

January/February 2013

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



Southern California Section Dinner Meeting

Dr. Michael Ram, Esquire

**Wednesday, January 23rd,
2013**

Taix French Restaurant

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San Gorgonio Section

“The Chemistry of Wine”

Dr. Ernie Simpson

Friday, January 25, 2013

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January Dinner Meeting

“You Have Your Chemistry Degree! Now What?”

Dr. Thomas Beattie

Wednesday, January 30, 2013

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SCALACS

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Chair Elect: Yumei Lin
Secretary: Spencer Ririe
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Southern California Section

Chair's Message



Happy New Year 2013!

Hopefully everyone had time to rest up a little with their family and friends over the holidays, because we have a very busy year planned for 2013. We will begin the year with a dinner meeting on January 23 with a presentation on patent law by Michael Ram, just in time for Federal Patent Law changes which take effect March 16, 2013.

The January meeting is also important because it marks the culmination of the effort to revise the section bylaws, and bring them into compliance with ACS Constitution and Bylaws. I am not sure how long this effort has been going on because it predates my active involvement with this section, but it has been long enough. Come to the meeting and vote on the ratification of the new bylaws. Information on the changes, including copies of the old bylaws, the new bylaws, and a blue lined copy of the old bylaws showing the changes can be found on the section's website, www.scalacs.org. If you have any questions or need copies of the changes that are being proposed, please contact Nancy Paradiso at (310) 327-1216 or via email at office@scalacs.org.

We ended our program of events in 2012 with a very successful presentation by Caltech Professor Jacqueline Barton on DNA Signaling sponsored by the Women's Chemist Committee. This meeting had a very high student turnout; in fact the students outnumbered the more senior audience members. The Women's Chemists Committee is planning another event for February, details of which will be released soon.

The rest of the year will also be full of events, but we always have room for more. If you have ideas for sections activities, or would like to help out with planning please let me know. The November/December issue of SCALACS included a thanks to volunteers in 2012. From that list you can get an idea of the range of activities our section sponsors, and the number of people it takes to keep things running. A number of our committees currently have openings; why not come to a meeting and see where you would fit in?

- Brian Brady, Chair

Southern California Section

Section Dinner Meeting

Wednesday, January 23rd, 2013

Taix French Restaurant

1911 W. Sunset Blvd.
Los Angeles, CA 90026

Major Changes to US Patent Law Dr. Michael Ram, Esq.

Check-in: 6:00 pm
Dinner: 7:00 pm
Presentation: 8:00 pm

The Executive Committee of SCALACS is proposing modifications to the Section's bylaws, which can be viewed on the Section's website at <http://scalacs.org>. It is anticipated that a vote will be taken at this January meeting to adopt these modified bylaws. If you have any questions or need copies of the changes that are being proposed, please contact Nancy Paradiso at (310) 327-1216 or office@scalacs.org.

Abstract: In September 2011 Congress voted in to law the America Invents Act (AIA). AIA significantly changes several major aspect of the US Patent Law. Some changes became effective immediately on passage, other changes became effective on Sept 16, 2012 and the remainder of the changes go into effect on March 16, 2013. A significant change is that US patents no longer go to the first to invent. Patents now go to "the first inventor to file". This change has numerous implications for inventors and their ability to protect their inventions, Also, patent applications, in certain situations, may list employers as applicants in place of their employees. Some of the major changes in the US patent law and their impact on inventors and employers will be discussed.

Biography: Dr. Michael Ram, DSc, Esq. is Senior Counsel with the firm of Koppel, Patrick, Heybl & Philpott , a law firm specializing in Intellectual Property matters. Dr. Ram obtained his law degree from Seton Hall Law School in New Jersey and has been admitted to practice law in New Jersey, New York and California and before the US Patent and Trademark Office. He has been handling patent, trademark and copyright matters since 1972 as both in-house counsel and a partner in patent law firms. His expertise in handling patent issues extends World Wide.

(Continued on Page 4)

Southern California Section

Michael Ram Biography (Continued from Page 3)

Dr. Ram received his BS Degree in Chem. Engr. from Lafayette College and a Ch.E. Master and Doctorate from New Jersey Institute of Technology. Corporate positions include Senior Research Engineer with Celanese Corporation, Patent Counsel and Director of Technical Liaison with CR Bard, VP R&D with Starr Surgical and General Counsel with Intermedics Intraocular and Pharmacia Ophthalmics.

Besides being a patent attorney with clients around the World, Dr. Ram is also an inventor on over 20 US patents and several foreign patents covering carbon fibers and their production and use in composites, reverse osmosis and kidney dialysis membranes and various medical devices. Academic activity includes numerous presentations regarding licensing and transferring rights in intellectual property and presenting a course as part of UC Berkley Extension Program entitled, Legal Aspects of Intellectual Property Protection and Transfer.

Reservations: There is a choice of Coq au Vin (chicken with wine sauce) or Beef Bourguignon for dinner. The cost of the dinner is \$31 per person including tax, tip, and wine with dinner; cash or check at the door. Please call Nancy Paradiso in the Section Office at 310 327-1216 or email office@scalacs.org by Monday, January 21, 2013 for reservations.

Directions: To access Google maps from their website, go to <http://taixfrench.com/contact-us/>

Election Results

Thanks to everyone who voted! The people who were chosen in the election follows. Their terms of office begin in January, 2013.

Chair-elect: Yumei Lin

Secretary: Spencer Ririe

Members of the Executive Committee: Veronica Jaramillo, Heather Mott and Brian Sullivan

Councilors: Tom LeBon and Eleanor Siebert

Alternate Councilors: Joe Khoury and Derek Marin

Congratulations to those who won the election and thanks to those others who were willing to be candidates. We hope that many more of our members will become involved with the Section in the near future. Please contact our Section Office (office@scalacs.org) to ask how you can participate.

Southern California Section

Salutes to Excellence Awards

During our final dinner meeting of 2012 on November 14th at Pasadena City College, four SCALACS members who have made extraordinary contributions to their community were recognized with an *ACS Salutes to Excellence* award.

Dr. Rita Boggs was honored for her dedication to chemistry and public affairs. **Professors Armando Rivera and Veronica Jaramillo** were honored for their outstanding work with ACS student members. **Barbara Belmont** (pictured below with her wife Rochelle Diamond on the right) was honored for advancing the involvement and acknowledgement of lesbian, gay, bisexual, and transgender (LGBT) members of the American Chemical Society through several innovative initiatives and mentoring activities. Congratulations to all!



Southern California Section

In Memorium David Stelman 1937-2012

David Stelman graduated from Penn State in 1959 and earned a Ph.D. in Chemistry from UC Berkeley in 1964. After post-doctoral work at Caltech and the University of Florida, David had a long career in research and development, working on energy, defense, and aerospace projects at Westinghouse, Atomics International, Rockwell, and Boeing. He was a 41 year member of the American Chemical Society.

David's graduate work used microwave spectroscopy to elucidate the quantum energy levels and motion of molecular bonds. He later developed methods for coal gasification, electrostatic and chemical scrubbing of exhaust pollutants, space nuclear power liquid metal heat pipe radiators, hot hydrogen production, and high power chemical oxygen iodine lasers.

He is missed by four sons whom he inspired to earn degrees in science, and a dozen grandchildren whom he delighted with kitchen chemistry.



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This Month in Chemical History

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

As I mentioned in a previous column, in November 2011 the Southern California Section of the ACS celebrated its centenary, and I assembled from my library a book display showing aspects of the development of chemistry books from the 18th. to the 20th. century. In this column I will complete my discussion of the books I chose.

Samuel Parkes' "A Chemical Catechism" was published in 1806, and went to 12 editions, obviously a popular text. I bought my 2nd. Edition back in 1976 at Hay-on-Wye, an unusual town on the English-Welsh border that is full of bookstores; worth a visit. The Chemical Catechism is in the well established form of questions and answers – a form that certainly dates back to Plato's reports of Socrates dialogs. There are a few good illustrations, and some examples of chemical verse. Here is Parkes on plant respiration:

"Thus while the vegetable tribes inhale the limpid water from the parent vale, To blend it with the carbon of the soil, And form bitumen, resin, wax, or oil:, The free'd caloric bursts the expanding mass, And swells the nascent oxygen to gas; Which, from its inmost cells, each leaflet pours In viral currents through its myriad pores, To renovate the air, by tempests hurl'd From pole to pole, around a freshen'd world."

Totally different is my English translation, a 1911 version, of the 1908 book by Alfred Werner: "New Ideas on Inorganic Chemistry". Werner, a Swiss chemist, and Nobel Laureate is the father of coordination chemistry. Originally an organic chemist who worked on stereochemical questions with Hantsch he began thinking about inorganic chemistry when faced with the task of teaching a course. In trying to elucidate the intricacies of what was known about ammonia complexes of transition metal halides he reported later that he had a flash of insight one sleepless night. He saw that many existing problems could be solved by separating what we now term the metal ion's oxidation state (Werner's valence) with a new concept he termed coordination number. A particular oxidation state would then be associated with a particular coordination number. These ideas led to the solution of many problems, and Werner used conductivity studies to confirm his ideas, and also predicted stereoisomerism in coordination compounds.

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This Month in Chemical History

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My copy of Justus Liebig's "Familiar Letters on Chemistry" ("Chemische Briefe") is the English translation of 1859, published in London. The text is in the form of letters from a teacher to a student explaining chemical concepts applied to physiology and agricultural chemistry, two fields in which Liebig was pre-eminent. There were many editions and translations of this popular work and if you want to explore the text it is available, along with many others I have mentioned, as an ebook.

While some things in chemistry change rapidly, others seem to remain for decades – and even longer. My copy of "Qualitative Chemical Analysis" by Arthur A. Noyes was published in Boston in 1895 and explains the laboratory scheme for separating a range of metal cations into groups and identifying them. It's a brief book and my copy bears the signs of having been on the benchtop during a student's manipulations. Noyes was a distinguished American chemist, and served on the faculty of California Institute of Technology from 1919 to 1936. Qualitative analysis of inorganic ions was a significant part of beginning laboratory work in chemistry from the 19th. into the 20th. century and when I was in high school in the 1940s I was taken through a rigorous course of that kind.

My final book in these discussions is "Chemistry" by John Howard Appleton, published in Providence in 1884. The text is sound, but there is little in it to distinguish it from other introductory chemistry books of the period. What is special, however, are the plates. Color lithography was introduced into commercial printing in the 19th. century, but few if any chemistry texts used it as profusely as Appleton's book. It is fun to read because of the pictures! And if you "Google" you can see many of Appleton's images.

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San Gorgonio Section

Chair's Message

This is the time of the year when people both reflect on the past and look ahead to the future, so it seems appropriate that I perform these exercises on behalf of the San Gorgonio Section. About five years ago, the National organization was seriously concerned about the future of the Section. Participation in meetings and registration as Section members were both down. The National Organization instituted a stimulus plan for the Section and, to paraphrase a famous Mark Twain quote "the reports of the Section's death were greatly exaggerated"!

The Section has had a successful year due to some very committed people who do not get enough recognition or acknowledgement! I would like to extend my heartfelt thanks for the members of the San Gorgonio Executive Board for their dedication and incredible support. The Section is fiscally sound due to the solid financial management of **Dennis Pederson**, Treasurer. Dennis has also played a critical role in arranging meetings and supporting the Olympiad. The Section has been able to feature nationally prominent speakers thanks to **Ernie Simpson**, Councilor. Ernie provides a wealth of knowledge to the Section (he seems to know everything, and if he doesn't know something, he knows someone who does)! The Executive Board is communicating very effectively, both internally and with the National organization, thanks to **David Srulevitch**, Secretary. David has consistently volunteered to help with the most mundane tasks. After a two-year (sometimes traumatic) ordeal, we have completed the process of updating the Section bylaws. Many thanks to **Jim Hammond**, Councilor, for his dedication to this endeavor. And a big thank you to **Patricia L. Perez**, who was part of the initial stimulus plan for the Section and offered me the opportunity to work with these incredible people!

As to the future, we plan to expand the Chemistry Olympiad to three testing sites for 2013. Cal Poly Pomona and Cal State San Bernardino have served as testing sites for several years, allowing approximately 200 high school students per year to participate. UC Riverside has offered to also host a testing site. To maintain the Section's fiscal solvency, we will be charging students \$5 each to participate in the Olympiad in the future. This fee will cover the cost of purchasing the exams and supplies. During the past year we have begun to venture
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San Gorgonio Section

Chair's Message (Continued from Page 10)

into the digital age by establishing a website (<http://sangorgonio.sites.acs.org>) and sending out email reminders of meetings. The plan is to continue to expand email communication and be more consistent in updating the website while maintaining our current methods of communication (SCALACS and US mail) for those who prefer these. There are still volunteer opportunities for 2013 (see the list below). So, please check the website for information about 2013 events, or contact me directly.

Chair Elect, Executive Board – serves for three years: Chair-Elect the first year, Chair of the Section the second year and Past-Chair for the third year.

Program Committee – organize dinner meetings, including selecting speakers and venues. Specifically seeking individuals in the Riverside, Palm Springs and Temecula areas to assist with planning local meetings.

Education Committee –organize the Chemistry Olympiad and Annual Awards Banquet.

Project SEED mentors – One of the ACS programs that the Section has proudly participated in is Project SEED. For those who are unfamiliar with Project SEED, here is a synopsis from the ACS website, *“Project SEED was established in 1968 to help economically disadvantaged high school students expand their education and career outlook. The program provides opportunities for students who historically lack exposure to scientific careers to spend a summer conducting hands-on research with a scientist in academic, industry, and government research laboratories.”* High school junior and seniors are given an opportunity to spend 8 to 10 weeks during the summer working on a project in a research laboratory with a mentor. In order to continue this program, we are in desperate need of mentors.

- Eileen DiMauro, Chair
edimauro@mtsac.edu
(909) 594-5611x4533

San Gorgonio Section

Friday, January 25, 2013

2:00 – 4:00 pm

“The Chemistry of Wine”

Dr. Ernie Simpson

Collins College of Hospitality Management

California State Polytechnic University, Pomona

3801 West Temple Avenue

Pomona, CA 91768-2557

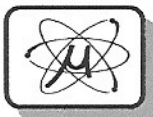
**See the San Gorgonio Section website (<http://sangorgonio.sites.acs.org>)
for complete details and registration form**

Dr. Simpson's lecture will include an overview of wine and wine making as well as detailed descriptions of the chemical composition of grapes and wine, laboratory methods for analysis of grapes and wines, sensory and organoleptic methods used for wine, the role of tannin and other phenolic compounds in wine and some potential health aspects of wine. Integrated with the talk will be wine samples from the leading wine producing regions of the world.

Biography: Dr. Simpson joined the Chemistry Department at Cal Poly Pomona in 1968 after completing his BS, MS and Ph.D. (Organic Chemistry) at the University of New Mexico and spending one year as a visiting professor at Pomona College. In 1973/74 he was on leave as a visiting Research Associate in the Department of Enology and Viticulture at UC Davis. He is an active member of the American Society for Enology and Viticulture and has served on the editing board of the society's journal. He has published a California Wine Guide. He is a member of the Society of Wine Educators and the American Wine Society.

Wine Tasting: All lecture attendees must be 21 years of age or older

Cost: Donation of \$10.00 (proceeds to fund Woodward-Graff-Simpson Collins College Scholarship).



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San Gorgonio Section

January 2013 Dinner Meeting

You Have Your Chemistry Degree! Now What?

Dr. Thomas Beattie

Wednesday, January 30, 2013

Lotus Garden

111 East Hospitality Lane

San Bernardino

Social and Checkin: 5:45 pm

Dinner: 6:30 pm

Program: 7:30 pm

The United States produces about 15000 Bachelor's, 2000 Master's and 2500 Doctoral degrees in Chemistry per year. What is the next step for these graduates? While many graduates decide to pursue a more advanced degree or post doctoral opportunities, others choose to enter the nonacademic work force. The focus of this meeting is employment outside of the academic world. An overview of local and national employment will be presented. The featured speaker will be Dr. Thomas Beattie of the San Diego Section of the American Chemical Society. The evening will include a panel discussion by local chemistry graduates who chose the nonacademic route.

Speaker: Tom currently is a Councilor in the San Diego Section and has served for the last nine years. Prior, he was an Alternate Councilor (2000-3). He was Chair in 1999, a year in which the Section won the ACS Outstanding Large Section performance award. He received the Section's Outstanding Service Award in 1996 and again in 2005 and the 2011 E. Ann Nalley ACS Western Region Service Award. In 2011 he was named an ACS Fellow.

Tom spent a 27-year career at the Merck Research Labs in Rahway, NJ working as a chemist in early stage drug discovery. After retiring from Merck in 1993, he came to San Diego and worked at Amylin Pharmaceuticals and IRORI/ChemRx/ Discovery Partners. Since 2001 he has been consulting for many organizations within and outside of San Diego, has taught at UCSD and U. Kansas, and serves on several advisory boards. He has a B.S. (U. Pennsylvania), Ph.D. (U. Wisconsin), and was a postdoctoral fellow at M.I.T.

Dinner, Cost and Reservations: The Chinese dinner will feature eight entrees, rice, and soft drink or iced tea (complimentary refills). The cost will be \$13 for ACS members, \$15 for nonmembers, \$10 for retirees and \$5 for students. Please make your reservation no later than 12 noon on Monday, Jan 28, 2013 Dennis Pederson (909-537-5477, dpedersn@csusb.edu).

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**SOUTHERN CALIFORNIA SECTION
AMERICAN CHEMICAL SOCIETY**

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***IMPORTANT
Do Not Delay!***

Contains Dated Meeting Announcement

PERIODICAL

Bi-Section Chemists' Calendar

January

- 23 SC Dinner Meeting at Taix French Restaurant on "Major Changes to US Patent Law" by Dr. Michael Ram, Esq.—see page 3
- 25 SG Meeting "The Chemistry of Wine" with Dr. Ernie Simpson—see page 12
- 30 SG Dinner Meeting "You Have Your Chemistry Degree! Now What?" with Dr. Thomas Beattie—see page 11

Happy New Year!