

# SCALACS

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

VOLUME LXXVII/No. 3

APRIL 2022

# SOUTHERN CALIFORNIA Section



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"Imagination Is Your Only Limitation: Join Me On My Stem Journey!" by Urvashi Saxena, Software Engineer, Collins Aerospace Saturday, April 23 • 1:00 - 2:00 pm PT

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Volume LXXVII

#### APRIL 2022

#### Number 3

SOUTHERN CALIFORNIA SECTION 2022 OFFICERS

> Chair: Thomas Mathew

> > Chair-Elect: Edye Udell

Secretary/Treasurer: Barbara Belmont

Councilors: Brian Brady, Robert de Groot, Veronica Jaramillo, Alex Oxyzolou, Eleanor Siebert, Barbara Sitzman

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Councilors: Eileen DiMauro, Emily Viggers, Ana Bahamonde, Jessy Lemieux

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"A person who never made a mistake never tried anything new." – Albert Einstein

CHAIR'S MESSAGE



Dear SCALACS Members,

Great to see that all our spring activities are going well with more vigor and wholehearted participation albeit still facing the COVID challenge in its variant forms. Thanks to all volunteers for sincere cooperation and support in making every program most successful.

I am glad to announce that Professor Donald R. Blake, University of California Irvine has been selected as the winner of Tolman Award for the Year 2021 (see page 3). Professor Blake is a great chemist and an outstanding scientist, with exceptional scientific contributions in Analytical and Atmospheric Chemistry. His pioneering work over the years in the field not only helped to improve our fundamental knowledge of atmospheric composition and its impacts on air pollution and climate change but also functioned as a catalyst for global efforts in finding ways to mitigate adverse impacts. Congratulations!

April brings Chemists Celebrate Earth Week nationwide with the theme "The Buzz About Bugs: Insect Chemistry." We begin our celebration this year by participating with our booth at "The City of STEM Kickoff Festival" on Saturday, April 2, from 10:00 a.m. - 4:00 p.m. at Columbia Memorial Space Center, Downey, CA. We will conduct a CCEW Illustrated Poem Contest (see page 5) to conclude this year's celebration. Ms. Urvashi Saxena, Collins Aerospace, has kindly agreed to give a virtual seminar titled "Imagination is your only Limitation: Join me on my STEM Journey!" on Saturday, April 23 at 1:00 p.m. (see page 9). Thanks to Dr. Veronica Jaramillo and Dr. Krishna Kallury for spearheading these programs. Let us all join to celebrate the Earth Week with the pledge to partake in efforts to ensure the safety and stability of our habitat.

I am very grateful to Professor Arieh Warshel and Professor Jenny Y. Yang for giving very fascinating and stimulating talks in March. They were highly motivational for our students and teachers. Thanks to SCALACS Senior Chemists Committee and Women Chemists Committee for all their efforts. Please see the following pages in this Newsletter or our website www.scalacs.org for upcoming events in the month of April.

With best wishes, **Thomas Mathew** Chair, SCALACS (tmathew@usc.edu)

# **Environmental Affairs Committee**

The Environmental Affairs committee is inviting new members to join! All students, postdocs, professionals interested in environmental and planetary chemistry are welcome. Our goals this year will be:

- 1) To organize activities to enrich expertise and create connections within the Environmental / Planetary chemistry community in Southern California.
- 2) To increase diversity and inclusion of the field, and provide opportunities for students and early career members.

Anyone interested in joining the Environmental Affairs committee, please email Laurie Barge (laura.m.barge@jpl.nasa.gov) with "SCALACS Environmental Affairs Committee" in the subject line. We will coordinate a time for our first meeting with those whose emails we have received by Friday, April 8.

# **High School Chemistry Olympiad**



The High School Chemistry Olympiad has returned to inperson testing. This year we had 663 students representing 25 schools. Testings took place on March 16 & 17 and the top 15 students will be invited to take the National Exam on April 30 at Cal State Dominguez Hills.

Thank you to Barbara Belmont and our new Management Group for their assistance, the schools that volunteered to host students from schools that had fewer than 10 participating, and Michael Morgan for handling the schools in the southwest side of our section. We'll announce the top scorers in the next issue.

# **Senior Chemists Committee**

Be sure to join us for these two great virtual seminars:

"Imagination is Your Only Limitation: Join Me on My STEM Journey!"

Presented by Urvashi Saxena

April 23, 2022 • 1:00 - 2:00 p.m.

This event is made possible under the SCALACS DEIR Local Section Activities Committee (LSAC) grant.

"Promoting DEIR While Encouraging Students to Study STEM/STEAM Subjects"

(working title)

Presented by Pamela Leggett-Robinson

#### May 17, 2022 • 4:00 - 5:00 p.m.

This event is presented through the DEIR grant from Senior Chemists Committee awarded through the Analytical Chemistry Division of ACS.

# Announcing the 2021 Richard C. Tolman Award Recipient

Professor Donald R. Blake Department of Chemistry University of California, Irvine is the 2021 Tolman Award recipient!

# Congratulations, Professor Blake!



We will honor Professor Blake at the Richard C. Tolman Award Dinner in June. Look for more information in our next issue.

### 2021 Richard C. Tolman Award Recipient: Professor Donald R. Blake Department of Chemistry, University of California, Irvine



**The Award:** The Richard C. Tolman Medal is awarded each year by the Southern California Section of the American Chemical Society in recognition of outstanding contributions to chemistry in Southern California. The Tolman Medal recognizes broad accomplishments in chemistry rather than a single fundamental discovery. These contributions may be of several kinds, including seminal research of widely regarded influence, achievements of broad impact in chemical technology, significant contributions to chemical education, and outstanding leadership in science on a national level. To be eligible for the Medal, the recipient must have accomplished a major portion of his or her work while a resident of Southern California.

### 2021 Richard C. Tolman Award Recipient: Professor Donald R. Blake University of California, Irvine

### Tolman Address: **"From Methane To Methane: Forty Years Of Research And Insight Into One Of The Most Important Greenhouse Gases**"

Time and Date will be anounced in the May issue.

Abstract: Methane is the second-most important anthropogenic greenhouse gas after carbon dioxide. Methane's levels in the atmosphere are higher than at any time in the past 800,000 years, and they have almost tripled since the industrial revolution. The measurements I took in the 1970s as a graduate student were among the first to observe methane's year-on-year increases, showing that further and systematic global monitoring was required. My group has now collected more than 40 years of methane measurements, which represents the longest observational record of global atmospheric methane levels. Over this time my group has also investigated major sources of methane, including dairies, oil and gas, and landfills. Together with colleagues, we estimated methane emissions from the Aliso Canyon natural gas blowout in Los Angeles, and found that, at its peak, the blowout effectively doubled the methane release rate from the entire Los Angeles basin. My group has also assessed methane emissions from landfills before and after the implementation of mitigation strategies. We found that daily methane emissions decreased by a factor of two at a landfill in Louisiana after the mitigation strategies were implemented. This research demonstrated the effectiveness of methane reduction measures in landfills once emission hotspots were located. In this presentation I will discuss my group's pioneering methane research since the 1970s, including insights into straightforward strategies to improve landfill infrastructure in order to reduce methane emissions to the atmosphere.

**Biography:** Donald R. Blake was raised in California and served in the US Navy from 1971 to 1974. He received his BS in Chemistry from UCLA in 1978 and his PhD in Chemistry from UCI in 1984. During his graduate studies he was mentored by F. Sherwood Rowland, who received the 1995 Nobel Prize in Chemistry for co-discovering that chlorofluorocarbons deplete stratospheric ozone. Professor

Continue on Page 13.



SCALACS

# THE BUZZ ABOUT BUGS:

🖌 insect chemistry 🛲 🕬



**Professor Molenium** 

# 2022 CCEW Illustrated Poem Contest

Theme: The Buzz About Bugs - Insect Chemistry

As part of CCEW 2022, students from grades K-12 were invited to share their interpretation of this year's theme, "The Buzz About Bugs: Insect Chemistry, in the form of illustrated poems. To enter this illustrated poem contest, students must submit their illustrated poems directly to our local section by Sunday, April 24 at 8:59 p.m. Pacific Time.

**Eligibility:** K-12th grade students sponsored by a local school or community group (for verification purposes).

### Deadline: April 24, 2022 at 8:59 p.m. Pacific Time Rules & Submission: https://bit.ly/CCEWpoems

Local Section: Southern California

**Prizes:** Best in each grade category (K-2nd, 3rd-5th, 6th-8th, 9th-12th) will be awarded Professor Molenium! Winners at the local section level are qualified for the national contest (national awards are \$300 for first place and \$150 for second place). Poems must be:

- · original work without aid or clipart
- less than 40 words and easy to read
- in one of the following styles: Haiku, Limerick, Ode, ABC poem, Free verse, End rhyme, and Blank verse.

#### Judging Criteria:

- Incorporation of theme
- Word choice and imagery
- Adherence to poem style
- · Creativity and use of color
- Overall presentation

If illustrated poem is digital, include **name** of program on the entry form.

Illustrated poems become the property of ACS. Acceptance constitutes consent to use winners' names, likenesses and entries for editorial, advertising and publicity purposes.

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A Virtual Seminar Presented by:

Professor Jenny Y. Yang, Chancellor's Professor, Department of Chemistry, University of California Irvine

Event was held on March 17 via Zoom

Recording is now available on our website: www.scalacs.org



The **City of STEM Kickoff Festival** is on **Saturday, April 2** from **10:00 a.m. - 4:00 p.m.** It will be held at Columbia Memorial Space Center, 12400 Columbia Way, Downey, CA.

We will have a SCALACS table at the City of STEM Kickoff Festival. We are looking for volunteers to help at the table that day. Please email Veronica Jaramillo (vijaramillo@pasadena.edu) if you are interested in volunteering.

The month-long City of STEM Celebration kicks off with a huge festival at the Columbia Memorial Space Center. The day will include interactive booths from their STEM partners, mobile museums, live musical performances, fascinating panel discussions, food trucks and so much more!

CITY OF STEN

Come and see us at our Booth during the Kickoff festival. Here is a link to the overall event details: https://cityofstem.org/calendar/2022/4/2/city-of-stem-kickoff-festival

# **SCALACS Elected Governance for 2022**

#### **Elected Officers**

2022 Chair: Thomas Mathew

2022 Chair-Elect Cycle: Edye Udell (Will serve as Chair in 2023)

2022 Secretary/Treasurer: Barbara Belmont

#### **Councilors, Re-elected**

Eleanor Siebert, 2022 – 2024 Robert de Groot, 2022 – 2024

#### Alternate Councilors, Elected

Barbara Belmont, Jan. 2022 – Dec. 2024 Michael Morgan, Jan. 2022 – Dec. 2024

#### **Executive Committee Members at Large, Elected**

Laxman Gurung, Jan. 2022 – Dec. 2024 Katherine Van Heuvelen, Jan. 2022 – Dec. 2024 Jake Rosener, Jan. 2022 – Dec. 2024

#### **Continuing Councilors**

#### **Continuing Alternate Councilors**

Barbara Sitzman (Jan. 2020 – Dec. 2022) Veronica Jaramillo(Jan. 2020 – Dec. 2022) Brian Brady (Jan. 2021 – Dec. 2023) Alexandros Oxyzolou (Jan. 2021 – Dec. 2023) Sofia Pappatheodorou (Jan. 2020 – Dec. 2022) Krishna Kallury (Jan. 2020 – Dec. 2022) Gerald Delker (Jan. 2021 – Dec. 2023) Miklos Czaun (Jan. 2021 – Dec. 2023)

#### **Continuing Executive Committee Members at Large**

Edye Udell (Jan. 2020 – Dec. 2022) Derek Marin (Jan. 2020 – Dec. 2022) Alexandra Aloia (Jan.2020 – Dec. 2022) Laurie Barge (Jan. 2021 – Dec. 2023) Inessa Bychinskaya (Jan. 2021 – Dec. 2023) Richard Kidd (May. 2021 – Dec. 2023)

Election Date: February 5 - March 5, 2022. Election Vendor: ElectionBuddy.com Submitted by and certified by Barbara Belmont, SCALACS Secretary/Treasurer

### SENIOR CHEMISTS COMMITTEE Chemist Virtual Seminar Recap

# From Kibbutz Fishponds to The Nobel Prize: Taking Molecular Functions into Cyberspace

### presented by Nobel Laureate Dr. Arieh Warshel



Comments from Mount Saint Mary's University students:

The SCALACS talk by Dr. Warshel was highly inspirational, emphasizing how extensive and critical research is especially in fields such as computational chemistry. In pursuing higher forms of education such as graduate school, such research and the sense of fulfillment in investigating complex theories can be further established. Despite many concepts being unknown to us, further investigation, studying, and understanding may lead us to finding new and significant results which may benefit industries and our society. Thus, in knowing of Dr. Warshel's humble background and astounding accomplishments, students such as myself are further motivated to pursue research and higher education as we may create a larger impact on the world through this research.

It was interesting how he used his upbringing findings and different aspects he learned in different researches he used in his graduated career. He expanded his knowledge of computation chemistry and the way it adapts now in the present we use his knowledge for future experiments and it leads to medical clinical research to adapt to it.

I found it really inspiring that he was able to go to graduate school even though his formal schooling wasn't very competitive or built to encourage higher education. It shows how personal curiosity, desire, and drive are major factors in attending college and graduate school. I really enjoyed the talk yesterday especially because I got to hear about someone's process in pursuing something he is passionate about. Because of our research and what we have learned. I was able to understand some of the methods he used in his research like computational work, classical mechanics, and quantum mechanics. It was motivating and allowed me to see from a different perspective on how I can use what I have learned so far and how I can expand my knowledge in chemistry or other areas of science and math.

Recording of this event is available on our website: https://scalacs.org/?page\_id=29

SENIOR CHEMISTS COMMITTEE Chemist Virtual Seminar

# Imagination is Your Only Limitation: Join Me on My STEM Journey!

presented by

Urvashi Saxena

Software Engineer at Collins Aerospace

## Sat., April 23 • 1:00 - 2:00 p.m. PT Register at www.scalacs.org



Be sure to join us for this very interesting and informational virtual seminar presented under the SCALACS DEIR Local Section Activities Committee (LSAC) grant. Hear from **Ms. Urvashi Saxena**, a Software Engineer at Collins Aerospace, about the connection between aerospace engineering and related scientific/computer programming technologies and STEM education and how the underrepresented communities and female students will benefit from STEM subjects.

Urvashi Saxena has been recognized with the Women's Advocate Award for consistently organizing and introducing young women to STEM. Urvashi is an eager STEM enthusiast who values problem-solving, consistency, and excellence. She believes in the power of coding to design innovative solutions with unmatchable customer service to deliver the end product.

At Collins Aerospace, Urvashi gets to operate flight simulators and design the software within. She was first introduced to programming at the young age of 10 and was mesmerized by the instant results. One of the most formative coding courses she took was during her middle school at The Bishop's Co-Ed School, Pune, India, where she created her first HTML website. Having full autonomy over designing the layout, colors, and architecture through coding gave her a new meaning of life.

Urvashi's desire for front-end development made her pursue a Bachelor of Science in Computer Science at Florida Institute of Technology, Melbourne, FL. She later pursued a Masters of Science in Data Analytics at George Mason University, Fairfax, VA. Her interests are Software Engineering, Customer Experience, Product Designing, and Data Analytics.

STEM has had a positive impact on her life and she aims to share her knowledge and enthusiasm for engineering to educate the younger generation. She will share about the different STEM disciplines and the impact they have on the world of future Scientists and Engineers.

Urvashi has been able to host Engineering events for middle/high school girls for the past 6+ years. She introduces the multiple facets of Science, Technology, Engineering, Art, and Math to encourage young adults to pursue a fulfilling career!

# INSIGHTS INTO IP LAW

#### ΒY

### KEITH ORSO Irell & Manella LLP KOrso@irell.com

Continuing a foray into copyright law, as requested by a reader, an important principle in copyright law is embodied in a section of the statute titled "Subject matter of copyright: In general." That section describes not only what copyright protects, but also what it does not protect: "In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work." This is known as the "idea/expression dichotomy." Copyright protects the expression of ideas, not the ideas themselves.

The idea/expression dichotomy is grounded in the primary objective of copyright, which, as one court has explained, is not to reward the labor of authors, but rather to promote the progress of science and the useful arts as set forth in the Constitution. By not protecting ideas, copyright encourages others to use and build freely upon the ideas and information they find in copyrighted works. It also promotes freedom of speech under the First Amendment.

In an old, landmark decision relating to the idea/expression dichotomy, the Supreme



Court considered the extent of copyright protection for a book that described a system of bookkeeping. The Court held that although the book's expression of the art of bookkeeping was protected, the art itself was not protected. The Court wrote:

The description of the art in a book, though entitled to the benefit of copyright, lays no foundation for an exclusive claim to the art itself. The object of the one is explanation; the object of the other is use. The former may be secured by copyright. The latter can only be secured, if it can be secured at all, by letters-patent.

Patents can cover practical applications of ideas. Copyrights cover expressions of those ideas.

More recently, a famous "hot yoga" instructor sued two former students who offered hot yoga classes that allegedly copied the sequence of 26 postures and two breathing exercises that the instructor described in his copyrighted book and that he used in his own classes. Citing the idea/expression dichotomy, the court ruled that copyright protection for the book does not extend to the postures and breathing exercises described inside of it.

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

#### ΒY

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



In this month's column, I will continue to look back a century and examine what was new in the chemical world in 1922. I will be scanning the pages of the "Annual Reports of the Progress of Chemistry for 1922" issued by The Chemical Society of London (now the Royal Society of Chemistry) in 1923. This is the 19th volume of this valuable series.

I start with inorganic chemistry. Many of us have a one-shot view of the achievements of Bohr in the realm of atomic theory – the Bohr hydrogen atom model. We overlook the industrious and insightful way in which Bohr's approach to the electronic theory of atoms was extended over many years. In 1922 he published on a dynamic theory of heavier elements including noncircular eccentric orbits for some outer electrons that consequently cannot be assigned to a single energy level. He asserts that his refined theory accounts for paramagnetism, colored compounds, and complex spectra, and calls on recent X-ray spectral measurements to support his new approach.

Controversial, in retrospect, are those reports of the intensity of reflections of X-rays from sodium chloride crystals by William Bragg and his associates that indicate counting from the nucleus outwards, shells of 7 and 3 electrons in the sodium ion, and 10, 5, and 3 electrons in the chloride ion. These numbers agree with Bohr's new ideas but completely disagree with the predictions of the L-L (Lewis-Langmuir) theory, since the Bragg interpretation sees no octets of electrons.

Meanwhile Oliver Lodge urges consideration of the possibility that chemical bonding might be more accurately explained not by considering electrical forces but rather by the "interlacing of the stationary magnetic fields which must accompany rapidly revolving electrons." The debate rages on.

In more mundane but essential work, the atomic weight of what was then called glucinum – our beryllium – was re-determined by the analysis of purified glucinum dichloride and precipitation and weighing of the chloride as silver chloride. A new atomic weight of 9.018 was calculated,

lower than the 9.1 accepted at the time. The currently accepted value is 9.0122, so they pretty well nailed it in 1922. Boron is an element for which the mixture of isotopes can vary considerably depending on the source. The modern value of its atomic weight is usually given as 10.811 – with the caveat already stated. In 1922 determinations based on highly purified samples of boron trichloride and tribromide which then gave silver halides led to a value of 10.83, which was considered more reliable than an earlier value of 10.90.

One of my favorite reports in this section is on the work of H.B. Baker, a respected physical chemist and former President of The Chemical Society, on the subject of "intensive drying". Baker reported that by sealing liquids for extended periods (up to many years in most cases) in contact with the drying agent phosphorus pentoxide their physical properties changed markedly. Bromine dried for 8 years had its boiling point raised by 55 degrees! Ether dried for 9 years now boiled at 83 degrees rather than 35 degrees! After this tantalizing glimpse into an unusual facet of chemistry perhaps you'll be tempted to read a fuller account in "Intensive Drying: Anomaly and the Chemical Community" by Harold Goldwhite, Journal of Chemical Education, 1987, 64, 657. (Now you see why it's a favorite of mine.)

I close with a discussion of the activation of gaseous chlorine by light, a controversial subject at the time. Chlorine was illuminated by various light sources and then mixed with hydrogen while illuminated further. Immediate reaction took place. However chlorine exposed to an intense light source or to an electric discharge and then mixed with hydrogen in the dark as rapidly as in 0.01 seconds did not undergo reaction. The authors ruled out the intermediacy of triatomic chlorine in this process.

I still have organic chemistry, analytical chemistry, biochemistry, mineralogy, and radioactivity to go. Look for further columns on chemistry in 1922.

# SAN GORGONIO SECTION



# CHAIR'S MESSAGE



Hello!

This is an exciting time for the San Gorgonio Section as we begin to have more events once again! This year, we will have a mix of virtual, hybrid, and in-person events. I hope to see you at some of these events throughout the year, regardless of the format.

The Section recently held the local exam for the 2022 U.S. National Chemistry Olympiad (USNCO). Based on the local exam results, we will nominate the top ten students to represent the San Gorgonio Section in the National Chemistry Olympiad exam later this month. Some of these students will also be selected to receive college scholarships of up to \$1200. We are so proud of the young chemists that are representing the San Gorgonio Section! Thank you to Dr. Dennis Pederson and Eileen DiMauro for their work in coordinating the Chemistry Olympiad exams for our Section!

### Women Chemists Committee (WCC) Saturday, April 9 at 9:00 a.m.

Our first meeting of the Women Chemists Committee (WCC) will be on Saturday, April 9 at 9:00 a.m. (Zoom link: https://ucr.zoom.us/my/ womenchem). This virtual meeting will involve a roundtable discussion featuring several chemists in careers beyond academia or medicine. Join us to hear from:

- Graciela Torres: Vice President, Board of Directors at Western Municipal Water District
- Karen A. Bailey: Process TD Engineer at Intel Corporation
- Pilar Calleja: Associate Editor, Angewandte Chemie
- Sadie C. Otte: Organic Chemistry Laboratory Coordinator at W. M. Keck Science Department

There is no cost to attend this event that is open to everyone, especially undergraduate and graduate students. Attendees will have the opportunity to network with the invited speakers in breakout rooms during the event. Please spread the word to anyone who might be interested in attending this virtual WCC event.

### **Environmental Improvement Committee**

### Chemists Celebrate Earth Week Event Saturday, April 23 at 10 a.m. UC Riverside

Our Environmental Improvement Committee is hosting an event for Chemists Celebrate Earth Week. The FREE in-person event will be held at UC Riverside on Saturday, April 23 from 10:00 a.m. to 1:00 p.m. This family-friendly event will feature demos, activities, and giveaways. We hope to see you there!

If you are interested in helping out with one or more of our committees, please fill out the form at https://forms.gle/swTa7XWpLYAb7GD96, where you can include information about your preferred availability. Thank you to everyone who has already volunteered and helped on a committee so far this year.

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

Continue from Page 4.

### 2021 Richard C. Tolman Award Recipient: Professor Donald R. Blake, University of California, Irvine

Blake joined the UCI faculty in 1985 and has led or co-led the Rowland-Blake group since 1998. His research focuses on atmospheric trace gases that contribute to climate change, stratospheric ozone depletion, and urban air pollution. His group has monitored global trace gas levels since the 1970s and has participated in regional NASA airborne missions since the 1990s, in which instrumented research aircraft survey atmospheric pollution in different locations. His group also regularly studies air quality in cities around the world, with the aim of identifying specific emission sources that contribute to poor air quality. Professor Blake has received numerous research and teaching awards, including the American Chemical Society Award for Creative Advances in Environmental Science and Technology (2013) and the California Air Resources Board Haagen-Smit Clean Air Award (2014). He has published more than 600 research papers and is a Fellow of the American Association for the Advancement of Science (2008) and the American Geophysical Union (2009). He is currently a Distinguished Professor at UCI.

#### 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 Chemists' Calendar**

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9 San Gorgonio Women Chemists' Committee Meeting — see page 12
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#### 17-23 Chemists Celebrate Earth Week

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23 SCALACS Virtual Seminar "Imagination is Your Only Limitation: Join Me on My STEM Journey!" by Urvashi Saxena from Collins Aerospace – see page 9
24 SCALACS CCEW Poem Contest Deadline — see page 5

#### MAY

**17** SCALACS Virtual Seminar "Promoting DEIR while encouraging students to study STEM/STEAM subjects" (working title) by Pamela Leggett-Robinson — see page 2

#### JUNE

Richard C. Tolman Award Dinner — see pages 3, 4 & 13

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