ACS Chemistry for Life®

SCALACS

A Joint Publication of the Southern California and San Gorgonio Sections of the American Chemical Society

VOLUME LXXVIII/No. 4 MAY 2023

SOUTHERN CALIFORNIA Section

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University of California,
Santa Barbara

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SCALACS (ISSN) 0044-7595 is published monthly March through May, September and October; and Bi-monthly January/February and November/December along with a special ballot issue once a year. Published by the Southern California Section of the American Chemical Society at 2700 East Foothill Blvd #209, Pasadena, CA 91107. Subscription price is $12.00/year. Make checks payable to Southern California Section, ACS. Periodical mail postage paid at Gardena, CA 90247, email: office@scalacs.org. Or call: 626.327.1216.

ADVERTISERS: Advertising rates on application. Mail COPY, CONTRACTS and CHECKS to Southern California Section, ACS, 2700 East Foothill Blvd #209, Pasadena, CA 91107. Phone: 626.327.1216.

CONTRIBUTORS: Send all copy to Editor, SCALACS, 2700 East Foothill Blvd #209, Pasadena, CA 91107, email: editor@scalacs.org. Or call: 626.327.1216.

POSTMASTER: Send change of address to SCALACS, 2700 East Foothill Blvd #209, Pasadena, CA 91107.

Website address: www.scalacs.org

CHAIR'S MESSAGE

ACS Local Section
Southern California

Dear SCALACS members,

As I write this month's message, I am thinking about how exciting it is to be a chemistry educator. We live in a time when technology is changing so fast, data are plentiful, and students have many problems in the world worth working on.

With Earth Day having just passed, the threat of climate change is on many people's minds. With this threat comes the promise of new problems to solve. Chemists are at the forefront of many areas of climate research including, but not limited to, finding ways to combat the increase in greenhouse gas emissions. Reducing greenhouse gas emissions was the topic of one of the seminars hosted by SCALACS in April.

We have the High School Chemistry Olympiad award ceremony coming up on May 11. The 20 national finalists will be chosen soon for the U.S. International Chemistry Olympiad team. Bravo to all the teachers who mentored students and to all the students who took the local exam. On page 3, you can find the names and photos of the 12 students who were invited to participate in the National Exam on April 22.

Furthermore, I am pleased to share with you photos from various SCALACS events held in April. Seeing the younger generation enjoy these events is truly inspiring.

As we move into summer, we will be planning programming for the next academic year. Please contact me with any ideas you have for future SCALACS events.

Sincerely,
Edye Udell
Chair, SCALACS
Science Teacher, Westridge School
(EUdell@westridge.org)

Announcing the 2022 Richard C. Tolman Award Recipient

Professor Alison Butler
Dept. of Chemistry & Biochemistry,
University of California, Santa Barbara
is the 2022
Tolman Award recipient!

**Congratulations,
Professor Butler!**

Congratulations to **Professor Alison Butler** for receiving the 2022 Tolman Award in recognition of her outstanding scientific contributions in bioinorganic and bioorganic chemistry.

Prof. Butler is a Distinguished Professor in the Department of Chemistry and Biochemistry at the University of California, Santa Barbara. She works on bioinorganic chemistry and metallobiochemistry. She is a Fellow of the American Association for the Advancement of Science (1997), the American Chemical Society (2012), the American Academy of Arts and Sciences (2019), and the Royal Society of Chemistry (2019). She was elected a member of the National Academy of Sciences in 2022.

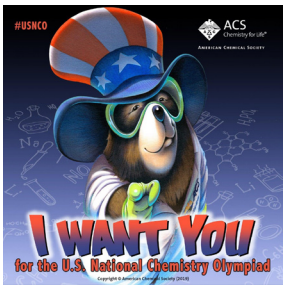
Prof. Butler studied at Reed College, graduating in 1977. She started in immunology, but moved into chemistry to work with transition metals. She worked with Professor Tom Dunne on an intramolecular electron transfer study: The Reduction of Pyrazinepentaaminecobalt (III) by Chromium (II). She earned her Ph.D. at University of California, San Diego in 1982 under Robert G. Linck and Teddy G. Traylor.

Prof. Butler worked as a postdoctoral fellow at University of California, Los Angeles with Joan S. Valentine and at California Institute of Technology with Harry B. Gray. She was appointed to the faculty at University of California, Santa Barbara in 1986. Here she was awarded an American Cancer Society Junior Faculty Research Award. She was awarded the 34th University of California, Santa Barbara Harold J. Plous Award.

She looks to discover new siderophores, small molecules that bind iron in microorganisms. She uses genomics and bioinformatics to predict new siderophore structures. She explores how siderophores adhere to mica and looks at how they can promote surface colonisation. She identified that siderophores become sticky when wet, which may help to develop underwater adhesives. Her current research considers the uptake of microbial iron, vanadium haloperoxidases in microbial quorum sensing and cryptic halogenation, bio-inspired wet adhesion using catechol compounds, and the oxidative disassembly of lignin. Her research into the bioinorganic chemistry of iron is funded by the National Institutes of Health and the National Science Foundation. She studies how transition metal ions are used by marine organisms.

In 2012, she became the President of the Society for Biological Inorganic Chemistry and served until 2014. She was made a Fellow of the American Chemical Society in July 2012. She delivered the 2016 Douglas Eveleigh Endowed Lecture at the Waksman Institute of Microbiology. In 2018, she was awarded the American Chemical Society Alfred Bader Award for her work on siderophores. In 2019, she was elected to the American Academy of Arts and Sciences, received the American Chemical Society's Arthur C. Cope Scholar Award for excellence in organic chemistry, and received the Royal Society of Chemistry's Inorganic Mechanisms Award. Prof. Butler also received the 2019-2020 Faculty Research Lecturer Award, the highest honor that University of California, Santa Barbara faculty can bestow on their members.

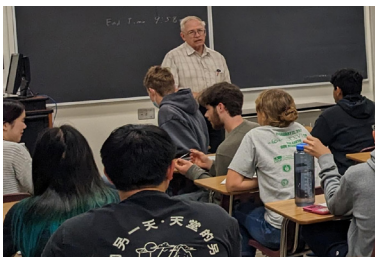
Plans for a ceremony to honor Prof. Butler are being developed and members will be nofified soon.

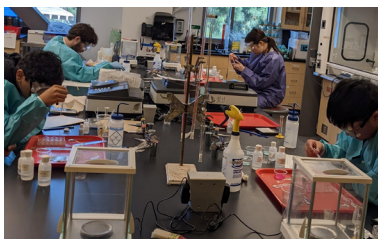


High School Chemistry Olympiad

This year we had 624 students representing 30 schools for the High School Chemistry Olympiad. Testings took place on March 15 and 16 and the top 12 students were invited to take the National Exam on April 22 at Cal State Dominguez Hills.

Thank you to Gerald Delker, Barbara Belmont, and Huntington Association Management team for their assistance, as well as the schools that volunteered to host students from schools that had fewer than 10 participating. We appreciate the help of these teachers who took in the additional students in their area: Edye Udell, Paul Bender, Ryan Casey, Wonjong Kim, Benjamin Ku, Fawzia Qazi, and Charles Lee. Also, Michael Morgan for handling the schools in the southwest side or our section.





The top 12 students who took the National Exam on April 22:

Herrick Wang	Arcadia High School
Ian Chan	Arcadia High School
Konnie Duan	Harvard-Westlake High School
Alexander Franks	North Hollywood High School
Daniel Rosado	Redondo Union High School
Theodore Danial	Redondo Union High School
Max Zhou	San Marino High School
Michael Lee	South Pasadena High School
David Zhang	Temple City High School
Aldon Lam	Temple City High School
Lidia Prokopovych	Venice High School
Prabodh Rao	Whitney High School

Congratulations to all! The **2023 High School Chemistry Olympiad Awards Ceremony** will be held on **May 11, 6 pm via Zoom**. Look out for the invitation soon and come to cheer on our students!

SCALACS Participation in the 'Engaging Girls in STEM' Event Organized by Los Angeles County Office of Education STEM Section

Four Executive Committee Members of SCALACS (three Senior Members: Jerry Delker, Thomas Mathew, and Krishna Kallury and one Young Chemist: Inessa Bachynskaya) volunteered at the event in manning the SCALACS booth at the event on Saturday, April 15.

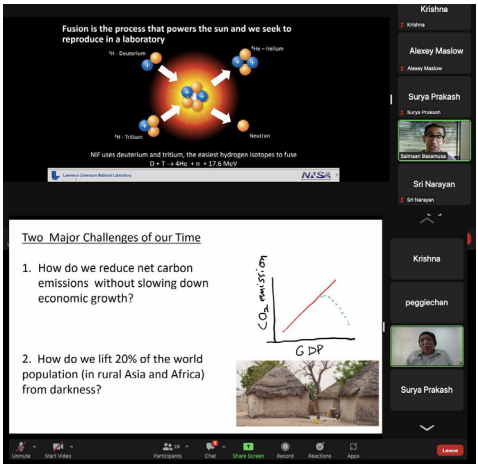
The event was specifically held for K-12 girls from high Schools throughout LA County. Two booth visiting sessions were scheduled, one in the morning from 10:30 am to 11:30 am and the other in the afternoon from 1:15 pm to 2:15 pm. The SCALACS booth was visited by over 120 students, some at the middle school and some at the high school level.

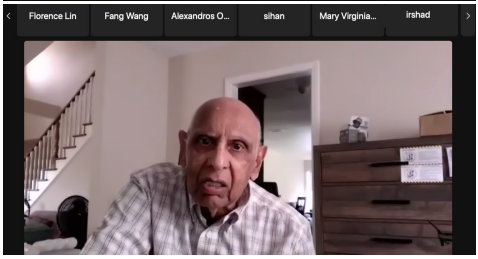
Our demonstration exhibits consisted of two experiments – one dealing with pH using red cabbage indicator and household chemicals like vinegar, window wash ammonia liquid, acids occurring in fruits (lactic, tartaric, citric and benzoic acids), bleach, milk of magnesia, baking soda, and sodium carbonate. The second experiment demonstrated glow sticks and their chemistry. There were many interactive discussions with all the girls on topics ranging from applications of pH in chemicals occurring in the human body and in nature to nutritional chemicals and soil acidity and basicity. Other points of discussion included the use of glow sticks by the Army in night exercises and by the public during camping.

We were delighted to see the genuine interest among school girls in STEM subjects and we thank the LA County Office of Education for giving SCALACS the opportunity to interact with these students.

SCALACS Seminars in Celebration of Earth Day

In celebration of the Earth Day, SCALACS organized two presentations under the auspices of a Science Café grant awarded by the Local Section Activities Committee (LSAC). Dr. Salmaan Baxamusa, a younger generation chemical engineer from Lawrence Livermore National Laboratory, and Prof. Sri Narayan, a senior electrochemist from USC, were invited to address our audience. The topics of the seminars were of great relevance as they dealt with technologies to generate energy through processes which do not produce carbon-related materials responsible for climate change effects like global warming,





severe weather events, etc. affecting human health and eco systems.

In his introductory remarks, Coordinator Prof. Surya Prakash of USC pointed out that fossil fuels contribute to about 80% of the carbon dioxide responsible for global warming and how his laboratory and others developed processes for converting it into methanol. He suggested that it would be ideal if we can mimic the nuclear fusion occurring on the Sun's surface which liberates tremendous energy. This was precisely the theme of the first seminar by Dr. Salmaan Baxamusa.

Dr. Baxamusa elaborated on the approaches to generate energy through nuclear fusion as a breakthrough announced on December 5, 2022, by his laboratory. The sequence consisted of inertial confinement of deuterium and tritium isotopes of hydrogen into a very small area and application of 1.9 mega joules of energy from an array of high-powered lasers in a specially prepared capsule whose interior was coated with carbon by chemical vapor deposition. It involved the efforts of a large contingent of chemists, physicists, and chemical engineers from around the world. He pointed out that although the principle was demonstrated, it would take several years to develop a system for producing fusion energy. Dedicated investment, technology, political will, sorting through science, developing means for producing larger amounts of tritium, target production, and high energy lasers are needed to achieve the end results.

Prof. Sri Narayan stressed that "we are living on Earth and hence do something to protect and sustain

(Continued on page 6)

ACS MEETING
March 26-30 2023 • INDIANAPOLIS
COUNCILOR TALKING POINTS

- The candidates for the Fall 2023 National Election for President-Elect for 2024, will be Dorothy J. Phillips and Florian J. Schattenman, as well as any petition candidates. The Council selected the above 2 candidates through electronic ballot and also elected Daniel Rabinovich for 2023-2024 on the Committee on Committees.

- The Committee on Nominations and Elections presented the candidates, selected by councilors, for the Board of Directors:
  - o District VI Directors: Janet Bryant and Jeanette M. Van Emon. Janet Bryant has withdrawn from consideration, so the candidates will be Jeanette M. Van Emon and Richard V. Williams. (District ACS members will vote for one of the above candidates plus any petition candidates.)
  - o Directors-at-Large: Wayne E. Jones, Jr., Daniel Rabinovich, Carolyn Ribes, and Joseph P. Stoner. (Members will vote for two from the above candidates plus those selected via petition.)
    The above positions are for the 2024-2026 term. Ballots will be available by early October for the elections which will be held in the fall.

- Council's key actions on committee motions and reports:
  - o authorized Council Policy Committee (CPC) to review complaints of councilor conduct.
  - o the Committee on Local Section Activities (LSAC) launched the ACS Speaker Directory as a new resource for accessing speakers for local events.
  - o approved the Schedule of Membership (presented by Committee on Membership Affairs) including an important change in criteria for ACS emeritus status after a total of 35 (consecutive or not) years of paid membership upon retirement from full-time professional employment. There is no longer an age requirement.

For full text:
https://www.acs.org/content/dam/acsorg/about/governance/governance-cmt-mtgs-spring-2023/final-councilor-talking-points-spring-2023.pdf

(Continued from page 5)

it." His research group is exploring the feasibility of building batteries utilizing Iron, water, salt and organic materials which occur abundantly in nature. Use of these not only reduces pollution but also is cost effective and hence contributes to economic growth while providing sustainability and durability. He described how the energy of electrons can be harnessed to design electrochemically driven power generation from renewable energy sources. He cited examples of the use of Iron, benzoquinone, anthraquinone, DHDMBS (dihydroxy dimethylbenzene sulfonic acid) electrodes to generate rechargeable batteries by redox reactions. Iron/Iron sulfate/Anthraquinone disulfonic acid combination seems to be very promising.

Petition to Add International Representation on the Board of Directors

At the Fall 2023 ACS meeting, the Petition to Add International Representation on the Board of Directors will be on the agenda for discussion and action by Council. The petition is to replace one of the six Directors-at-Large by one International District Director elected by SOCIETY members residing outside of the United States and Canada who are not members of a Local Section. Here is the link to the petition. It can be found on Page 79:

https://www.acs.org/content/dam/acsorg/about/governance/governance-cmt-mtgs-spring-2023/council-agenda3-29-2023.pdf

If you have any comments, feel free to email the SCALACS office and your comments will be forwarded to the councilors.

Call for Nominations for Agnes Ann Green Distinguished Service Award

Nominations are now open for the Agnes Ann Green Distinguished Service Award. Each year the Southern California Section solicits nominations for an award to recognize outstanding service to the section. Nominees should have an outstanding record of major service to the Southern California Section, made one or more identifiable major contributions to the Section, or to the national ACS through work at the Section level, and preferably is or has been and officer of the section. More details on the award and how to nominate can be found at https://scalacs.org/?page_id=21. Nomination packages should be sent to office@scalacs.org by **May 31, 2023.**

SCALACS at the City of STEM Festival & LA Maker Faire

SCALACS had a booth at the City of STEM Festival & LA Maker Faire held at the Los Angeles State Historic Park on April 1. Approximately 22,000 visitors enjoyed the first combined LA Maker Faire and City of STEM event. We handed out over 400 Celebrating Chemistry magazines for both National Chemistry Week and Earth Week. Our activities included “Are you stronger than a cotton ball?” and "Bounce No Bounce Balls." These activities demonstrated how intermolecular forces can increase the strength of fibers and how materials can be designed to have different physical properties.

The ACS 27th Annual Green Chemistry & Engineering Conference June 13-15, 2023 Long Beach, CA & Hybrid

Theme: 'Closing the Loop: Chemistry for a Sustainable Future'

The ACS Green Chemistry Institute's Green Chemistry & Engineering Conference is the premier conference for scientists, students, and leaders seeking innovative and more sustainable ways to do chemistry and chemical engineering. The 27th Annual Green Chemistry & Engineering Conference will be a hybrid meeting held in-person in Hilton Long Beach Hotel in Long Beach, CA and streamed online for virtual participants.

This is a great opportunity for our Southern California Section members to attend this event in person for the best networking experience and to take part in the conference workshops and activities. If you can't travel, virtual access will allow you to participate in the robust technical program.

While a wide variety of green chemistry and engineering topics are covered in the technical program each year, the thematic focus on the stages of the chemical life cycle is intended to challenge the green chemistry and engineering communities to move toward a systems thinking approach that will help create a more sustainable future. Check out this year's program here: https://www.gcande.org/program/

Registration is now open at: **https://www.gcande.org/register/**

There are many categories of registration that include free admissions. Scholarships to attend the virtual GC&E Conference are also available. Find out more at: **https://www.gcande.org/register/**

BY

KEITH ORSO
Irell & Manella LLP
KOrso@irell.com

Picking up from where last month's column left off, who prevailed in the lawsuit between Feist and Rural over Feist's copying of Rural's telephone directory listings? Feist ultimately prevailed.

The Supreme Court began its opinion by describing the tension between two well-established propositions: (1) facts are not copyrightable; but (2) compilations of facts can be protected by copyright. Facts are not copyrightable because facts do not originate in an act of authorship. "The first person to find and report a particular fact has not created the fact; he or she has merely discovered its existence." Factual compilations, by contrast, can involve authorship insofar as the compiler may choose which facts to include and how to arrange them. Even then, however, copyright protection extends only to non-factual components of the compilation. "The primary objective of copyright is not to reward the labor of authors, but '[t]o promote the Progress of Science and useful Arts,'" the Court wrote. Accordingly, copyright does not protect the facts or information conveyed by the author. It protects only the author's original contributions.

The Court further explained that not all compilations of facts will be copyrightable. To merit copyright protection, a compilation of facts must be selected, coordinated, or arranged "in such a way" as to render the work as a whole original to the author. The Court stressed that the originality requirement "is not particularly stringent," but "[t]here remains a narrow category of works in which the creative spark is utterly lacking or so trivial as to be virtually non-existent."

Turning to the facts of the case, the Court acknowledged that there was no dispute between the parties that the telephone directory from which Feist copied, considered as a whole, was subject to a valid copyright, and that Feist copied from the directory a substantial amount of factual information. The question was whether Feist copied anything that was "original" (in the copyright sense) to Rural.

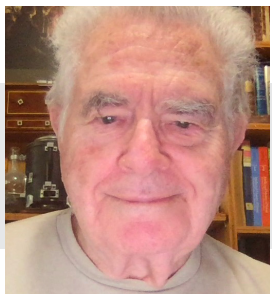
The Court concluded that the answer was "no." The raw data—the names, towns, and telephone numbers of more than a thousand of Rural's telephone subscribers—certainly did not satisfy the originality requirement. And Rural's selection, coordination, and arrangement of that raw data by selecting all subscribers and listing them alphabetically (as "is practically inevitable") did not satisfy the originality requirement either. Because Rural's white pages lacked originality under the copyright statute, Feist's use of the listings could not constitute copyright infringement.

The author earned engineering and chemical engineering undergraduate and graduate degrees, and is a patent attorney and partner at the law firm of Irell & Manella LLP. This column does not constitute legal advice and does not necessarily reflect the views of the firm or its clients.

THIS MONTH IN CHEMICAL HISTORY

BY

HAROLD GOLDWHITE
California State University, Los Angeles
hgoldwh@calstatela.edu



What were the hot topics in organic chemistry 90 years ago as seen through the "Annual Reports of the Progress of Chemistry" published in London by The Chemical Society? (The report for 1933 is Volume XXX, the series having started in 1903.)

The subject is so large that it is subdivided into aliphatic, homocyclic, and heterocyclic sections. The polymerization of acetylene yields vinyl and divinylacetylene. Reaction between sodium or sodamide and vinylacetylene gives the sodium derivative of the latter as a reactive solid that can be used to introduce the vinylacetylenic group into other organic compounds. Halogen substituted alkynes have been investigated. Sodium acetylide prepared in liquid ammonia reacts with iodine to give a quantitative yield of di-iodoacetylene. Chloro- and bromo-vinylacetylenes, CH_2:CHCCX are prepared as distillable liquids by direct reaction of the halogen with bis-(vinylethynyl)mercury.

Catalytic hydrogenation, a relatively new technique, has been refined with respect to its specificity, selectivity, and reaction conditions. Cleavage of many oxygenated compounds by hydrogenolysis has been observed when a copper-chromium oxide catalyst is used at fairly high temperatures (120° – 250°C) and high pressures of hydrogen (140 – 210 atm).

Oximes and some nitriles can be reduced to amines by hydrogenation in presence of a palladium catalyst. Reaction rate studies of substituted alkenes with hydrogen in presence of a nickel catalyst show the order mono-substituted > disubstituted > trisubstituted > tetrasubstituted.

Karrer, Kuhn, and their collaborators have published much further work on the polyene pigments known collectively as carotenoids that are found in many plant and animal sources. In most of these materials there is a conjugated C_{20} fragment that is made up of two isoprene dimers linked by a double bond. Recall – this is 1933. No infrared; no magnetic resonance; no crystal structures of these materials. The elucidation of structure proceeded by ultraviolet-visible spectral measurements; and C,H and molar mass determinations of starting materials, degradation products, and derivatives. The work and the insights of 19th and early 20th Century natural products chemists are a continual source of wonder to me. My own doctoral and post-doctoral work were on small molecules, and I didn't get my hands on an NMR instrument until my second faculty appointment. That was in 1962 at Cal State, Los Angeles; it was a Varian A60 – hydrogen spectra only and initially only at room temperature. The variable temperature probe came a couple of years later.

In similar vein, Kuhn has derived a formula for bixin, the pigment of the food colorant annatto, and crocetin, the saffron pigment. Karrer has explored the xanthophylls, colorants in plants – and egg yolks. Plant pigment research flourished in this period with structure proposals for azafrin from azafran root – a Mexican plant with a yellow root sometimes used as a saffron substitute; for flavoxanthin, from ranunculus plants; and for rhodoxanthin, a blue-black pigment from yew fruits.

Turning to simpler systems, new studies have clarified structures of peroxide oxidation products of carbonyl compounds. Acetaldehyde reacting with hydrogen peroxide produces a

(Continued on page 11)

Call for Nominations for Paul Shin Memorial High School Teacher of the Year Award

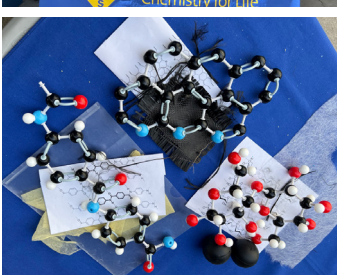
If you know of a local high school chemistry teacher who is making a difference, please make the effort to show how important his/her work is to you and the students. Self-nominations from those who feel they fit the requirements are accepted as well. It's teachers like the recipients of this award who make learning chemistry rewarding.

Plus, there is a financial component of $500. The $500 will be an unrestricted award directly to the teacher. The winner of the Section Award will also be entered at the National ACS level for the Western Regional High School Teacher of the Year Award and the James Conant Bryant Award. Having won a previous award does not necessarily exclude a nominee; however, the nomination would need to be based on different criteria than the first award.

Nomination Package should include: Biographical sketch of nominee with date of birth, list of any publications, statement (no more than 1,000 words) of nominee's achievements as a high school chemistry teacher including quality of teaching, effective methods, nominee's ability to challenge and inspire students, extracurricular work (science fairs, clubs, etc.). Seconding letters are not essential, but up to five may be included. Nominating documents should be submitted via email to office@scalacs.org. Note that signed documents that have been scanned are acceptable.

The deadline for nominations is **November 15th, 2023.** Please feel free to contact Michael Morgan of the Educational Affairs Committee at mmorgan@lausd.net if you have any questions.

SCALACS Outreach at the Pasadena Unified School District (PUSD) 2023 Science Fest



SCALACS also did outreach at the Pasadena Unified School District (PUSD) Science Fest 2023. This event was held at John Muir High School Early College Magnet on Earth Day, April 22. We handed out over 100 Celebrating Chemistry magazines for both National Chemistry Week and Earth Week. Our activities included the "Bounce No Bounce Balls" and sample fabrics with chemical models built. These activities demonstrated how materials can be designed to have different physical properties. We also had UV sensitive beads that children used to make bracelets out of. Children were very excited by the change of color!

(Continued from page 10)

polymeric peroxide $(-CH_3CHOO-)_n$ and similar polymers are formed from a variety of aldehydes and ketones. Reaction between acetaldehyde and oxygen gives per-acetic acid. The work of Szent-Györgi has produced a definitive structure for ascorbic acid, now known familiarly as Vitamin C. While the efficacy of citrus fruits in preventing scurvy had been known since the 18th Century the effective agent had not been isolated until the 20th Century. And now (in 1933) its structure has finally been established.

AUTHOR'S NOTE: I have recently published "Great Chemistry Books: A Personal View," available in paperback from Amazon. It is the second volume in my series "Chemical Sketches." The first volume, "A Chemical Chrestomathy: Chemists" is still available from the same source.

CHAIR'S MESSAGE

Hello!

Thank you to everyone who attended our Chemists Celebrate Earth Week event at California Baptist University last month! During the event, we had an exciting lecture from Elizabeth Hann, Botany and Plant Sciences Ph.D. candidate from UC Riverside, on this year's theme, 'The Curious Chemistry of Amazing Algae.' It was wonderful to connect with attendees during the lunch sponsored by the San Gorgonio Section afterward as well. Thank you to the members of the Environment Improvement Committee and our event speaker, Elizabeth!

Are you a member, officer, or advisor for a chemistry club at a local university or college? We want to connect with you! Our Younger Chemists Committee, chaired by Olivia Taylor, is compiling a list of contact info for all chemistry, STEM, ACS, etc. clubs in the area so we can coordinate for large group events. As a former chem club advisor, I know it can be hard to get students to show up to events on your campus. We want to bring together all of the local clubs for large group events that can bring connection to the chemistry students in our Section. Please email me with the contact info for your club!

Our Younger Chemists Committee has planned a **bowling mixer for STEM clubs at local colleges and universities** for **Saturday, May 6 at 5 pm in Riverside at Arlington Lanes**. The event is totally free for all attendees and includes dinner and bowling. We hope to see many of our local undergrad and grad students represented at this event!

We administered the **ACS Chemistry Olympiad Local Section and National Exams** for high school chemistry students in the area during March and April. During the Local Exam, the Section had 112 students from 12 local high school participate! Congratulations to the top-scoring students (and their teachers) from each school!

SAN GORGONIO SECTION

TOP SCORING STUDENTS

On April 22, ten students participated in the Chemistry Olympiad National Exam at CSU San Bernardino. These students were the top-scoring students overall for our Section during the Local Exam.

Zhehan (Garry) Zhang	Webb Schools
Fernan Coo	Redlands
Yuxi (Jack) Zhu	Diamond Bar
Lucas He	Walnut
Jake Li	Troy
Najm Hoda	Etiwanda
Annie Hu	Great Oak
William Havercroft	Riverside STEM
Brandon Xu	Ayala
Aubrey Allen	Santiago
Sean Perry Sahagun	Rancho Cucamonga
Xinyl (Cassidy) Yao	Rowland
Yuyin Huang	Chino Hills

NATIONAL EXAM PARTICIPANTS

In May, we will recognize the top-scoring students and their teachers during a banquet. Some students will be awarded college scholarships from the Section as well. Thank you to Dennis Pederson, Ph.D., and Eileen DiMauro for their tireless efforts to coordinate these Olympiad Exams! Thank you to the members of the Chemistry Olympiad Committee, especially Joyce Pham, Maritess Oda, and the CSU San Bernardino Chemistry Club, for your help with mailing out test materials, proctoring exams, grading exams, and more.

Fernan Coo	Redlands
Yuxi (Jack) Zhu	Diamond Bar
Lucas He	Walnut
Surya Donath	Walnut
Xinyi Cui	Diamond Bar
Najm Hoda	Etiwanda
Annie Hu	Great Oak
William Havercroft	Riverside STEM
Sienna Hernandez	Etiwanda
Ann Vu	Riverside STEM

The San Gorgonio Section is now on LinkedIn! Connect with us on LinkedIn (https://www.linkedin.com/company/american-chemical-society-san-gorgonio-section/), follow us on Instagram (@SanGorgonioACS), and bookmark our webpage (https://www.sangorgonioacs.com/) to stay up-to-date on the latest with the Section.

If you would like to volunteer for one of our committees, please fill out the form at https://forms.gle/26CZmwuWP1qjMWbc6. If you would like to become a financial partner of the Section, you can email me at jnalbandian@calbaptist.edu. We use donations from our members for funding student scholarships, Project SEED research for high school students, outreach events, and more!

Feel free to email me if you have any questions or suggestions for the Section. Have a great month!

Dr. Jenifer N. Nalbandian
Chair of the San Gorgonio Local Section
jnalbandian@calbaptist.edu

SOUTHERN CALIFORNIA SECTION
AMERICAN CHEMICAL SOCIETY
2700 East Foothill Blvd #209
Pasadena, CA 91107

IMPORTANT
Do Not Delay!

Contains Dated Meeting Announcement

PERIODICALS

Bi-Section ACS Calendar

MAY

6 San Gorgonio's Younger Chemists Committee STEM Clubs Mixer — see page 12

11 SCALACS 2023 High School Olympiad Awards Ceremony — see page 3

31 Deadline for Nominations for Agnes Ann Green Distinguished Service Award — see page 7

JUNE

13-15 ACS 27th Annual Green Chemistry & Engineering Conference, CA — see page 8

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SCALACS

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For more information or to find events, please see our websites: www.scalacs.org • www.sangorgonioacs.com

THE NEXT ISSUE OF SCALACS WILL BE IN SEPTEMBER