning debris from a local preserve, recruiting students, April 22.

ACS Spring National Meeting (JGG) – Coming this month
Action: Bill check with councilors as to attendance at Spring meeting.

Adjourn: 7:20 p.m.

Next meeting: April 6

***These minutes have not been approved by the Executive Committee at the printing of this issue**

Creek to Bay Cleanup
I love a Clean San Diego
multiple locations
April 22, 2023
[Click here!](#)

Creek to Bay Cleanup
ACS Local Section
at the
Chula Vista Wildlife Refuge
April 22, 2023
[Register here!](#)

San Diego EarthFest
Balboa Park
April 22, 2023
[More info.](#)

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Chair-Elect			
Past Chair	Jim Shih, Eli Lilly & Co, jshih@sandiegoacs.org	(2023)	626-826-3561
Secretary	William Tolley, Seacoast Science, Inc., b_tolley@juno.com	(2023)	858-780-0978
Treasurer	Desiree Grubisha, Heron Therapeutics, desgrubisha@gmail.com	(2023)	858-254-5497

Councilors

Hui Cai, WuXi AppTec	(2025)	858-361-8838
Surya K. De, Conju-Probe	(2024)	858-337-4961
Desiree Grubisha, Heron Therapeutics	(2024)	858-254-5497
Valerie Kuck	(2023)	973-744-5510
Jackie Trischman, CSUSM	(2025)	858-414-3323
David Wallace, Wallace Scientific Consulting	(2024)	858-638-1866

Alternate Councilors

Julann Miller	(2023)	
Ben Pratt, Pratt Pharma Consulting LLC	(2025)	858-945-7893
Jim Shih, Eli Lilly & Co	(2024)	626-826-3561
Shannon Woodruff, HP Inc.	(2023)	949-735-9021

Members-at-Large

Sean Anderson, Application Specialist, 3M	(2024)	661-714-6174
James O'Brien, TE Connectivity	(2023)	858-336-0654
Bill Szabo	(2025)	858-550-0306
Christina Vialva, Southwestern College	(2024)	951-287-4503

STANDING & SPECIAL COMMITTEES**Awards Nomination Committee**

Valerie Kuck (Co-Chair)	973-744-5510
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ChemExpo

Jackie Trischman, CSUSM	858-414-3323
-------------------------	--------------

Communications Committee

Surya K. De, Conju-Probe.	858-337-4961
Desiree Grubisha, Heron Therapeutics	858-254-5497
Ken Poggenburg	760-635-2573
Carolina Ibarra (Newsletter Editor & Social Media Manager)	619-618-9240
David Wallace, Wallace Scientific Consulting	858-638-1866

Distinguished Scientist Awards Nomination Committee

OPEN (Chair)	
Tammy Dwyer USD	619-260-4030
Barbara Sawrey	858-729-0689
David Wallace, Wallace Scientific Consulting	858-204-5412

Education Committee

Valerie Kuck	973-744-5510
Joan Schellinger, USD	619-260-7960

EarthFair

OPEN

Finance Committee

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Ryan Smith	619-744-2220

Fundraising Committee

OPEN

Government Affairs Committee

Hui Cai, WuXi AppTec (Chair)	858-361-8838
Ken Poggenburg	760-635-2573

Law Committee

Ryan C. Smith, Duane Morris LLP	619-744-2220
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Mad Science Program

OPEN

MedChem Symposium

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Mark Tichenor (Co-Chair), Janssen Pharmaceuticals, Inc.
David Wallace (Co-Chair), Wallace Scientific Consulting

858-945-7893
858-334-8914
858-638-1866

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Jim Shih, Eli Lilly & Co.

626-826-3561

Professional Development Committee

Valerie Kuck

973-744-5510

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760-635-2573

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Valerie Kuck

973-744-5510

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