

## **SCALACS**

October 2021

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

### Southern California Section



Congratulations to ACS member Veronica I. Jaramillo for being inducted into the American Chemical Society Fellows Class of 2021 during the Fall National ACS Meeting.

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Senior Chemists Committee Meeting Saturday, October 9, 2021

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National Chemistry Week Celebration "Fast or Slow . . . Chemistry Makes It Go!"

October 17-23, 2021

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and

**College and University Chemistry Clubs** 

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## **SCALACS**

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

Volume LXXVI October 2021 Number 6

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#### Southern California Section



## Chair's Message

Dear Members of the ACS Southern California Section,

We have a series of virtual meetings planned during the month of October. Our Senior Chemists' Planning meeting will be held on October 9. Another important event is the National Chemistry Week celebration. During the National Chemistry Week, talks on different topics in chemistry relat-

ed to the National Chemistry Week theme will be delivered by eminent scientists. Please see Page 3 and our website for the details of these events.

Ballots for the election of members-at-large and section officers with candidate statements will be sent out this month. Please cast your vote and support the section through the ballot. Thanks to Mr. Michael Morgan, Ms. Barbara Belmont, and SCALACS office staff for all the arrangements. Also, I really appreciate all the volunteers, who are nominated to be candidates, for their willingness to serve the Section.

Thank you all for your continued support.

With Best Regards, **Thomas Mathew**Chair, SCALACS (tmathew@usc.edu)

#### Congratulations to Veronica I. Jaramillo



**Veronica I. Jaramillo** was inducted into the **American Chemical Society Fellows Class of 2021** at a hybrid ceremony during the Fall National ACS Meeting this past August. Veronica, an ACS member since 1997, has been involved with our local section leadership for over a decade in many capacities – from committee chair to Chair – and currently serves as Councilor. For her sustained service to our local section, in particular for her innovative and successful outreach programs, Veronica received our **2019 Agnes Ann Green Distinguished Service Award.** 

Since 2017, Veronica has served as a member of the ACS National Committee on Community Activities (CCA) and focused her efforts as part of the Volunteer Engagement and Recognition Subcommittee (VER). Last year she was appointed co-chair of the VER subcommittee, where she has led the charge in developing evaluation rubrics for the ChemLuminary Awards, Salutes to Excellence, and clarifying National Volunteer of the Year criteria and expansion. Through the CCA, she has volunteered at the ACS Kids Zone, a Presidential Outreach event held before the national meetings. She is currently part of the theme planning committees for National Chemistry Week 2021, and is co-chair for the Chemists Celebrate Earth Week 2022 *Celebrating Chemistry* development.

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#### Southern California Section

#### NATIONAL CHEMISTRY WEEK CELEBRATION

Theme: "Fast or Slow ... Chemistry Makes It Go!"

This year we are celebrating the National Chemistry Week with four Virtual Talks that are accessible to everyone on Zoom. Please RSVP using the EventBrite link provided for each talk. Zoom links to the talks will be emailed to you separately. For more information, visit www.scalacs.org.

Monday, October 18, 2021

Speaker: Prof. Paula L. Diaconescu

**Faculty Professor** 

Dept. of Chemistry & Biochemistry University of California, Los Angeles

Title: "Redox Switchable Catalysis"

Time: 8:00-9:00 PM

RSVP Link: https://bit.ly/3zornbE

Tuesday, October 19, 2021

Speaker: Prof. Stephen Burke Cronin

Professor of Electrical and Computer Engineering

and Chemistry

Viterbi School of Engineering University of Southern California

Title: "Solar Fuels, Photochemistry,

and Clean Solar Energy Storage"

Time: 8:00-9:00 PM

RSVP Link: https://bit.ly/2YXrsqf

Wednesday, October 20, 2021

Speaker: Dr. Richard D. Kidd

Senior Technologist, Planetary Surface Instrument Group Jet Propulsion Laboratory - NASA

California Institute of Technology

Title: "Travelogue through

Astrobiology & NASA"

Time: 8:00-9:00 PM

RSVP Link: https://bit.ly/3CpvKVM

Thursday, October 21, 2021

Speaker: Prof. Nicos A. Petasis

Harold E. & Lillian M. Moulton Endowed Chair in Chemistry Professor of Chemistry

and Pharmacology

University of Southern California
Title: "Chemistry for Biomedical

Advances, Methods, Molecules,

Mechanisms, Medicines"

Time: 8:00-9:00 PM

RSVP Link: https://bit.ly/3EmcWbQ

#### Continued from page 2

While Veronica is not busy volunteering for ACS outreach, she is a committed community college professor leading the charge for diversifying the scientific workforce. Currently the Physical Science Department Chair at Pasadena City College, Veronica advocates for and mentors underrepresented students, improves chemistry curriculum, and teaches chemistry in ways to make chemistry relevant to students, influencing them beyond their community college experience. Veronica's dedication to diversity, inclusion, and equity in science education is profound, and her rise through the ranks of leadership is inspirational and a testament to her innovative ideas and practices in chemistry education.

ACS Fellows are recognized for their robust contributions to their profession and the ACS community. In particular, Veronica's elevation to ACS Fellow recognizes her for:

 contributions to the scientific community for her education research, extensive work with students in science education, and her impact on diversity in the STEM workforce through work with minority and economically disadvantaged students.

#### and

• enthusiasm, and innovation of chemistry outreach through her service on the ACS Committee on Community Activities and to the Southern California local section.

#### Southern California Section

#### IT TAKES A VILLAGE

In our September issue of SCALACS Magazine, you read about our new business management team, Huntington Association Management. This transition came about because of the long-planned closing of the business that hosted the SCALACS headquarters and Nancy Paradiso's planned retirement as administrative secretary to our local section.



Nancy Paradiso

Nancy joined us in 1998, and over the years became familiar with our program cycle, anticipated the needs of programming and leadership folks, and pretty much took the lead in making sure our local section attended to its business. She was the voice on the reservation phone, the author behind our email announcements, and the friendly face at the registration table at our pre-pandemic events. Our local section leadership immensely appreciated her constant and helpful presence. And Nancy learned a lot of chemistry in the process!

The transition is complete now. Our SCALACS Magazine archives now reside at the Los Angeles Public Library Scientific Periodicals Division and our institutional memories are digitally well-documented in The Cloud. Nancy, now retired, is enjoying gardening, mural painting, ceramics, and planning for her first grandchild. And the village known as Huntington Association Management team is doing a great job of managing our local section business.

Barbara Belmont, SCALACS Secretary/Treasurer

#### **SENIOR CHEMISTS COMMITTEE**

Due to the upsurge in COVID, we have had to rearrange our meeting plans. We are now planning on a "Zoom" meeting on **Saturday**, **October 9 at 1 pm**. If you are interested in what we are planning and how we can use your knowledge and assistance, please join us using this link: <a href="https://bit.ly/3a8iVTY">https://bit.ly/3a8iVTY</a>. Email Gerald Delker at **Delker@earthlink.net** if your have issues or need further information.

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## This Month in Chemical History Harold Goldwhite

California State University, Los Angeles hgoldwh@calstatela.edu

In a recent column I made a passing reference to a book that I might have included in my list of Great Books in Chemistry, a book on nomenclature. Upon mature reflection I have decided that the book I referred to in passing is, in fact, well worthy of inclusion in my list. It is the multi-authored "Methode de Nomenclature Chimique" by Guyton de Morveau, Antoine Lavoisier, Claude-Louis Berthollet, and Antoine-Francois Fourcroy, published in 1787. The authors are listed in order of seniority by age. Each of them contributed to the text, but the first listed author, Guyton, was the leading spirit of the enterprise.

Nomenclature may be considered by many as a rather dull subject. But no less an authority than M.M. Pattison Muir, a distinguished historian of chemistry, wrote in his "A History of Chemical Theories and Laws" (1907): "to write a full description of the origin, growth and misadventures of the language of chemistry is to write a history of the science." Full disclosure: I copied this quotation and its source from a marvelous historical work by Maurice P. Crosland titled "Historical Studies in the Language of Chemistry" published originally in 1962 and reprinted by Dover Books, with a new Preface, in 1978. It is out-of-print but worth pursuing in the on-line catalogs of used-book sales sources. Much of this column is derived from Crosland's book and also Volume III of J.R. Partington's "A History of Chemistry."

To understand the significance of the Methode (as I shall refer to it) we must look back to the language of chemistry before its publication, and by that I mean the language of alchemy and chymistry, precursors to the modern science of chemistry. That language abounds with names that refer to incidental properties of elements and compounds: quicksilver for mercury, oil of vitriol for sulfuric acid, sugar of lead for lead acetate, liver of antimony for antimony sulfide – and the list goes on and on.

One impetus for the reform of chemical nomenclature was surely the reform of botanical nomenclature initiated by Carl Linnaeus in 1758. He introduced and elaborated the now familiar binary Latin names for plants that had previously borne common names not unlike those used by alchemists for chemical materials. The common garden pea becomes Pisum sativum; the ordinary beet is Beta vulgaris. This form of plant nomenclature is in use to this day. Torbern Bergman, a Swedish chemist who knew Linnaeus, was the first to see merit in applying a similar scheme to chemical compounds. He began to call fixed air (carbon dioxide) acidum aeratum (acid air) to describe a chemical property. But his approach lacked consistency.

And so we come to the Methode. Inspired in part by earlier articles by De Morveau, it boldly proposes a complete reform of chemical nomenclature, particularly of inorganic compounds, introducing (in French, of course) the binary naming of compounds that we use to this day. Oil of vitriol becomes Acide sulfurique; Acide sulfureux contains less oxygen. Salts formed from the former are Sulfate; the latter Sulfite etc. About a third of the Methode is a comprehensive dictionary showing the equivalence of the new terms to those commonly in use. The new approach was presented to the Academie des Sciences in a lecture delivered by Lavoisier in April 1787 titled "On the necessity of reforming and perfecting the nomenclature of chemistry."

As is usual with any revolutionary idea, the reform of nomenclature was not enthusiastically endorsed by many chemists. Resistance in the German-speaking States, still holdouts for phlogiston, was especially strong. An interesting comment is contained in a letter written from Paris by Thomas Jefferson in July 1788: "One single experiment may destroy the whole filiation of his terms and his string of sulfates, sulfites...". Jefferson concluded that the reform was premature. Nevertheless as the oxygen theory began to prevail over phlogiston, so the new nomenclature began to prevail over the old. And with the introduction of a new symbolism by Berzelius in the early 19th Century the pathway to the modern expression of chemical names and formulas was beginning to open.



## Insights Into IP Law Keith Orso

Irell & Manella LLP KOrso@irell.com

Generally, information that is published or included in a patent application filed before an inventor files an application pursuing his or her invention is called "prior art" and can be used to show that the invention is not novel or is obvious, and that a patent should not issue (or should not have issued). But not always. This column has been exploring circumstances where the work of an inventor or joint inventors cannot be used as "prior art" against them even though the work appeared in a document that was published, or was included in a patent application that was filed, before the inventor(s) filed an application claiming the invention. One such circumstance is when inventors published their work in a journal article less than one year before they filed their patent application. Another circumstance is when inventors, or others who learned of their work, described the work in a patent application that was filed before the application specifically claiming the invention (and was not published more than one year earlier).

What if information that would render the invention obvious or not novel was included in an earlier patent or patent application filed by someone other than the inventor or a joint inventor, and what if that information was not obtained directly or indirectly from an inventor? Rather, suppose the information was generated by colleagues engaged in team research with the inventor or inventors? There is an exception for that, too. Specifically, such published patent applications or patents do not count as "prior art" if they were owned by the same person or entity, or subject to an obligation of assignment to the same person or entity.

So suppose that Amy, Bob, and Christie work with Isabel and Jake at Acme Chemical Company. All five individuals signed standard employment agreements requiring them to assign to Acme any inventions they conceive in connection with their employment. During the course of their work, Isabel and Jake develop a new compound. Meanwhile, as part of the same research project, Amy, Bob, and Christie develop their own compound that is different from the one developed by Isabel and Jake, but is closely related, given the parameters of the overarching research project under which both groups were operating. Isabel and Jake file a patent application on their compound, and Amy, Bob, and Christie later file an application on their own compound. Because both sets of inventors are obligated to assign their inventions to the same entity—Acme Chemical Company—the application filed by Isabel and Jake can be excluded as prior art against the later application filed by Amy, Bob, and Christie.

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.

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## San Gorgonio Section



## Chair's Message

We look forward to a robust turnout at the first in-person event planned in some time, the annual **Recognition Luncheon for the 50-, 60-, and 70-year members** in the San Gorgonio Section. As detailed in this newsletter this event will be held **Saturday, October 9** at **Eddie's Italian Eatery in Claremont**. Please RSVP no later than **October 5**. At this event we will also honor our College and University Chemistry Clubs and we encourage any college students and young chemists to attend and learn more about the senior ACS member's stories in an informal mentoring environment.

Additional Section events currently being planned are celebrations of **National Chemistry Week, October 17-23** and the **Annual Section Meeting** in **mid-November.** Due to continuing and evolving COVID-related restrictions, details of these events have not been finalized as of the submission deadline for this newsletter. Please check the San Gorgonio section website for updated information.

As a reminder, the section is always in need of additional members to serve in leadership roles or other volunteer support roles to facilitate our activities. Anyone who is interested in serving in such roles should contact me (email provided below) or Chair Elect Jenifer Nalbandian (Professor at California Baptist University) to discuss opportunities. We look forward to a productive finish to 2021 and an even more productive 2022.

As a reminder you can access the local section information on the websites shown below—a link to the National ACS website is provided therein:

- ACS San Gorgonio Local Section website: http://www.sgacs.org
- ACS San Gorgonio Local Section Instagram: https://www.instagram.com/san-gorgonioacs/

As always I welcome any questions, suggestions or comments from members of the section or other interested parties. My email is: rm.riggin@yahoo.com. Feel free to contact me at any time.

Ralph Riggin, Chair

## San Gorgonio Section

## San Gorgonio Section October Luncheon Meeting Saturday, October 9, 2021

Recognition of 50-, 60- and 70-year ACS Members and College and University Chemistry Clubs

**Eddie's Italian Eatery** 

1065 W. Foothill Blvd. Claremont, CA 91711

**Check-in and Social:** 11:00 – 11:30 AM

**Luncheon:** 11:30 am – 12:30 pm

**Program:** 12:30 – 2:00 pm

This gathering showcases American Chemical Society members with longest and shortest tenures in the ACS. The San Gorgonio Section (SGS) currently has approximately sixty chemists with fifty or more years of service. This event is held to honor those members who have reached exactly the 50-, 60-, and 70-year milestones. Please join us in celebrating these remarkable accomplishments and hearing some of their ACS stories.

70-Year Members

Dr. Charles F. Allen

Dr. Harland H. Schmidt

#### 50-Year Members

Ms. Vickie L. Clawson Dr. Enoch Clifford Hermann

### In-Memoriam

Mr. Thomas Howard Lubin (50-year member)
Dr. J. Ernest (Ernie) Simpson (53-year member)

#### **60-Year Members**

Dr. Fred Paul Abramson Dr. Robert P. Pinnell Dr. Gary Wentworth

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## San Gorgonio Section

At the other end of the spectrum, many newer members of ACS have taken advantage of undergraduate and graduate student programs, sometimes through Student ACS Clubs. We have invited representatives from the Section's college and university Chemistry Clubs to share their activities. Please help us welcome our newer members.

In addition to sharing ACS stories of the senior members and updates regarding activities of the student chemistry clubs, this event will provide an informal opportunity for mentoring discussions between senior chemists and younger chemists and students. We hope that many students from community colleges, four-year colleges and universities will take this opportunity to attend this important annual event and become better acquainted with ACS and the San Gorgonio Local Section.

**Lunch:** Served family style. Salad, platters of Chicken Parmigiana, Spaghetti Marinara (with or without meat sauce), a variety of pizzas, and homemade bread will be served. Dessert, coffee, iced tea, soda and water are included. Wine and beer are available for purchase.

**Cost and Reservations:** The cost (meal, tax and tip) is \$15 for ACS members, \$20 for non-members, \$10 for seniors and retirees, \$5 for students, and free for ACS members receiving their 50-, 60- and 70-year certificates.

Please register for the event by **October 5** using the form on the San Gorgonio Section website: **http://www.sgacs.org** 

If you are unable to access the website you can also register by contacting **Ralph Riggin, Section Chair** at **rm.riggin@yahoo.com** or via phone at **317-407-3029**.

**Directions:** Eddie's Italian Eatery is located at the NE quadrant of the intersection of Foothill Boulevard and Towne Avenue in Claremont, easily accessed from the I-10 and 210 Freeways. Parking is free in the adjacent Stater Brothers parking lot. See www.eddieseatery.com for more information or call 909-398-1985.

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## SOUTHERN CALIFORNIA SECTION AMERICAN CHEMICAL SOCIETY

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IMPORTANT Do Not Delay!

**Contains Dated Meeting Announcement** 

#### **PERIODICALS**

## **Bi-Section Chemists' Calendar**

#### **OCTOBER**

- 9 Senior Chemists Committee Meeting via Zoom
- —see page 4
- 9 San Gorgonio Section October Luncheon Meeting
  - —see page 8 9
- 17–23 National Chemistry Week Celebration
- —see page 3