

# Silicon Valley Chemist

Santa Clara Valley Section

American Chemical Society

Volume 25 No. 10

## November Dinner Meeting The Lure of the Solar Eclipse

Dr. Karl Marhenke

### Abstract

What are the necessary conditions for a solar eclipse? How rare are they? Why are there different types of solar eclipses? Why do people have to chase them in order to see them? Why do eclipse chasers spend so much time and money for something that lasts such a brief time?

Come and learn something about our sister science of astronomy, and see some nice shots from two (1992 and 2002) of Karl's eclipse trips.

### Biography

Karl Marhenke has been the Santa Clara Valley Section Secretary since 1989, a chemistry instructor at Cabrillo



College in Aptos since 1965, and an eclipse chaser since 1970, when he saw his first total solar eclipse in Mexico. Since then he has chased total eclipses in 1972 (Canada), 1973 (Africa), 1974 (Australia), 1976 (Australia), 1979 (Canada), 1980 (Africa), 1991 (Mexico), 1998 (Caribbean Sea), 1999

(Black Sea) and 2002 (Australia), getting clouded out only once, for a batting average of 0.900. He has seen annular ones in 1973 (Mexico) and 1992 (Mt. Palomar). He has given eclipse lectures at Cabrillo numerous times, and he has prepared a special one for us in 2003.

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## Chair's Message

This month celebrates National Chemistry Week (NCW), Oct. 19-25th. As you probably know by now, this year's theme is "Earth's Atmosphere and Beyond". Our section has planned a variety of activities as described in the last few months' newsletters. Asfia Qureshi has worked very hard this year to provide you with two opportunities to celebrate NCW with local section members and our community. Please plan to join us on Friday, October 24th, at the Minolta Planetarium at De Anza College for a

special screening of "Clouds of Fire: The Origin of Stars." Then, on Saturday afternoon, October 25, we will host a NASA Scientists Seminar Series in tribute to the innovators and pioneers of aviation and the atmosphere. Both events require registration. Please see this newsletter for more information on these two activities as well other NCW events.

National Mole Day (October 23 from 6:02 AM to 6:02 PM) is also during NCW.

*continued on next page*

## November Dinner Meeting

**Date:** Thursday, November 20, 2003

**Time:** 6:00 PM Social Hour  
7:00 PM Dinner  
8:00 PM Lecture

**Location:** Biltmore Hotel & Suites  
2151 Laurelwood Blvd  
Santa Clara, CA 95054

**Speaker:** Dr. Karl Marhenke  
Cabrillo College

**Cost:** \$27.00 with the choice of Teriyaki Steak or Pasta Primavera  
Wine included with dinner

**Reservations:** [www.scvacs.org](http://www.scvacs.org)  
Shirley Radding  
408-246-2564  
408-296-8625 Fax

Reservations should be made by November 17th, stating your name, address, company affiliation, number of people in party, and menu selection.

If you are unable to honor your reservation and do not cancel by Wednesday 19th, you will be invoiced following the dinner meeting.



Chair's Message, continued from previous page

For those who teach chemistry, celebrating National Mole Day can create quite an interesting reaction in your classroom! A member from the California Section contacted me to inquire if we had an active Younger Chemists Committee (YCC). After some research, I determined that we do not currently have a chair for our local section YCC and thus, no YCC activities. Therefore, a volunteer opportunity exists to lead our section's YCC and to collaborate with the California Section as they also try to create an active YCC. If you are interested, please contact me.

Looking ahead to November, our dinner speaker will be our dedicated SCV-ACS Secretary, Dr. Karl Marhenke. I am delighted that he will be sharing his stories on chasing eclipses all over the world. On occasion, he has shared his adventures with the Executive Committee. Many of us urged him to share them with the entire section and he agreed! I hope you can join us at the November dinner meeting. This will be our last dinner meeting of 2003.

And, finally, please don't forget to cast your ballot for the 2004 SCV-ACS election. Your ballot was included in the September 2003 Newsletter. You will need your ACS membership number to make your completed ballot valid. To find your membership number (if you have misplaced your membership card), it's on your CE&N mailing label, directly above your first name. – copy the numbers up to the space. If you are unsure, copy all of the digits above your name. All ballots must be received by October 22, 2003.



# Earth's Atmosphere and Beyond!

National Chemistry Week – October 19-25, 2003

## Clouds of Fire

Friday October 24, 2003 6-9pm

What is a star? Are all stars the same? How do stars shine? Find out the answers to these questions and explore the connection between the formation of stars and the formation of everything else in the universe - from galaxies to planets to human beings. Join us for a fun filled evening at the Minolta planetarium for this astronomy star show designed for all members of the family to enjoy. Telescopes may be available after the presentation, if weather conditions permit. Light refreshments will be provided.

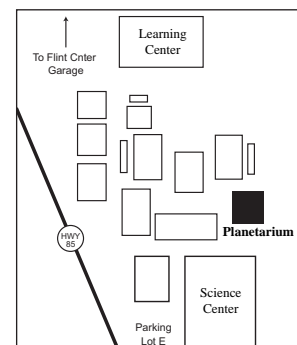
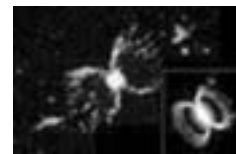
Time: 6:00 PM Social hour and hors d'oeuvres  
7:30 PM Show

Location: Minolta Planetarium  
De Anza College  
21250 Stevens Creek Boulevard  
Cupertino CA 95014

Parking: \$2.00 in quarters  
in any student parking lot  
(Parking lot E is closest)  
Look on our website for  
a map of DeAnza College

Cost: \$8.00 adults  
\$6.00 children, seniors

Reservations: [www.scvacs.org](http://www.scvacs.org) or  
Shirley Radding  
408-246-2564  
408-296-8625 Fax  
(no later than Monday, October 20th)



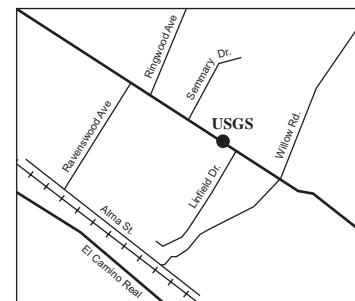
## Honoring Innovators and Pioneers in Aviation and the Atmosphere

Saturday, October 25th "NASA Scientists Seminar Series"

Join us for a fascinating afternoon of insightful lectures given by several distinguished scientists from NASA Moffett Field on topics ranging from astrochemistry to astrobiology to pre-earthquake phenomena to Mars soil analogs found in Northern Chile. The speakers' biographies and abstracts have been profiled in our newsletter over the past couple of months and the talks are guaranteed to be "out of this world".

Time: 1:00 PM – 4:30 PM  
Location: United States Geological Survey  
345 Middlefield Road, Menlo Park  
Building 3 Conference Room  
Cost: Free but please RSVP so we can  
plan for the refreshments.  
Sponsored by the Santa Clara  
Valley ACS

Reservations: [www.scvacs.org](http://www.scvacs.org) or  
Shirley Radding  
408-246-2564  
408-296-8625 Fax  
(no later than Monday,  
October 20th)



# Councilor's Report

## 226th ACS National Meeting

New York, NY September 6-10, 2003

Bonnie Charpentier

The fall 2003 ACS National Meeting was attended by Santa Clara Valley Section Councilors Ean Warren, Herb Silber, Jack Riley, Sally Peters, and Bonnie Charpentier. Alternate Councilors Peter Rusch and Laura Jarvis attended for Linda Brunauer and Maureen Scharberg. This report provides some highlights from the meeting, including Council and other governance activities.

### General Meeting Statistics and Information

ACS membership as of June is 156,374. The New York meeting had 14,030 attendees. At the National Employment Clearing House, 97 employers posted jobs seeking a potential 290 hires. In total, there were 1,564 job interviews scheduled from a pool of 1,305 job seekers. A number of workshops and programs, including resume reviews, were held to assist ACS members during this time of record high 3.5% unemployment rate for chemists. In other workplace issues, the Board of Directors approved a white paper supporting the need for the Employment Non-Discrimination Act, which protects individuals from discrimination based on perceived or actual sexual orientation.

A "Town Meeting" on Sunday afternoon provided an opportunity to ask questions and hear the views of the candidates for Director at Large and for ACS President. William F. Carroll, Jr. and Michael E. Strem are the candidates for 2004 President-Elect. Please vote in the upcoming election.

### Western District

The Western District Councilors Caucus met Sunday evening to discuss petitions and issues coming before council and in committees. Ean Warren served as chair of the Caucus. The Western Regional Meeting will be held October 15-18 in Long Beach. Details of the technical program and

educational symposia can be found at [www.westernregionalmeeting2003.org](http://www.westernregionalmeeting2003.org).

### Council Business

The Council meeting was relatively sedate on Wednesday morning with only two petitions up for vote. The following petitions were approved: 1) Coastal Empire Section name changed to the Coastal Georgia Section, and 2) the chartering of a new international chemical sciences chapter, the Hungarian International Chemical Sciences Chapter.

Elections were held for the Council Policy Committee, the Committee on Committees, and the Committee on Nominations and Elections. Bonnie Charpentier (Santa Clara Valley Section) and Howard Peters (Division of Chemistry and the Law) were elected to the Council Policy Committee for the 2004-2006 term.

Executive Director John Crum gave his final report to Council and received the thanks of the Board and Council members. The search for a new Executive Director is well underway with nearly 250 applications for the position received. The announcement of the new Executive Director is expected in mid-November.

The Committee on Budget and Finance reported that the Society is expected to end 2003 with a net deficit of \$3.1 million, which is \$1.9 million unfavorable to the approved budget. Shortfalls are expected in advertising revenue and investment income, as well as the default of a subscription agent and its failure to remit to ACS funds received from libraries. Strong sales of STN and SciFinder help to offset the revenue shortfalls. Capital expenditures for 2003 are expected to total \$23.7 million, about \$800,000 favorable to the approved budget.

### National Chemistry Week

"Earth's Atmosphere and Beyond" is the theme for NCW, October 19-25, 2003. The local section has some

great events planned (see elsewhere in this newsletter) and has great volunteer opportunities. The theme for 2004 will be "Health and Wellness."

### Future Programs

The Spring 2004 National Meeting will be held in Anaheim. The meeting will feature several activities related to nanoscience, including a public colloquium and related division-sponsored symposia. The Younger Chemists Committee will sponsor programs on funding opportunities, career development and the two-body program (coordinating dual job searches), and a Fun Run and Walk.

The Fall 2004 meeting in Philadelphia will feature presidential symposia on communicating chemistry through the arts and on graduate education. The Committee on Science is organizing programs on "Viruses as Chemical Entities," "Fuel Cells: Progress, Prospects, and Problems," and "Designing Materials for Product Success."

More information about future meetings can be found at [www.acs.org/meetings](http://www.acs.org/meetings).

For information, suggestions or questions regarding any of the topics in this report (or any other ACS business), please contact your Councilors. We'd love to hear your opinions.

## Thank You Peet's Coffee

The Santa Clara Valley Local Section of the ACS thanks Peet's Coffee of Town and Country Village in Palo Alto for the generous donation of the coffee and tea for our National Chemistry Week afternoon event on October 25th at the U.S. Geological Survey.

## Editor's Corner: New York Meeting and Celebrating Flight



Exploring the Big Apple!



Howard, Laura, and Sally at SciMix.



Celebrating flight at the Air Show.

## CAS Expands Patent Coverage and Currency

Chemical Abstracts Service (CAS), the leading provider of chemistry-related patent information, has announced several enhancements that build upon its unique patent offering: CA patent coverage has been expanded by the addition of patents from 6 more countries; the UK and French patent offices have been added to the group of "Core" patent issuing authorities for which CAS delivers patent information within 2 days of issuance; in addition, CAS has broadened its selection criteria to include the US National Patent Classification codes.

The six national patent authorities added to CAS' regular patent coverage are New Zealand, Estonia, Monaco, Bulgaria, Slovenia and Hong Kong in addition to the African Regional Industrial Property Organization (ARIPO). In total, CAS now offers patent information for 44 active patent issuing authorities.

CAS now offers ultra fast delivery of information from the UK and French patent offices, which have been added to a group of 7 Core patent issuing authorities that also includes the United States Patent & Trademark Office (USPTO), German Patent and Trademark Office (GPTO), Japanese Patent Office (JPO), European Patent Office (EPO) and the World Intellectual Property Organization (WIPO). For these offices, patent bibliographic information and abstracts are available in CAS electronic services within 2 days of the patents' issuance. Fully indexed records for these patents appear within 27 days.

Additionally, CAS is extending its patent selection criteria by including more classification codes: the US NPC, which began in January 2003, and the ECLA codes and Japan F-Terms to be added to patents in the CA/CAPplus files in the near future.

"This latest slate of enhancements builds upon our strength as a unique scientific information resource, and the only one that integrates both journal literature and patents in a comprehensive database with extraordinary currency," said CAS Editorial Operations Director, Matthew J. Toussant. "The unsurpassed currency of the chemistry-related patent information in the CAPplus file continues to be a key reason for STN's standing as the leading sci-tech information service."

More information is available on the CAS web site at [www.cas.org](http://www.cas.org), via email to [help@cas.org](mailto:help@cas.org), or by calling 1-800-753-4227.

## CAS Adds Regional Meetings Abstracts to Databases

Chemical Abstracts Service (CAS) and the Office of Regional Meetings (ORM) are excited to announce that beginning with spring 2003 all regional meetings abstracts will be accessible through all of CAS' online search services: STN®, SciFinder®, and SciFinder Scholar. CAS Editorial Operations Director, Dr. Matthew J. Toussant, recognizes that "Regional Meetings...communicate a wealth of timely and relevant chemistry-related information. CAS customers will be happy to get fast and convenient access to these abstracts online, before they appear anywhere else." Kathleen Thompson, ORM Manager, concurs. "Regional Meetings authors contribute timely, pertinent, and important technical information to attendees. This collaboration will expand the opportunities that the meetings provide."

Abstracts for the fall regionals also will be added to CAS. Online registration and meeting details are available on the ORM website at [www.acs.org/meetings/regional/](http://www.acs.org/meetings/regional/).

## CHEMPLOYMENT ABSTRACT 3726

*Position Title:* Analytical Chemist/Mass Spectroscopist

*Job Description:* Work with Codexis process chemists to assist in the qualitative characterization of our products and with Codexis assay chemists to quantitatively screen for small molecules in high throughput.

### QUALIFICATIONS DESIRED

*Education:* PhD or MS in Analytical Chemistry or Chemistry  
*Experience:* Strong background in Mass Spectrometry and ability to independently trouble shoot, operate and develop methods for a triple quad LC/MS/MS system as well as a GC/MS system required. Industrial experience in sample preparation methods for the analysis of biological samples, chromatography and data analysis (with LIMS) highly desirable. High throughput experience is a plus.

### LOCATION, SALARY, MAIL ADDRESS

*Location of Employer:* Redwood City, CA

*Salary:* Depends on experience

*Description of Employer:* Codexis is a majority-owned subsidiary of Maxygen that specializes in improving biocatalyst function through the use of Molecular Breeding TM directed evolution technologies.

### Application:

Email resumes to [jobs@codexis.com](mailto:jobs@codexis.com)

## CHEMPLOYMENT ABSTRACT 3727

*Position Title:* Analytical Chemistry Tenure-Track  
Position Beginning Fall 2004

*Job Description:* The Department of Chemistry at Santa Clara University, an undergraduate institution located in Silicon Valley, invites applications for a tenure-track position in analytical chemistry. The successful applicant will teach advanced courses in analytical chemistry and instrumentation as well as lower-division general chemistry and non-science majors courses. A vigorous undergraduate research program is expected, including participation in our NSF-REU summer program.

### QUALIFICATIONS DESIRED

*Education:* Ph.D. required.  
*Experience:* Demonstrated excellence in teaching and research essential.

### LOCATION, SALARY, MAIL ADDRESS

*Location of Employer:* Santa Clara

*Description of Employer:* Our ACS-approved department is well equipped, including an x-ray diffractometer, an atomic force microscope, and a 400 MHz NMR

### APPLICATION INSTRUCTIONS:

For additional information visit [www.scu.edu/chemistry](http://www.scu.edu/chemistry). Send CV, undergraduate and graduate transcripts, three letters of recommendation, statements of teaching philosophy and research plans, and cover letter to Search Committee, Chemistry Department, 500 El Camino Real, Santa Clara University, Santa Clara, CA 95053 by October 17, 2003.

## CHEMPLOYMENT ABSTRACT 3728

*Position Title:* Bench Chemist

*Job Description:* Temporary assignment in Petaluma.

### QUALIFICATIONS DESIRED:

*Education:* BS Chemistry  
*Experience:* Bench chemist with 2-5 years experience in the pharmaceutical industry. Knowledge of GMP, GLP and HPLC.

### LOCATION, SALARY, MAIL ADDRESS

*Location of Employer:* Petaluma

*Salary:* \$17-\$19/hour

*Description of Employer:* Pharmaceutical company developing dermatological products and analytical and clinical services.

### Application Instructions:

Please contact Elenah Herdman or Linda Svenson at 707-521-2140 or fax to 707-521-2134.

## 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-addressed envelopes unless requested to do so.

### California Section

Mrs. Nancy Gephart  
American Chemical Society  
California Section  
49 Quail Court  
Walnut Creek, CA 94596  
925-287-8055  
e-mail: [office@calacs.org](mailto:office@calacs.org)

### California Los Padres Section

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Santa Barbara  
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e-mail: [lamb@chem.ucsb.edu](mailto:lamb@chem.ucsb.edu)

### Mojave Desert Section

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e-mail: [zarrasp@navair.navy.mil](mailto:zarrasp@navair.navy.mil)

### Orange County Section

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Garden Grove, CA 92641  
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Ron Denedour  
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Mission Viejo, CA 92691-3306

### Sacramento Section

John R. Bingham  
809 W. Stadium Lane  
Sacramento, CA 95209  
916-927-7088  
916-927-7006 FAX

### San Diego Section

Renate Valois  
619-260-4513  
619-260-2211 FAX  
e-mail: [pascal@acusd.edu](mailto:pascal@acusd.edu)

### 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](mailto:office@scalacs.org)  
[www.scalacs.org/employ.html](http://www.scalacs.org/employ.html)

## Thoughts to Ponder...

Even if you are on the right track, you'll get run over if you just sit there.

—Will Rogers, humorist

Courage is being scared to death...and saddling up anyway.

—John Wayne

It wasn't raining when Noah built the ark.

—Howard Ruff

You have to think anyway, so why not think big?

—Donald Trump

Miracles sometimes occur, but you have to work terribly hard for them.

—Chaim Weizmann

You're never beaten unless you give up.

You may have a fresh start at any moment you choose.

—Mary Pickford

# Happy Halloween





SANTA CLARA VALLEY SECTION  
AMERICAN CHEMICAL SOCIETY  
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#### OCTOBER 2003 NEWSLETTER TOPICS:

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#### CHEMPLOYMENT ABSTRACTS



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## SANTA CLARA VALLEY SECTION

### 2003 Section Officers

Chair: <b>Maureen Scharberg</b>	408-924-4966	<a href="mailto:chair@scvacs.org">chair@scvacs.org</a>
Chair-Elect: <b>George Lechner</b>	408-226-7262	<a href="mailto:george.lechner@usa.xerox.com">george.lechner@usa.xerox.com</a>
Secretary: <b>Karl Marhenke</b>	831-479-6263	<a href="mailto:karlmar@armory.com">karlmar@armory.com</a>
Treasurer: <b>Hong Gao</b>	650-564-5197	<a href="mailto:hong.gao@alza.com">hong.gao@alza.com</a>
Past-Chair: <b>Sally Peters</b>	650-812-4994	<a href="mailto:sally.peters@parc.com">sally.peters@parc.com</a>

### Councilors

2001-03: <b>Linda Brunauer</b>	408-554-6947	<a href="mailto:lbrunauer@scu.edu">lbrunauer@scu.edu</a>
2001-03: <b>Sally Peters</b>	650-812-4994	<a href="mailto:sally.peters@parc.com">sally.peters@parc.com</a>
2002-04: <b>Bonnie Charpentier</b>	650-948-3931	<a href="mailto:charpentierbon@yahoo.com">charpentierbon@yahoo.com</a>
2002-04: <b>Herb Silber</b>	408-924-4954	<a href="mailto:hbsilber@sjsuvm1.sjsu.edu">hbsilber@sjsuvm1.sjsu.edu</a>
2003-05: <b>Maureen Scharberg</b>	408-924-4966	<a href="mailto:scharbrg@pacbell.net">scharbrg@pacbell.net</a>
2003-05: <b>John F. Riley</b>	650-328-4036	<a href="mailto:jfriley@atdial.net">jfriley@atdial.net</a>
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### Alternate Councilors

2001-03: <b>George Lechner</b>	408-226-7262	<a href="mailto:george.lechner@usa.xerox.com">george.lechner@usa.xerox.com</a>
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2002-04: <b>Mark Kent</b>	408-736-0989	<a href="mailto:makent@earthlink.net">makent@earthlink.net</a>
2003-05: <b>David Parker</b>	408-615-4961	<a href="mailto:dparker@ci.santa-clara.ca.us">dparker@ci.santa-clara.ca.us</a>
2003-05: <b>Laura Jarvis</b>	650-210-1242	<a href="mailto:lj Jarvis@scvacs.org">lj Jarvis@scvacs.org</a>
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### ChemEmployment Abstracts

Director: **Shirley B. Radding** 408-246-2564 [sradding@att.net](mailto:sradding@att.net)

## FUTURE MEETINGS

<b>Oct 22</b>	Return Local Section Ballots
<b>Oct 15-18</b>	Western Regional Meeting Long Beach, CA
<b>Oct 24</b>	Clouds of Fire: Origin of the Stars National Chemistry Week Cupertino, CA
<b>Oct 25</b>	Honoring Innovators & Pioneers in Aviation and the Atmosphere National Chemistry Week Menlo Park, CA
<b>Nov 20</b>	SCV Dinner Meeting Dr. Karl Marhenke Santa Clara, CA
<b>Nov 9-12</b>	Proteomics & Genomics ACS ProSpectives Leesburg, VA
<b>Jan 2004</b>	Dr. Joseph Lambert Mosher Awardee
<b>Mar 2004</b>	National Meeting Anaheim, CA

For the latest information, please visit  
SCV/ACS web site: [www.scvacs.org](http://www.scvacs.org)



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