Newsletter May 2013

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245th ACS National Meeting New Orleans, LA April 7-11, 2013

By Sally Peters

Spring in New Orleans was beautiful! Almost too beautiful to attend any of the 11,232 papers that were presented! The ACS meeting attracted 15,596 registrants, including 8,105 regular attendees and 5,793 students. This was the largest number of students ever registered at a national meeting. The Santa Clara Valley section had its full contingency of 7 councilors or alternate councilors present at the Wednesday council meeting. The councilors also attended their assigned committee meetings for Membership Affairs, Meetings & Exposition, Divisional Activities, Chemical Health & Safety, and the Committee on Community Affairs.

Actions of the Council and Board:

• By electronic ballot, the Council selected G. Bryan Balazs and Charles E. Kolb, Jr. as candidates for 2014 President-Elect. Bryan Balazs is a chemist at Lawrence

Livermore and a councilor from the CA section, and Charles Kolb is President & CEO of Aerodyne Research in Boston. These two candidates, along with any candidates selected via petitions, will stand for election in the Fall National Election.

- The Committee on Nominations and Elections announced the selection of the following candidates for Directors-at-Large for a 2014-2016 term: Susan B. Butts, Thom H. Dunning, Jr., Dorothy J. Phillips, and Kathleen M. Schulz. The election of two Directors-at-Large from among those candidates and any selected via petition will be conducted in the fall. Ballots will be mailed to the Council on or before October 10.
- Despite the sluggish economy, ACS generated favorable operating results in 2012. Total revenue was \$490.7 million, which was \$6.1 million or 1.3% greater than the approved budget, and 3.9% higher than 2011. The Net from Operations was \$20.2 million, or \$4.3 million favorable to budget. This was largely attributable to better-than-expected performance by ACS Publications and CAS, and represents the Society's 9th consecutive year of positive operating results. While operating performance was favorable, Unrestricted Net Assets declined \$1.4 million to \$100.6 million. Finally, ACS ended the year in compliance with four of the five Boardestablished financial guidelines.
- The Council voted to set the member dues for 2014 at the fully escalated rate of \$154. This rate is established pursuant to an inflation-adjustment formula in the ACS Constitution and Bylaws.

Chair's Message

Thank you. Thank you. Participation in the recent membership survey was very gratifying. The survey was sent to 2,765 SCV members with valid e-mail addresses. Nearly 9% (nine percent) completed the survey with some questions bringing even better response. I am grateful for your taking the time to respond and find the results reveal-

ing and useful. Half of those responding have been

members for ten or more years; more than two-thirds have a Ph.D. Another two-thirds are employed full-time. A quarter is in academe while our industrial members are almost evenly split between manufacturing and non-manufacturing jobs.



Counter to my concerns, 72% were "familiar" with the newsletter while over half were familiar with the website and almost half knew about ChemPloyment. These services also garnered high satisfaction from those responding.

Our local section is about events. From dinner meetings to recurring events to special activities, SCV reaches out to members and the general public in many ways. Eighteen activities were listed. Responses showed a range of familiarity accompanied by relatively high satisfaction among those who responded.

One bright spot was the number of

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National Meeting, continued from previous page

- Society membership at the end of 2012 was 163,322 893 lower than the total for year-end 2011 despite recruiting 24,943 new members. The net loss occurred primarily in the regular, full member category. There was continued growth in both the student member undergraduate and international categories.
- The Council voted to approve a new formula for the distribution of allocations to individual Local Sections beginning in 2014. The new allocation will be divided as follows: base allotment (49%); per member allotment (43%), and LSAC program funds (8%).
- The career center had a brisk business of interviews with 38 employers interviewing candidates.
- The exposition was spacious, but busy with 415 booths representing 210 companies.
- On a lighter note, the Committee on Community Affairs had an outreach at the New Orleans Zoo. Approximately 400 visitors took part in hands-on experiments. Millie Mole had a photo op with ACS President Marinda Wu.

 The following is a list of URLs and email addresses presented on slides at the Council meeting. You will find the information noted on these sites helpful.

m.wu@acs.org – contact information for ACS President Marinda Wu

www.acs.org/leadscopeqa - ACS vs.
Leadscope questions and answers

www.acs.org/newmember - information on
"Why should I join the ACS?"

nomelect@acs.org — email address for the Committee on Nominations and Elections www.acs.org — then click on "About Us" and scroll down to ACS Financial Information for information on the Society's finances

safety@acs.org – email address for comments and suggestions about chemical safety to the Committee on Chemical Safety www.acs.org/ei - information on the ACS Entrepreneurial Initiative

www.acs.org/sequester - location for completing the survey on sequestration www.acs.org/supportfedscience - information on ACS materials related to federal S&T funding

www.acs.org/ethics - information on the ACS Committee on Ethics

http://nationalethicscenter.org - "Ethics

CORE" web address and the chemistry landing page which links to chemistry related ethics content (click 'resources by discipline' then click 'chemistry')

Local Section Resources

www.acs.org/getinvolved - grant information, important deadlines and officer resources

www.acs.org/forms - submit annual reports, record meetings, activities and events year round

speakers@acs.org – nominate speakers for Online Speaker Directory

outreach@acs.org – information on "Celebrating Chemistry" for 4th – 6th graders

Chair's Message, continued from previous page

responses asking to volunteer for almost all of our activities. The Executive Committee plans to contact you. Alternatively, contact us using the information for the newsletter.

Like most surveys, there's good news and bad news. Of those responding, about two-thirds (62%) indicated they were not involved with the local section. So, we still have work to do. Spread the word and read the newsletter. There's room for many more members having fun with chemistry.

Reminder

May Dinner Meeting Small-scale Gasification

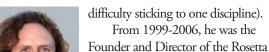
Jim Mason, PhD, Founder of ALL Power Labs

Abstract:

small-scale gasification using biomass gasifiers. The resulting gas can be used as fuel for industrial internal combustion engines that will deliver electrical generation, heat and torque. ALL Power Labs also manufactures integrated, palletized systems called Power Pallets that produce electricity from woody biomass "out of the box." Jim will describe the development of the gasifiers, integrated systems, the biomass that can be used, and some of the worldwide applications currently operating. *Biography:*

ALL Power Labs is a leader in

Jim Mason is a General Specialist working at the intersection of engineering, anthropology and information science. He is a graduate of Stanford University, with degrees in Anthropology and Philosophy, after a long tour of Mechanical Engineering (yes, he has



Project: ALL Language Archive at the Long Now Foundation – a project to create an online archive of all documented human languages, currently the largest linguistic resource

Reminder

on the web. He also directed the New Guinea Sculpture Garden at Stanford – an effort which brought 11 artists from Papua New Guinea to campus to build a permanent outdoor sculpture garden.

Jim is also the Founder and Director of The Shipyard collaborative art/build space for large scale mechanical, kinetic and electronic art. As the Founder of ALL Power Labs, Jim is focused on creating tools for distributed power generation and open source comparative research in biomass thermal conversion.

May Dinner Meeting

Date: Thursday May 16, 2013 **Time:** 6:00 p.m. Social Hour 7:00 p.m. Dinner

8:00 p.m. Presentation

Presentation: Jim Mason, PhD

Founder, ALL Power Labs "Small-scale Gasification"

Location: Biltmore Hotel & Suites

2151 Laurelwood Road Santa Clara, CA

Cost: \$26.00, Apricot Chicken or Eggplant Parmesan

Reservations: www.scvacs.org

Sally Peters, 650-854-4614

Reservations should be made by May 13th stating your name, address, company/school affiliation, and dinner selection. If you are unable to honor your reservation, please cancel by May 14th.

2013 Synopsys Championship

The award ceremony for the 53rd annual Santa Clara Valley Science and Engineering Fair, the Synopsys Championship, was held Sunday, April 7, at California's Great America. Mark Kent presented the SCV-ACS Team and Promethium Awards at the middle school ceremony, while Susan Oldham-Fritts presented the first and second place SCV-ACS individual awards at the high school ceremony.

Of the 190 incredible projects our judging team of Dr. Gary Buller, Mark

Kent, and Susan Oldham-Fritts reviewed, the following are the winners of our three section awards:

\$500 First Place Individual Award:

Arpita Singhal, 9th grade, Saint Francis High School, for Herbalism as an Anticancer and Anti-inflammatory Agent: Characterization and Evaluation of Bioavailability of Curcumin Particles

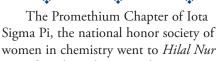
\$200 Second Place Individual Award: *Vadim Korolik*, 10th grade, Archbishop



Mitty High School, for Ground Water Treatment: Removal of Dissolved Iron

\$300 Team Award:

Roxanna Hashemi and Zahra Bismah Masood, 8th grade, Magnolia Science Academy of Santa Clara, for Drinkable or Nondrinkable?



Atesoglu, 8th grade, Magnolia Science Academy of Santa Clara, for Using Sesame Leaves as Low Cost Absorbent to Effectively Reduce Heavy Metals such as Lead, Copper and Cadmium from Contaminated Water Samples as recipient of their book award.

In addition to our special award judges, we'd like to thank the category award judges for volunteering their time and expertise. We also extend our thanks to Dr. Art DeGeus, CEO of Synopsys, and Gary Robinson and Heidi Black of the Synopsys Outreach Foundation for their continuing generous support of local science students and their teachers. Science fairs don't happen without these committed students, teachers, judges, and sponsors.

Join us in 2014 as either part of our SCV-ACS judging team or as a category judge at your local fair.



In Memoriam Marjorie K. Balazs



Marjorie K. Balazs passed away peacefully on Saturday, March 9, 2013 in St. Louis County, Missouri. Marjorie was the founder of Balazs Analytical Laboratories (1975) in Fremont, which she owned and operated for 27 years. Marge was an active member with SCV section, attending many of our dinner meetings over the years.

There was a Memorial Gathering for Marjorie on Sunday, April 21st at the Palo Alto Elks Lodge.

An obituary for Marjorie can be seen online: www. legacy.com/obituaries/mercurynews/obituary. aspx?pid=164135410

Below are a few comments from section members as well as some links to a couple interesting articles about Marjorie.

"Those of us who attended the celebration of Marjorie learned how many lives she affected with her company and her impact on the chip manufacturing in Silicon Valley as well as numerous awards - some national and some local. Those of us who thought we knew her learned there was much more to learn."-Lois Durham

"The Memorial gathering was well attended by her ex-employees, most of which are still with the 'new' company. Everyone spoke highly of Marjorie's scientific knowledge, her business sense, and her dedication to her employees." -Sally Peters

"Marjorie received the SEMI North American award in 1993 for contamination control, a safety award much earlier for recognizing some dangers of phosphine coming from thin films, an award from Ronald Reagan as a Woman Entrepreneur, headed a bay area Girl Scout council, and ran a Semiconductor Pure Water and Chemicals conference for 25 years, until 2007. She was always an adventurer, with trips to Antarctica, and the Arctic on Russian Icebreak. She visited Polar Bear country many times. She will be missed by the semiconductor industry and many people who she gave careers in analytical chemistry, helping to make chip manufacturing more efficient."-Mark Camenzind

"Marjorie Balazs Awarded Honorary Doctorate by USF." By Roberto Galemmo 7/2011 www.scvacs.org/newsletter/news1107hi.pdf

National 2013 Chemists Celebrate Earth Day Illustrated Poem Contest: Participants and Poems

The following three students will receive a certificate of participation in the SCVACS poem contest plus the chance to participate in the National contest. The national poem judging took place on April 22nd.

Mila Yoch, 8th Grade Teacher: Jay Richards Central Middle School, San Carlos Haiku

"Our Earth: Handle with Care!"

Wind pulls trash around In the sea and on the ground Surrounded by trash



Brianna Havens, 9th Grade
Teacher: Heather Rottenborn
Ann Sobrato High School, Morgan Hill
"Weight of the World"

There's no doubt Earth is rich
Rich in many ways,
In air, water, waste
Trash is littered everyday
We can't feel it,
Poor Earth can
Next time you have trash
Just think of lifting weights
Litter is weight on Earth



Malaya Redding Lapuz, 2nd Grade Teacher: Aura Bartok-Tello Adelante, Redwood City

"Mother Earth"

I love mother Earth.
She's pure, good, strong and loving.
She is my true home.





Happy Mother's Day

Welcome to the Santa Clara Valley Section of ACS

Each month the section receives a spread-sheet from national ACS with the names of members new to our section. The members are either new to ACS, have transferred in from other areas, or are the newest members — students. To welcome you to the section and get to know you, the Executive Committee offers new members a free dinner! To encourage you to attend a monthly section dinner meeting, we would like you to be our guest. When you register, make certain to mention that you are a new member and you and a spouse (or friend) will be our guests.

The dinner meetings are often the 3rd Thursday of the month at a local spot, somewhat convenient to the entire section. If you are unable to attend in the evening, perhaps you would join us for an outreach event, like judging a science fair, participating in the Chemistry Olympiad, or a National Chemistry Week event in October. Then, there is our annual wine tasting and awards picnic in July. The local section is a volunteer organization. Please attend an event, volunteer to help, and get to know your local fellow chemists. Welcome!

New Members List for April

Surl-Hee (Shirley) Ahn Rob Arathoon Danial Ray Beaudry Sarah Breed Dr. Kristi Budzinski Janessa E. Cariaga Travis Cervantez Dmytro Danylov Thanh Dao Dr. David J. Edwards Lubayna S. Elahi Dr. Jay Dell Feldman Daniel V. Fishlock

Darin Hildebrandt
Dr. Michelle Louise James
Erik Johnson
Dr. William Kennedy
Miss Myeonghui Kim
Michael Koehler
Amy Kuhn
Jenny La
Rich La
Quan N. Lam
Dr. Hsiau-Wei Lee
Michael Milligan
Melissa Mun

Richard T. Ngo
Thien Anh N. Nguyen
Wayne Paul Schammel
Jacob M. Schekman
Geeta Singh
Rae Ana Snyder
Dr. Claudiu Andrei Stan
Ngoc B. Tran
Sharat Bharat Varma
Kailiang Wang
Allison Yee
Dr. Do Yeung Yoon

Dr. Michael Anthony Sweeney, 46-Year SCU Chemistry Professor, Discovered Isotope at Cal

Michael Anthony Sweeney of Santa Cruz, California, died in his home on March 26, 2013 of pancreatic cancer. He was 81. Sweeney joined the chemistry faculty at Santa Clara University in 1966, and taught until the fall of 2012. In 2001 he was named professor emeritus. Prior to teaching, he worked as a research chemist for Standard Oil (now Chevron), and he also rose to the rank of 2nd Lieutenant while serving in the US Air Force.

Sweeney was born on December 5, 1931 in Los Angeles, California to James Robert Sweeney and Ruth (Bauter) Sweeney. His father was a film editor for Columbia Pictures in Hollywood, whose credits include Jean Renoir's "The River," Ann Margaret films, and "Three Stooges" films. He was an early member of ACE, American Cinema Editors.

He attended Loyola High School, and in 1953 graduated cum laude from Loyola Marymount University (then, Loyola University). He earned his masters and doctorate in radiation chemistry from the University of California at Berkeley in 1962. The research for his PhD thesis, "Radiation chemistry of isopropyl compounds," was directed by Amos Newton and Nobel laureate Glenn Seaborg at the Lawrence Berkeley Lab where Sweeney also operated a cyclotron. During that period he was credited along with two other scientists with discovery of the isotope rhenium-181.

He performed research and published scientific articles throughout his career. In conjunction with NASA-Ames, he studied the area of abiotic biosynthesis - the origin of organic molecules on the early earth and solar system, the formation of organic molecules resulting from radiation fluxes, and carbonaceous chondrite chemistry. His investigation into the radiation levels of the primitive Earth atmosphere added to our understanding of the origin of life.

In 1966, Sweeney began teaching

chemistry at Santa Clara University, a position he called, "the best job I've ever had." Students from his first graduating class presented him with a pamphlet titled, "Sweeney's Similes," in which they had recorded many of the analogies from his lectures for which he was well known. Ten of his first eleven chemistry majors went on to earn their doctorates in chemistry, the eleventh, a JD. Several of these students reached out to Sweeney during his final weeks, offering gratitude for his inspiration. Examples of his colorful analogies from "Sweeney's Similes" are:

" As_2O_3 as a reducing agent needs a trace of an iodine-containing compound (ICl). It's like I want someone beat up, but I don't want to do it myself, so I send one of you to do it."

"A barber is an oxidizing reagent with respect to hair. He does not lose it, the barbee does."

Interested in genealogy, Sweeney verified that he was a nephew of Elihu Anthony, one of the founders of the town of Santa Cruz. Anthony created the first foundry and general store in Santa Cruz, helped build the road to San Jose, and first used the term, "The little city by the sea." A historical marker with Sweeney's name will be placed in the Anthony area of the Santa Cruz Memorial Park on Ocean Street.

Sweeney remained in close contact with a group of friends from St. Ambrose

Elementary School in Los Angeles. Some he knew from as far back as first grade. They were fondly known as, "The Lads," and they had lifelong adventures together.

During his semiretired years, he traveled throughout Ireland, renting a house on Galway Bay in the town of Spiddal, his "home away from home," where he was warmly received. Friends and family who made the trip over to visit were enthusiastically welcomed. He treated them to his knowledge of the region and tours of the countryside including pubs that featured traditional Irish music.

Sweeney is survived by three children: Matthew and his spouse, Kelly; Anna and her spouse, Brett; Daniel and his spouse, Sandra, and their two children, Jonathan, 8, and Sophia, 6. Sweeney adored and was adored by his grandchildren. He also had two nephews, Mark and Christopher, and two nieces, Kathleen and Jennifer from his younger brother, Terrence, who died in 2003.

A memorial service was held at Mission Santa Clara on April 11. A reception followed at the Arts and Science Building on the Santa Clara University. His ashes will be laid to rest in Ireland by his children.

In lieu of flowers, the family requests that a charitable donation be made to:

Santa Clara University, The Chemistry Dept., in Memory of Michael A. Sweeney, University Relations, 500 El Camino Real, Santa Clara, CA 95053; or via the web at: www.scu.edu/give/

The donations will be awarded to a chemistry major who demonstrates interest in a teaching career, and also has a sense of humor.





44th Western Regional Meeting The Many Elements of Chemistry! October 3-6, 2013 Santa Clara, CA

Co-hosted by the California and Santa Clara Valley Sections

An exciting technical and event program is planned for the 44th Western Regional meeting to be held at a great venue in the Silicon Valley-San Francisco Bay area. Highlights of the meeting will include a Nuclear Chemistry Symposium in honor of Priestley Medalist Dr.

Darleane Hoffman of UC Berkeley and Lawrence Berkeley National Laboratory, and the Cope Scholar Symposium in honor of Dr. Sarah Reisman of the California Institute of Technology. For updated information please see www.wrm2013.org.

We encourage scientists at all levels to submit papers and posters as soon as possible as space is limited. <u>The closing date for submissions is Friday, August 23, 2013.</u> The closing date for early registration is Thursday, September 12th. For details on early registration and submission of papers and posters, please see the website above.

The location is at the Hyatt Regency Santa Clara, convenient to the San Jose International Airport, where a special \$139/night room rate has been arranged, which includes free wifi and free parking.

The wide-ranging technical program offers something for everyone, from traditional areas to more specialized programs. Planned sessions include:

Analytical Chemistry
Biochemical Technology
Biofuels
Chemical Safety
Entrepreneurship
Environmental Chemistry
Ethnobotany

Ethnobotany Fuel Chemistry Hydraulic Fracking
Inorganic Chemistry
Chemistry and the Law
Medicinal Chemistry
Nanomaterials
Natural Products
Nuclear Chemistry

Organic Chemistry
Organometallic Chemistry
Pharmaceuticals
Physical Chemistry
Polymer Chemistry
Process Chemistry
Renewables

Solar Chemistry

44th WRM

There will also be several programs for educators at the high school and college levels. Workshops in Career Development, Leadership Development, Safety and a special workshop in Polymorphs and Salt Selection, co-hosted by CACO-PBSS, are scheduled. Poster sessions are being scheduled throughout the meeting.

There will be a large Exhibition with commercial vendors and university graduate school representatives and will include small group presentation opportunities. Vendor early registration closes July 1. Early registration is recommended as space may become limited. Please see www.wrm2013.org for more information.

Special evening events will include the regional awards banquet featuring a talk by Priestly Medalist Dr. Richard Zare, an evening with Dr. Charles Bamforth on beer chemistry, and an evening with Shirley Corriber and Dr. Sara Risch on flavor chemistry. Luncheons with ACS President Dr. Marinda Wu sponsored by the California Section WCC and an ACS Governance lunch meeting with members of the Board of Directors are also planned. A Sunday public outreach event at the nearby Great America Theme Park is also in the works!

Make your plans now to join us for a great meeting, and don't forget to submit your paper or poster!

Highlights of the Chemistry Olympiad National Exam at Santa Clara University April 13th







Highlights of the March 21st Dinner Meeting



Kenzie Hong; Aaqilah Brown; Linh Tran



Ean Warren; Jim McClure: Peter Rusch; George Lechner



David Parker; Steve Bachmann; Stephanie Bachmann



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George Lechner; Irina Pozdnyakova







To receive an email when our newsletter is published on our web site, sign up at: http://www.scvacs.org/newsletter/

SANTA CLARA VALLEY SECTION

	Officers

Director

Liang Cao

Chair	Peter Rusch	650-961-8120	pfrusch@aol.com	
Chair Elect	Ean Warren	650-329-4554	ewarren@scvacs.org	
Past Chair	Natalie McClure	650-906-7831	nmcclure@drugregulatoryaffairs.com	
Secretary	Karl Marhenke	831-688-4959	karlmar@armory.com	
Treasurer	Ihab Darwish	650-594-1654	darwishis@yahoo.com	
Councilors				
2011-2013	George Lechner	408-226-7262	glechner@aol.com	
2011-2013	Herb Silber	408-924-4954	hbsilber@science.sjsu.edu	
2012-2014	Abby Kennedy	209-640-2005	akennedycali2007@yahoo.com	
2012-2014	Ean Warren	650-329-4554	ewarren@scvacs.org	
2013-2015	Linda Brunauer	408-554-6947	lbrunauer@scu.edu	
2013-2015	Sally Peters	650-854-4614	sallybrownpeters@gmail.com	
2013-2015	Peter Rusch	650-961-8120	pfrusch@aol.com	
Alternate Councilors				
2011-2013	Mark Kent	408-736-0989	marklent@yahoo.com	
2011-2013	Harry Ungar	831-708-2049	haungar@cruzio.com	
2012-1014	Lisa Milstein	510-624-4019	lisa.milstein@balazs.com	
2012-2014	David Parker	408-615-4961	drdrparker@comcast.net	
2013-2015	Stephanie Bachmann	408-429-9681	s_gehling@hotmail.com	
2013-2015	Lois Durham	650-322-3507	ldurham9398@sbcglobal.net	
2013-2015	Natalie McClure	650-906-7831	nmcclure@drugregulatoryaffairs.com	
Newsletter				
Editor	Nathaniel Zuckerman	408-802-7443	nathanielzuckerman@gmail.com	
ChemPloyment Abstracts				

liang.cao@aol.com

FUTURE MEETINGS

May 16	Santa Clara Valley Section Meeting
	Jim Mason, ALL Power Labs
	Biltmore Hotel & Suites
	Santa Clara, CA

Jun 23-27 43rd National Organic Symposium

Seattle, WA

www.organicdivision.org/ama/orig/NOS/index.html

Jul 13 Annual Family Picnic and

Awards Ceremony
Department of Chemistry
Stanford University

Jul 21-24 Northwest Regional ACS Meeting

Corvalis, OR

www.norm13.org/ACS_Norm13/Home.html

Oct 2-5 Western Regional Meeting

Santa Clara, CA www.wrm2013.org