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**SCALACS**

**October 2020**

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

## **Southern California Section**

**National Chemistry Week**  
**Theme: Sticking With Chemistry**

**October 18-24, 2020**

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## **San Gorgonio Section**

**Virtual Recognition of 50-, 60-, 70 year ACS Members**  
**and**

**College and University Chemistry Clubs**

**October 17, 2020**

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SECTION 2020 OFFICERS**

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# Southern California Section

## Chair's Message



Dear Southern California American Chemical Society members:

October is here and we have several virtual events planned. National Chemistry Week and Mole day are coming this month. Please see Pages 4 and 5 in this issue and on our website for a schedule of events. We hope to welcome you virtually.

The Tolman award presentation on September 16th was a great success. Over 100 people were online to hear a fascinating talk from Prof. Borovik. There was no dinner, but we had a half hour of networking/socializing before the talk that also went well.

Ballots for the election of section officers will be mailed out this month. We have a full slate of candidates this year, so there are plenty of candidates to choose from. Look over the candidate statements and please vote. Many thanks to all the volunteers who were willing to put their name on the ballot.

As this message was going to the publisher we learned of the passing of Ernie Simpson. More will be written about Ernie elsewhere, but I wanted to mention here that Ernie touched our section, and the broader ACS, as well as his home San Gorgonio section. He mediated collaborations between our sections, interacted with our councilors at National meetings, and gave presentations at Western Regional meetings we organized. He will be missed.

- Brian Brady  
Chair, SCALACS 2020

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## Southern California Section

### National Chemistry Week Virtual Events Cohosted by SCALACS and AIAA LA LV October 18-24, 2020

Each night of NCW, we have virtual talks from leading chemists, as well as events all day on Saturday, October 24th. We still have some open spots if you'd like to give a talk or participate in a panel discussion. We hope you'll join us for these great online activities:

#### **1) Oct 19, 2020, Monday: 5-6 pm Talk**

**Dr. Ian S. Haworth**, Associate Professor & Vice Chair, Department of Pharmacology & Pharmaceutical Sciences, School of Pharmacy, University of Southern California

"Chemical aspects of oral drug delivery, and particularly how chemical principles are applied in understanding of ADME properties of drugs and in new drug design"

#### **2) Oct 20, 2020, Tuesday 5-6 pm Talk**

Volunteer needed

#### **3) Oct 21, 2020, Wednesday 5-6 pm Talk**

**Dorothy Pan**, resident physician at Keck Hospital and LA County Hospital with the USC Caruso Department of Otolaryngology – Head and Neck Surgery, training to be a surgeon-scientist advancing therapies or and treating disorders of the ears, nose, and throat. "Nanoparticle Drug Delivery: History and Future Developments"

#### **4) Oct 22, 2020, Thursday 5-6 pm Talk**

**Prof. Surya G. K. Prakash**, Director of Loker Hydrocarbon Research, Institute and Chair of the Department of Chemistry at USC

#### **5) Oct 23, 2020, Friday 5-6 pm Talk**

Volunteer needed

#### **6) Oct 24, 2020, Saturday 10-11 pm Talk**

**Jessica Weber, Ph.D.**, JPL Postdoctoral Fellow, Origins and Habitability Lab

"Mineral organic interactions and prebiotic chemistry"

*(Continued on Page 4)*

## Southern California Section

### National Chemistry Week Activities (Continued from Page 3)

#### 7) Oct 24, 2020, Saturday 11-12 pm Panel Discussion

##### "Women for Chemistry and STEM Careers"

A) **Jessica Weber** (JPL)

B) **Maggie Fox** (PhD student at UCLA)

C) **Dorothy Pan** (Keck Hospital and LA County Hospital)

D) **Khushbu Patel** (Relativity Space)

Volunteer needed

#### 8) Oct 24, 2020, Saturday 12-1 pm Panel Discussion

##### Young Professionals for Chemistry and STEM Career

A) **Ryan Casey** (Chaminade College Preparatory)

B) **Dr. Ian S. Haworth** (USC)

Volunteers needed

#### 9) Oct 24, 2020, Saturday 1-2 pm STEM Resume Workshop

A) **Fred Lawler** (Raytheon)

Need Volunteers

#### 10) Oct 24, 2020, Saturday: 2-3 pm Talk

**Daniella Duran**, Honors Nanoscience and Chemistry Teacher- Valencia High School, Science Technology Engineering Math (STEM) Club Advisor, Teacher Facilitator/PD provider- UCLA Nanoscience Program

**STEM Talk:** Building partnerships, providing meaningful research experiences for students, and promoting diversity in STEM by leveraging technology and human resources.

#### 11) Oct 24, 2020, Saturday 3-4 pm Talk

Volunteers needed

For up-to-date information on these activities, see our website at [https://scalacs.org/?page\\_id=29](https://scalacs.org/?page_id=29).

**To volunteer to give a talk or participate in a panel discussion, please contact [cgsonwane@gmail.com](mailto:cgsonwane@gmail.com).**



## Insights Into IP Law

**Keith Orso\***, Irell & Manella LLP  
KOrso@irell.com

Under the on-sale bar doctrine, an inventor must file a patent application no later than one year after first offering for sale or selling the invention. This one-year grace period seeks to afford inventors a reasonable amount of time to test the commercial market for their inventions before deciding whether to invest time and resources in applying for patents, while preventing inventors from extensively exploiting their inventions before applying for patents, which, if granted, would permit them to exploit their inventions under limited monopolies for even longer. Application of the on-sale bar prevents patent claims from issuing, or invalidates patent claims that already issued, from patent applications filed more than one year after offers for sale or sales.

Does the on-sale bar doctrine apply if an inventor sells embodiments of the invention more than one year before applying for a patent but does profit from such sales?

In one case, from quite a few years ago, the invention at issue was a load sensing piezoelectric transducer used to prevent overloading a mechanical power press. There was no dispute that the inventor sold the transducers more than a year before filing a patent application. But the inventor contended that the sales were for experimental purposes and therefore not subject to the on-sale bar. See November 2018 to March 2019 editions of this column for discussion of the experimental use doctrine in connection with the public-use doctrine.

The inventor pointed out that the transducers were sold for substantially less than comparable commercial equipment and produced no personal profit. The inventor also argued that “test data” collected shortly after the sales were made showed that the transducers experienced errors of fifty percent or more and operated erratically. However, the inventor never informed the buyers about this “unsatisfactory test data.”

Ultimately, a court found that none of the inventor’s offers for sale indicated that the sales would be incidental to experimental use or required the purchaser to report back performance data. The court also found that the inventor’s failure to disclose the “unsatisfactory test data” to the buyers supported an inference that he was seeking to penetrate the market for commercial purposes. Although selling the devices for a profit would have demonstrated such a purpose, the inventor’s failure to realize any profit did not demonstrate the contrary. The court found that the on-sale bar applied.

\* 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

Harold Goldwhite, California State University,  
Los Angeles  
hgoldwh@calstatela.edu

My last column began a survey of “Great Books of Chemistry” with a look at two ancient texts: Plato and Lucretius. Although you might question the inclusion of an alchemical work in this exploration I believe that as alchemy is a direct precursor of modern chemistry such a survey would be incomplete without a look at a representative work of alchemy –if there is such a thing! My choice, in part because I have a copy in my personal library, is “The Works of Geber” “Englished by Richard Russell, 1678” in an edition by E. J. Holmyard, a distinguished historian of chemistry. My copy was published in 1928. Geber is the westernized version of Jabir, one of the most famous Arab alchemists. There is a large body of work ascribed to Jabir, who lived from about 720 C.E. to about 800 C.E. He was born in what is now Iraq and studied religion and mysticism –possibly including alchemy – in Arabia. He also became a proficient physician and served in that capacity at the court of Haroun-Al-Rashid, the caliph of the Arabian Nights. Because Jabir became a famous alchemist many later workers used his name to add luster to their own efforts. Consequently it is quite unclear how much of the extensive Jabirian corpus can be ascribed to Jabir himself. Scholars of alchemy have agreed that the core of Jabir’s alchemy includes the following points:

While accepting Plato and Aristotle’s four elements: earth, air, fire, and water – Jabir had a novel “insight” into the constitution of metals. They are made up of two “exhalations”, one earthy and one watery. These are respectively the “sulfur” and the “mercury” principles. These principles are not to be equated to the familiar substances that bear these names. The names are a convenient shorthand for the essential essences that go into making up the familiar terrestrial substances. To turn to more practical aspects of Jabir’s work it is clear that he was an experimentalist. He describes the operations of alchemy and the materials on which those operations were performed. He wrote a whole “book” (many of the “books” of this period are what we would call chapters) on furnaces. In Russell’s English version there are illustrations of each type of furnace: calcinatory; distillatory; descensory; fusory; solutory; fixatory; and the water bath. However the writings of Jabir are often deliberately obscure. Alchemy was a “mystery” (or mastery) only to be passed down and interpreted by those whose lives were given to its study. These adepts would have the key to unlock a passage like the following (I have deliberately chosen a short extract): “Of the Calcination of middle minerals. All Atraments, Salts, Allones, and the kinds of Tutia are calcined in the said Calcinary Furnace, with Tartar and other Things, with fire moderate or strong, according to the Exigency of Things to be calcined; as is evident in Our Book, Of the Investigation of the Perfect Magistry; but all bodies are calcined, as in Our Testament.”

I promise you more clarity in my next column.



## Chair's Message



*Just as this message was to be submitted for publication, I received the sad news of the passing of **Dr. Ernie Simpson**. Ernie was a beloved member of our section and the ACS for 53 years, twice serving as section Chair and long serving as Councilor. He was an ACS fellow, a long serving chemistry professor at CPP, a high school basketball referee, a wine expert, and much more. He was known through the ACS for his riveting Wine Talks which he held annually as a Section event, to sell out crowds, and frequently hosted the event within other ACS sections as well. The Section will plan events and postings to acknowledge and celebrate Ernie's life and accomplishments. He will be greatly missed.*

I hope that all members have had an enjoyable summer, probably quite different in many respects from previous summers, but enjoyable nonetheless. While there is still great uncertainty regarding the exact timing for a return to "normalcy" it seems clear that some attributes, and even benefits, of "virtual participation" will remain as a permanent aspect of our personal and professional life.

The section is happy to announce that we will hold two virtual events this fall. The first event will be "Recognition of 50, 60, 70 year ACS members and Student Chemistry Clubs" on Saturday October 17<sup>th</sup>. In the past this event has been a luncheon with Senior member's stories being presented and has included a mentoring session facilitating information flow to the next generation of chemists. While the event is virtual (via Zoom videoconferencing) a similar format is envisioned. We welcome all experienced and Senior members of the section to attend and be prepared to provide a brief overview of their careers. We also welcome any questions, input, or updates from all the Chemistry Clubs, student members and young chemists. A separate announcement is contained in this issue of SCALACs magazine and is posted on the section website along with a registration form.

Secondly, the Section's annual meeting will be held on Saturday November 21<sup>st</sup>, via Zoom videoconferencing. Details regarding this meeting will be posted on the Section's website.

(Continued on Page 8)

## San Gorgonio Section

### Chair's Message (Continued from Page 7)

In November SGS will hold the electronic Officer elections. We welcome all members, and especially younger members and industrial members, to consider participating in our various committees and other leadership positions. The board positions open for nominations this year are Chair-Elect, Secretary, Councilor (two positions), and Alternate Councilor (two positions). Many committee positions are also available to all section members. Please feel free to contact me, at [rm.riggin@yahoo.com](mailto:rm.riggin@yahoo.com), or any of the other officers/board members should you wish to discuss opportunities in more detail.

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/sangorgonioacs/>

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

- Ralph Riggin  
Chair

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# San Gorgonio Section

## San Gorgonio Section Virtual Meeting

Saturday October 17, 2020

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

10:30am until Noon

**Zoom Videoconference Link provided to registered participants  
(will include telephone call-in information)**

This virtual Section meeting is being held to recognize the longest tenure ACS members in the Section and to provide a forum to interact with the younger chemists just beginning their careers. All Senior and experienced members are encouraged to join this virtual meeting and to add to the career discussions based on their wealth of experience. All younger chemists, including those representing University and College Chemistry clubs, are encouraged to attend. While not ideal in some respects, the virtual format provides for greater participation by members from more remote areas of this geographically large section.

Special recognition to the following members who reached ACS milestones:

#### 50 Year Member

Mr. Robert Schirripa

#### 60 Year Members

Mr. Sam Haywood

Dr. Ted McKinney

Mr. John Watson

Dr. I. Kuen Yen

#### 70 Year Member

Dr. Albert Leo

#### In Memoriam

Dr. James Sims (60 year member)

Dr. J. Ernest (Ernie) Simpson (53 year member)

**Cost and Reservations:** There is no cost to attend this event. We ask all participants to register using the electronic reservation form on the Section Website <http://sgacs.org>. If you are unable to register via the electronic form please send your name, email address, and phone contact information to Ralph Riggins: [rm.riggins@yahoo.com](mailto:rm.riggins@yahoo.com).

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

For more information on these events, please check our website at  
[www.scalacs.org](http://www.scalacs.org)

#### **October**

- 17 SG Recognition of 50-, 60-, 70 year ACS Members and College and University Chemistry Clubs Virtual Meeting—See Page 9
- 18-24 SC National Chemistry Week events—2020 Theme “Sticking With Chemistry” - See Page 3

**To find virtual events, please see our websites:**

[www.scalacs.org](http://www.scalacs.org)

[www.sgacs.org](http://www.sgacs.org)

[www.acs.org](http://www.acs.org)