

Silicon Valley Chemist

Santa Clara Valley Section

American Chemical Society

Volume 24 No.12

The Elements of Leadership: Chemical Demonstrations With a Theme!

2002 Harry and Carol Mosher Awardee

Professor C. Marvin Lang

The 2002 Harry and Carol Mosher Award will be presented to Professor C. Marvin Lang on January 17, 2003 at our monthly dinner meeting in the Biltmore Hotel in Santa Clara. The evening will include a dinner (make your reservation early, seating is limited), the Award address by Professor Lang, and a chemistry demonstration. The address and the demonstration will take place in an adjacent hall to the dining room.



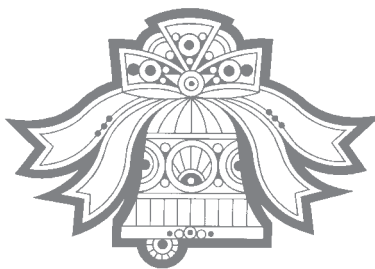
of England. Each of us could add a name to the list of renowned leaders in government, medicine, theology, law, etc., who had prior significant experience with chemistry. What characteristics do they have in common?

Dr. Lang's extensive biography has been published already – see the August 2002 issue!

Abstract

Chemical professionals are leaders! They are immersed in challenging and intriguing problems. They identify and solve problems. In fact, there are some that claim, "Chemistry is the problem!" How is it that individuals interested in chemical phenomena, over many modern generations, have often held positions of great importance? In the last century Herbert Hoover was a chemical engineer before becoming President of the USA. Margaret Thatcher was an analytical chemist before her tenure as Prime Minister

The Harry & Carol Mosher Award addressee will present thoughts and ideas on the subject "What are the characteristics of a successful leader?" For example, "How do ordinary people perform extraordinary feats?" "What motivates and inspires leaders to rise above themselves and get others to follow?" "What roles do self-discipline, honor and integrity play in leadership?" These questions prompt answers and comments that will be punctuated with pertinent and inspiring chemical demonstrations!



January Dinner Meeting

Date: January 17, 2002

Time: 6:00 Social hour
Sponsored by Peters, Verry Jones, and Schmitt, LLP
7:00 Dinner
8:00 Lecture

Location: Biltmore Hotel & Suites
2151 Laurelwood Road
Santa Clara, CA 95054
408-988-8411

Speaker: Dr. C. Marvin Lang
Lecture and chemical demonstration

Cost: \$27.00 with the choice of Grilled salmon or wild mushroom stuffed manicotti

Reservations: www.scvacs.org
Shirley Radding
408-246-2564
408-296-8625 Fax

Reservations should be made by January 13th, stating your name, company affiliation, number of people in party, and menu selection.

If you are unable to honor your reservation, you will be invoiced following the dinner meeting. Reservations are not needed for attending the lecture only.

Chair's Message

Here is the update on National Chemistry Week (NCW) as promised in my last message. It was a great success! All of our events went well. I was at the Menlo Park slime event for kids at the La Entrada School soccer fields. We made a lot of slime, and the kids had a lot of fun.

I'd like to thank Asfia Qureshi for doing a fine job of organizing and coordinating all of the section's NCW events. And, thanks to the folks who volunteered and made each event such a success.

I wish everyone a happy and safe holiday season. Our first meeting of the new year will celebrate the Harry and Carol Mosher Award winner for 2002: Dr. C. Marvin Lang of the University of Wisconsin. The dinner meeting will be on Friday, January 17th at the Biltmore Hotel. We are

fortunate that Dr. Lang, a renowned chemical demonstrator, will put on a show at Santa Clara University on Saturday, January 18th (check our web site for details). It should be a great time, so bring the whole family.

This is my last Chair's message. Writing them has been a rewarding experience as has been Chairing the section. I am glad to have had the opportunity. However, I am also glad to be finishing up and passing on these responsibilities to Maureen Scharberg, our new Chair. I know Maureen will do a great job.

Certainly, Laura Jarvis, our Newsletter editor, will breathe a sigh of relief, as Maureen's messages will not test Newsletter deadlines as much as mine. Have a great holiday week - see you next year!



The whole team gets to work.



Youngest slime maker, Sarah Touster, and her Dad.



Morning slime crew.



Afternoon slime crew.

DON'T MISS World Famous Chemical Demonstration - January 18, 2003 -

Do not miss the Lang and Showalter Chemical Demonstration Show on Saturday, January 18, 2003 at Santa Clara University. This show is renowned on the national and international stage. Nationally, this show was presented at places like The U.S. Congress, The Smithsonian and The EPCOT Center.

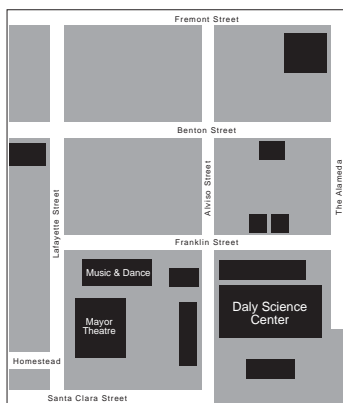


Internationally, Professor Lang presented similar demonstrations in countries like Finland and Russia. Professors Lang and Showalter gave our section a presentation at Stanford University in 1989. Do not miss this one or you may have to wait another 13 years to the next one!

Professor Donald Showalter is the Professor who nominated Dr.

Lang for the Mosher's Award. He is a Professor of Chemistry at University of Wisconsin, Stevens Point. He will be the one who will do the introduction of Professor Lang on Friday at the dinner. He works together with Dr. Lang in the presentation of the Chemistry Shows. Often, Professor Showalter has been referred as the "Side kick".

The Saturday Chemical show will begin promptly at 2:00 pm in the Daly Science Center on the Santa Clara University Campus.



Patent Truths: Kid Stuff

I have found some great web sites for the kid in all of us. Some of the information below is summarized from these sites

(<http://inventors.about.com/library/inventors/bltoy.btm> and <http://inventors.about.com/library/inventors/bltoy.btm>).

1. "LINCOLN LOGS" were invented by John Lloyd Wright in 1916. Wright was the son of the famous architect, Frank Lloyd Wright, and claimed he was inspired by the interlocking foundation of the Imperial Hotel (the earthquake proof building) in Tokyo, Japan. (The day the Imperial Hotel opened in 1923, the massive Tokyo earthquake and fire destroyed all buildings for miles. But the hotel survived intact and operating.) By 1975, more than a million sets of LINCOLN LOGS were being sold annually (<http://www.ideafinder.com/history/inventions/lincolnlogs.btm>).
2. The modern plastic Frisbie® was invented by Walter Morrison (U.S. Patent No. 3,350,67). The Frisbie Baking Company of Bridgeport, CT sold pies to local New England colleges – including Yale University. The metal pie tins were sailed by Yale students. Students would yell "Frisbie" when someone was about to be hit by the sailing metal tin (like "fore" in golf). The plastic Frisbie® was popularized by Wham-O of Southern California.

Morrison received more than \$1,000,000 in royalties from two USC graduates, Rich Knerr and Spud Malin, the founders of Wham-O (<http://www.airfairways.com/history.btm>).

3. The modern Hula Hoop® was really not protected by patent and sales were subject to cut-throat competition. Research chemists Paul Hogan and Robert Banks of Phillips Petroleum in Oklahoma invented MARLEX® plastic, a blend of crystallized polypropylene and high-density polyethylene (HDPE), U.S. Patent No. 2,825,721 (see National Inventors Hall of Fame at <http://www.invent.org>). Twenty million hula-hoops were sold (by Wham-O) in 6 months in 1958 for \$1.98. It was a great use for this new polymer (<http://inventors.about.com/library/inventors/blbulaboop.btm>).
4. SILLY PUTTY® was invented by James Wright at GE's New Haven, CT labs. Boric acid and dimethyl silioxane produced a novel goo that bounced further than rubber. But, no one could find a practical use for this unusual product. In 1949, unemployed advertising man Peter Hodgson saw "nutty putty" at a party. He borrowed \$147, bought the production rights from GE, and produced the elastomer. It was packaged in plastic eggs and sold just before Easter. It was an instant

hit - first, with adults and later, with kids. When Hodgson died in 1976, he left an estate of over \$140 million (<http://web.mit.edu/invent/www/inventorsAH/sillyputty.html> and http://sillyputty.com/history_101/timeline/timeline.btm).

5. PLAY-DOH® was invented by Joseph and Noah W. McVicker in 1956 and they received U.S. Patent No. 3,167,440 issued in 1968. It really is based on a well-known wallpaper cleaner formulation used in the East to remove residual winter coal and fuel dust. The similarity to modeling clay without toxicity made a great toy. Joe McVicker became a millionaire before his 27th birthday (<http://inventors.about.com/library/inventors/blplaydob.btm>).
6. "KOOSH® BALL" was patented (U.S. Patent No. 4,756,529) by Scott Stlinger of Campbell, CA in 1971. It is a series of elastic strings connected at the center by elastic. In the Silicon Valley, the KOOSH® BALL was a favorite toy to be thrown from one office into the adjacent cubical in the open office environment of most startup companies (<http://www.yesterdayland.com/popopedia/shows/toys/ty1198.php>).

My wife, Sally, read this draft and said, "You can really tell a guy wrote this column."

Howard M. Peters, Copyright © 2002



2003 ACS - SCVS Election Results

CHAIR-ELECT: George Lechner

SECRETARY: Karl Marhenke

TREASURER: Hong Gao

COUNCILORS (2003-2005)

Maureen Scharberg

John Riley

Ean Warren

ALTERNATE COUNCILORS (2003-2005)

David Parker

Laura (Rasay) Jarvis

Asfia Qureshi

Voluntary Membership It Helps

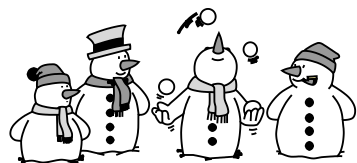
Many of you have already received your membership notice from ACS National. In addition to renewing your membership and journal subscriptions, we hope you contribute to your local section by paying the voluntary dues. For your \$12, you get all the programs your local offers including this newsletter, monthly dinner meetings, recognition of your fellow chemists through awards, support for local schools teaching chemistry, and outreach programs such as National Chemistry Week.

The volunteers of the local section would like to thank you for your generosity.

2002 ACS Western Region Outstanding High School Teacher Award



Maureen hands over the 2002 ACS Western Region Outstanding High School Teacher award to Gareth Wong. In the next issue of the newsletter hear more about the Teacher's Workshop celebrating National Chemistry Week.



Editor's Corner

Happy Holidays! I wish everyone happy and safe travels as well as a relaxing time with family and friends. In this month's issue, you will not see a Technical Division Column. I had gotten married on October 27th and spent most of the October making final preparations. Thus, by the November 10th deadline, I had no time to work on the column for the issue. I hope to have something for the column in the next issue. Until then, happy holidays!



Happy Holidays!

Call for Volunteer Judges and Assistants

Dr. George Washington Carver
Reconition Day Science Fair and Carver
Kidvention

Date: Saturday January 4, 2003

Time: 8 am - 1:30 pm (includes continental breakfast/coffee and lunch)

Location: Santa Clara Convention Center

The local section has assisted these important events for the past four years; now, you can too! If you can help, please contact Dr. Howard Peters as soon as possible for more information (peters4pa@aol.com or 650-324-1677 Extension 3).

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www.gatewaychemical.com • rjkaufman@aol.com



CHEMEMPLOYMENT ABSTRACT 3703

Position Title: Analytical Chemistry Associate

Job Description: Will run HPLC and GC methods for research and QA/QC analyses of products. Will also be responsible for methods validation & custodianship of the HPLCs, GCs, and NMR.

QUALIFICATIONS DESIRED

Education: BS/MS in Chem or Analytical Chemistry
Experience: At least 2 years applicable pharmaceutical industry exp required. Exp with methods of chiral analyses (CE or HPLC) & some familiarity with NMR/MS and/or GLP/GMP desirable. Must be detail-oriented, flexible and have good verbal and written communication skills.

LOCATION, SALARY, MAIL ADDRESS

Location: Redwood City, CA
Salary: Depends on experience
Description of Employer: Wholly-owned subsidiary of Maxygen, Inc. Provider of high-value chemical products and services to the worldwide life science & fine chemical industry.

Application Instructions:

Email resume, referencing Job #CDX-273 to jobs@maxygen.com or mail to: Maxygen, Inc.
Human Resources Job #CDX-273
515 Galveston Drive
Redwood City, CA 94063.
Visit our website at www.maxygen.com for further information.

CHEMEMPLOYMENT ABSTRACT 3704

Position Title: Analytical Chemist

Job Description: Will develop and implement HPLC/GC methods for research and QA/QC analyses of products. Will also be responsible for optimizing lab for analytical support as well as selecting & installing new additional analytical instrumentation & capabilities.

QUALIFICATIONS DESIRED

Education: MS/PhD in Chem or Analytical Chemistry
Experience: At least 5 years pharmaceutical exp with methods of chiral analyses (CE or HPLC) and mass spect. Familiarity with GLP/GMP desirable. Must be flexible, detail-oriented and have excellent verbal and written communication skills.

LOCATION, SALARY, MAIL ADDRESS:

Location: Redwood City, CA
Salary: Depends on experience
Description of Employer: Codexis is a wholly-owned subsidiary of Maxygen, Inc. and is a provider of high-value chem products and services to worldwide life science fine chem industry.

Application Instructions:

Email resume, referencing Job #CDX-274 to jobs@maxygen.com or mail to: Maxygen, Inc.
Human Resources, Job #CDX-274
515 Galveston Drive
Redwood City, CA 94063
Please see our website at www.maxygen.com

CHEMEMPLOYMENT ABSTRACT 3705

Position Title: Process Chemist

Job Description: Will research, develop, and validate processes for prep & scale-up of pharmaceutical chemicals using biocatalysis.

QUALIFICATIONS DESIRED:

Education: PhD in Organic or Process Chemistry
Experience: Expertise in synthetic or enzymatic methods for production and/or resolution of chiral molecules required. Pharmaceutical industry experience desirable.

LOCATION, SALARY, MAIL ADDRESS:

Location: Redwood City, CA
Salary: Depends on experience
Description of Employer: Codexis is a wholly-owned subsidiary of Maxygen, Inc. and is a provider of high-value chem products and services to worldwide life science and fine chemicals industry.

Application Instructions:

Email resume, referencing Job #CDX-275 to jobs@maxygen.com or mail to: Maxygen, Inc.
Human Resources Job #CDX-275
515 Galveston Drive,
Redwood City, CA 94063
Please see our website at www.maxygen.com.
CHEMEMPLOYMENT ABSTRACT 3706

CHEMEMPLOYMENT ABSTRACT 3707

Position Title: Electrochemist or Electroanalytic Chemist for Nanotechnology Team

Job Description: NASA Ames Research Center is looking for an electrochem or electro-analytical chem to join a cross-disciplinary nanotechnol team for development of biosensors. NASA's world-class nanotechnol group, in collaboration with National Cancer Institute, is developing nanotechnol-based biosensors for cancer diagnostics for use in space missions.

QUALIFICATIONS DESIRED

Education: BS or M.S. degree in Chemistry
Experience: Research exp in electro-chem, surface chem, and/or bioanalytical chemistry are favored. Dedicated researchers with strong motivation & hands-on exp are highly desired. U.S. Citizenship or permanent residency is required

LOCATION, SALARY, MAIL ADDRESS

Location: NASA Ames Research Center, Moffett Field (Mountain View) CA
Salary: Salary commensurate with exp
Description: Opening is a contract position, working at NASA Ames Research Center thru ELORET Corporation, a research and engineering firm providing contract and consulting services to clients in government, industry, and academia.

Application Instructions:

Interested candidates should forward a resume and statement of interest to Dr. Jun Li at jli@mail.arc.nasa.gov.

CHEMEMPLOYMENT ABSTRACT 3708

Position Title: Chemical Engineer (through June 30, 2003)

Job Description: Seeking an experienced Chemical Engineer to work on an instruments development project through 6-30-03. Duties include acting as primary chemical engineering resource working with engineering design team to develop two robust instrument products. Designing test plans (real and simulated chemical reactions) to evaluate the functionality and ergonomics of instruments. Performing system testing/validation according to test plans, running required chem reactions to assess performance. Analyzing results and making engng recommendations on performance issues Creating test reports to document results of instrument testing.

QUALIFICATIONS DESIRED

Education: BS or equivalent degree in Chemical Engineering
Experience: 2-5 yrs exp in design executing test plans to validate performance of instrumentation/control systems 2-5 years exp designing high-pressure systems with heat and mass transfer analysis knowledge. Familiar with safe lab practices. Excel proficient Experience designing instrumentation for chemical, life science or pharma industries a plus.

Application Instructions:

Contact: Argonaut Technologies, Inc.
Send resume to: hinfo@argotech.com

Position Title: Scientist/Immuno Chemist Bioanalytical Research & Development

Job Description: Use your expertise in bioanalytical assay development/implementation to support non-clinical & clinical studies of recombinant biopharmaceuticals. Measure drug levels, detect antibodies directed against therapeutic drug, & assess pharmacodynamic biomarkers in biological matrix.

QUALIFICATIONS DESIRED

Education: Requires PhD in Cell Biology, Immunology or equivalent.
Experience: Technical proficiency, 3-5 years of exp, & knowledge of immunochemical assay design, development & optimization fundamentals are required. Excellent organization, communication & interpersonal skills are necessary and experience with a broad range of assay formats is desired.

LOCATION, SALARY, MAIL ADDRESS

Location: South San Francisco
Description: Genentech is at the forefront of the biotech industry, using human genetic information to discover, develop, commercialize and manufacture biotherapeutics

Application Instructions:

Refer to Job # 02-0005256 and apply online at www.gene.com

CHEMEMPLOYMENT ABSTRACT 3709

Position Title: Research Scientist

Job Description: Responsible for synthesis & development of processes used in the manufacturing of electro & photoactive materials.

QUALIFICATIONS DESIRED

Education: PhD in organic/organometallic chemistry.
Experience: At least 3-5 yrs of hands on bench synthesis exp, extensive exp with air-sensitive organometallic reagents.

LOCATION, SALARY, MAIL ADDRESS

Location: Fremont
Salary: Competitive salary & benefits
Description of Employer: Nanotechnology/Nanomaterials company

Application Instructions: Send resume to:

UltraPhotonics
Human Resources
48611 Warm Springs Blvd.
Fremont, CA 94539
FAX: 510-683-4661
Email: Jobs@ultraphotonics.com

CHEMEMPLOYMENT ABSTRACTS 3710

Position Title: Research Assistant/Synthetic Chemist

Job Description: Responsible for the synthesis of new organic & organometallic compounds

QUALIFICATIONS DESIRED

Education: BS/MS Chemistry
Experience: at least 5-7 yrs of industrial exp performing synthetic chemistry

LOCATION, SALARY, MAIL ADDRESS

Location: Fremont
Salary: Competitive salary & benefits
Description of Employer: Nanotechnology/nanomaterials company

Application Instructions: Send resume to:

UltraPhotonics
Human Resources Dept.
48611 Warm Springs Blvd.
Fremont, CA 94539
FAX: 510-683-4661
Email: jobs@ultraphotonics.com

EMPLOYMENT HELP IN OTHER AREAS OF CALIFORNIA

The following are names and addresses of contacts in other California Sections. You may write to them or call to find out how to receive their job listings or how to place a job listing with them. Do not send self-addresses envelopes unless requested to do so.

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Mrs. Nancy Gephart
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49 Quail Court
Walnut Creek, CA 94596
925-287-8055
e-mail: office@calacs.org

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Santa Barbara
Santa Barbara, CA 93106-9510
e-mail: lamb@chem.ucsb.edu

Mojave Desert Section

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e-mail: zarrasp@navair.navy.mil

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916-927-7006 FAX

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Renate Valois
619-260-4513
619-260-2211 FAX
e-mail: pascal@acusc.edu

San Gorgonio Section

Valerie Barrett
Sunkist Growers
e-mail:
vbarrett@sunkistgrowers.com

Southern California Section

Send a self-addressed, 55 cent stamped business envelope to:
ACS job listing
14934 South Figueroa Street
Gardena, CA 90248
310-327-1216
e-mail: office@scalacs.org
www.scalacs.org/employ.html

Season's
Greetings





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CHEMPLOYMENT ABSTRACTS



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Director: **Shirley B. Radding** 408-246-2564 sradding@att.net

FUTURE MEETINGS

- | | |
|------------------|---|
| Jan 17 | SCV Dinner Meeting <i>Dr. C. Marvin Lang</i> Mosher Awardee |
| Jan 18 | Chemistry Demonstration <i>Dr. C. Marvin Lang</i> University of Santa Clara |
| Feb 2-3 | Process Chemistry in the Pharmaceutical Industry San Juan, PR |
| Feb 1-5 | 50 Years On: From the Double Helix to Molecular Medicine |
| Feb 20 | SCV Dinner Meeting <i>Juanita Ryan</i> Antarctica Research |
| Feb 23-26 | Polymorphism in Crystals Tampa, FL |
| Mar 13 | SCV Dinner Meeting <i>Dr. Thomas Okarma</i> Stem Cell Research |
| Mar 23-27 | ACS Spring National Meeting New Orleans, LA |

For the latest information, please visit
SCV/ACS web site: www.scvacs.org



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