

# Silicon Valley Chemist

Santa Clara Valley Section

American Chemical Society

Volume 23 No. 12

## 2001 Harry and Carol Mosher Award

– Dr. James D. Morrison –

### From Chiral Synthesis to Glaciers and Galaxies, It's All Chemistry

Over the last fifty years or so, chiral synthesis has moved from an esoteric corner of organic chemistry to the forefront of organic chemical research and development. Fifty years ago there was only an occasional paper published on the subject. Today, one aspect or another of chiral reactions comprises a speciality that is the subject of more research publications than any other in organic chemistry. Fifty years ago chiral reactions that yielded a five to ten percent excess of one enantiomer over the other were cause for celebration. Today, enantiomeric excesses of greater than ninety-five percent are common, and there are industrial processes that employ the techniques of chiral synthesis to make very large quantities of pure enantiomers. A few months ago, the Chemistry Nobel Prize was given to two U.S. chemists



and a Japanese chemist for their work on chiral synthesis.

A subset of chiral reactions is chiral hydrogen transfer; the work of two of the new Nobel Laureates is in this area. One aspect of chiral hydrogen transfer involves

chiral reagents that can deliver a hydrogen selectively to one face of an unsaturated substrate so that the hydrogen becomes one ligand at a new stereocenter. Early examples of such chemistry are found in the pioneering studies of Harry Mosher at Stanford starting in the early Fifties. These studies were highly rational, based on concepts of mechanism and the minimization of unfavorable non-bonded interactions in presumed transition states. In retrospect, they are seen as quite exemplary, groundbreaking investigations that helped to

*continued on next page*

## Chair's Message

The past weeks were very busy with ACS activities! In October Dick Zare's talk on bubbles was delightful! As we all know, demonstrations can be fraught with mishaps and problems, to the delight of the audience and the discomfort to the speaker; Dr. Zare experienced this first hand! Bubbles would not rise, enlarge, spin or even blow, but thanks to Dr. Zare's patience, we learned about bubbles through art and history as well as demonstration. Did you know that bubbles would increase in size when chilled with dry ice?

On Saturday, October 27th, four SCVACS members helped the California section celebrate its 100th anniversary. Glenn Fuller's historical retrospective was both humorous and enlightening. The first years of meetings were "old boy smokers" held in San Francisco restaurants or the UC Berkeley faculty club. They hosted their first national ACS meeting in San Francisco in 1910 complete with a full day trip to Napa Valley; the times and tastes have not changed in 90

*continued on next page*

## January Dinner Meeting

**Date:** January 17, 2002

**Time:** 6:00 pm Social Hour

7:00 pm Dinner

8:00 pm Talk

**Location:** Scott's Seafood Grill  
2300 East Bayshore Road  
Palo Alto, CA  
(650) 856-1046

**Speaker:** Dr. James Morrison  
Professor of Chemistry,  
Emeritus  
Vice President for  
Research, Emeritus  
University of New  
Hampshire

**Cost:** \$27 with choice of  
Grilled Salmon, Oven  
Roasted Chicken, or  
Vegetarian Pasta

**Reservations:** Shirley Radding  
(408) 246-2564  
(408) 296-8625 FAX

Reservations should be made by January 13; stating your name, company affiliation, number of people in the party and the meal preference. People may also register using our web site: [www.scvacs.org/Local\\_Folder/din\\_mtg.htm](http://www.scvacs.org/Local_Folder/din_mtg.htm).



*Chair's Message, continued from front page*

years! As the section grew, its dinners and meetings became similar to what we have today. Women became involved with the section in the early Twenties, but did not hold office until WWII. The many large oil and chemical companies (Shell and Chevron) that employed chemists in the early years have changed and some have disappeared all together (Dow) to be replaced with smaller biotech companies. The government's USDA research center and the Lawrence Labs still employ large numbers of chemists. The section took this opportunity to honor its 50+ year members and their past section chairs. The section's senior member, Dr. Alan Nixon, who is over 90 years old attended the anniversary and was honored. We were reminded several times that our 50th anniversary is coming in three years! An enjoyable time was had by all!

The November 3rd Workshop for Teachers was a lively event. Several section members and Roche Bioscience employees arrived at 7:30 a.m. to set up for the daylong event. Again, Juanita Ryan and Julie Schultz shared their expertise and enthusiasm for teaching science to elementary and middle school teachers. The activities and lessons were designed to correspond with National Chemistry Week (NCW) with the theme of Chemistry and Art. The teachers made paint and created butterflies as they got suggestions on how to explain colloidal suspensions, absorption and the reflection of colors to the various age groups that they teach. Besides binders full of detailed science experiments, the teachers left with gifts and supplies donated by Roche, and a renewed enthusiasm for science in the classroom. A special thanks to Bonnie Charpentier for organizing the event and Juanita and Julie for conducting the workshop.

Over the next few months you might want to check out the website, <http://tea.rice.edu>. Juanita was chosen to be one of nine teachers from the entire U.S. to go to the Antarctica and participate in scientific research!! As a member of Teachers

Experiencing Antarctica and the Arctic, this past summer she trained in New Hampshire and Wisconsin in preparation for a 6 to 8 week trip in late January to McMurdo Station in Antarctica. She promised to keep us up to date with her experiences! She will be able to have audio contact with her classroom in San Jose and share her experiments with them.

Susan Roberts-Manganelli's talk in early November on art conservation concluded our NCW events. Ms. Manganelli is Manager for Collections, Exhibitions, and Conservation at the Cantor Center for Visual Arts on the Stanford campus. Chemistry plays an important part in art restoration. She explained how the museum preserves and restores its collection, from old oil paintings to the wonderful Rodin sculptures that are scattered across the campus.

The world of chemistry is becoming smaller and smaller, and I am not referring to atoms and molecules! Fifty years ago in 1951, a California and Bay Area chemist, Dr. Glenn Seaborg won the Nobel Prize in chemistry. Last month it was announced that the 2001 prize was won by another California chemist, Dr. Barry Sharpless (who spent several years studying and teaching at Stanford). Dr. Sharpless' prize was for work in the field of asymmetric catalysis (chirally catalyzed oxidation reactions). In January, our speaker, Dr. James Morrison, will be honored with the section's Mosher award and his talk will include his work on asymmetric organic reactions! That was also the field of interest of Dr. Mosher! Save January 17th for the talk and dinner with Dr. Morrison.

The January dinner and talk will be held at Scott's Seafood Grill in Palo Alto, a new venue for us. You will notice a slight increase in the price to \$27.00. Prices for dinner meetings are continuing to rise, regardless of the local economy. The local section continues to subsidize the dinners several dollars. Scott's serves extremely good food and their staff is very helpful. I am certain this will be a memorable

evening. Again I will ask for help. If you know of a reasonably priced restaurant, hotel, or company location where we can hold some of our monthly meetings, please contact me! As usual, you are very welcome to attend just the presentation part of the evening.

Recently there have been a few comments about the difficulty of reaching the chair and the executive committee, and I apologize for that. The board is in contact continually by email and did not realize that our addresses were not available to the general membership! So that has been corrected! If you go to the web page, [www.scvacs.org/officers.html](http://www.scvacs.org/officers.html) there are now active links to us all. The newsletter has been redesigned to include them also.

Best wishes for a happy holiday season!

*Sally Peters*



---

*2001 Mosher Award, continued from front page*  
trigger a flood of later work on chiral reagents.

Starting with these early studies, we will examine some of the work that has been done at the University of New Hampshire (UNH) on chiral hydrogen transfer reagents, including some done collaboratively by students at UNH and at Stanford. In addition, some very different kinds of chemistry done below the surface of ice fields and in outer space that can be called "time-machine chemistry" will be briefly discussed. By the chemical analysis of ice cores, one can determine aspects of ancient climates going back as far as 200,000 years. Also, one can detect bursts of energy from far back in the history of our galaxy, using a satellite carrying a Gamma-Ray Observatory.

## Professor James Morrison Will Present His Award Address

Our annual Harry and Carol Mosher Award will be held on January 17, 2002. This year's recipient is Professor James Morrison the emeritus professor and vice president at the University of New Hampshire. Dr. Morrison has a distinguished academic carrier where he mentored many graduate students and have scores of scientific papers to his credit. He also contributed to the industrial field by being a consultant. In his nomination letter, Dr. Robert Lyle wrote: *"Professor Morrison maintained an interest in applying his belief in an entrepreneurial attitude to education of graduate students. He combined his consulting assignments with contract research involving his students"*.

Early on in his career, Professor Morrison spent a period as a NSF Postdoctoral Fellow with Professor Harry Mosher at Stanford University. They shared an intense interest in asymmetric synthesis. Their book "Asymmetric Organic Reactions" became the major reference to all organic chemists who worked in this field. It is a coincidence that the topic of this year Nobel Prize in Chemistry is asymmetric synthesis; which Dr. Morrison will address in his presentation.

The Silicon Valley Chemist is the ACS Santa Clara Valley local section newsletter which is published monthly.

The submission deadline for each issue is the **10th** of the month preceding publication.

Contact Laura Rasay at 650-859-4782 or [editor@scvac.org](mailto:editor@scvac.org) for more information.

## Workshop for Teachers Celebrates Chemistry and Art

The first event in the Santa Clara Valley Section celebration of National Chemistry Week (NCW) was a free workshop for teachers sponsored by Roche Bioscience on November 3 on its Palo Alto campus. The workshop was taught by superteachers Juanita Ryan of Toyon Elementary and Julie Schultz of Redwood Middle School who again provided the enthusiasm and knowledge base for a very successful program. Elementary and middle school teachers from more than 40 schools from many area communities (from Petaluma through Hollister) attended.



Banner announces start of National Chemistry Week

The workshop program followed the NCW theme of "Celebrating Chemistry and Art." The morning included refreshments and two sessions of hands-on experiments which covered a variety of fun activities including mixing colors in solution, dispersion of solutions, chemistry of leaves, stained glass glue, chromatography butterflies, frescos, and making artists' paints. Teachers received curriculum binders, as well as materials and supplies to take back to their



Teachers convene for workshop

classrooms. Following lunch, which was provided as part of the workshop, Roche employees provided tours of four laboratories. The workshop concluded with an evaluation



Workshop presenters Julie Schultz (left) and Juanita Ryan (right) with Bonnie Charpentier

and raffle of donated items including classroom sets of goggles, a fax machine, bulletin boards, and many other office supplies. Funding for the workshop provided classroom sets of the KTEH TV produced investigation and experimentation booklet "Real Science" and sets of plastic beakers. The giveaways were sponsored through Roche's "Walk the Walk", a campus walkathon that matches funds for each employee participant.



Teachers enjoy experimenting

Feedback from the teachers was very positive as expressed in the following quotes: "I like how the chemistry is explained with each activity." "Love the hands-on with simple materials." "I can't wait to try some of them with my sixth graders." "This is what will make my kids excited." "Very cool." In at least one case, the science and art teachers from one school attended the workshop together

*continued on next page*



Teacher makes observations on colors in black paper

er, a nice example of the outreach potential of this year's NCW theme.

A successful workshop depends on the hard work of volunteers and we were fortunate this year to have many enthusiastic volunteers. Thank you to the following Section members who dedicated their day to the workshop: Lois Durham, Carol Mosher, Howard Peters, Sally Peters, Bruce Raby, Jack Riley, and Ean Warren. Roche employees who volunteered on Saturday (and in preparation) were David Swinney and Ferenc Makra (co-organizers), Shirley Ross, Brenda Price, Barbara Murphy-Wesley, Bart Miaullis,



Another National Chemistry Week has come and gone. This year, as in years' past, the local section participated with a variety of events designed to reach a range of audiences: teachers, museum visitors, local section members, and students. Bonnie Charpentier, Juanita Ryan, and Julie Schultz organized and taught a workshop for teachers (see accompanying article), exposing them to a variety of fun activities involving chemistry and art. San Jose State Student Affiliates and their advisor, Roger Terrill, spent



Hailey Warren with her butterfly creation.

Saturday, November 10 at the Tech Museum in San Jose, doing chemistry demonstrations for the visitors. Jonathan Touster organized a local section meeting featuring a talk

Mike Maddox, Khanh Nguyen, Gary Hedden, Chuck Dvorak, Nixy Zutshi, Stephen Gomez, Erin Engelhardt, Marie Dinh, and Becky Mackenzie. Additional help with preparation of the workshop came from Roche volunteers Thelma Gill, Eileen Cancilla, Tricia Takahara, Carmen Rodriguez, Lynne Yacovetta, Ina Lee, Peter Thanana, and Mandy Rees.

Stay tuned for next year's theme—this is one of the most effective community service projects of the Section and everyone leaves feeling great.

**Bonnie Charpentier**  
Workshop Organizer



Researcher Mike Maddox uses periodic table to explain a point during laboratory tour.

on Restoration and Conservation of Art by Susan Roberts-Manganelli, Manager for Collections, Exhibitions and Conservation at the Iris and B. Gerald Cantor Center, Stanford University. And Ean Warren brought chromatography to a kindergarten class by doing a butterfly art project and talking about blending and movement of colors in coffee filters. If you have any thoughts on future National Chemistry Week events, contact [ncw@scvac.org](mailto:ncw@scvac.org).



Social hour preceding Section dinner meeting.

## Election Returns for 2002 Operating Year

The Nomination Committee received a total of 281 envelopes of which 8 did not have signatures on the return address envelopes; consequently, 273 ballots were counted. No petition candidates were received. The election results are as follows:

### CHAIR-ELECT

**Maureen Scharberg** 251

### SECRETARY

**Karl Marbenke** 250

### TREASURER

**Hong Gao** 249

### COUNCILORS (two to be elected)

**Bonnie Charpentier** 251

**Herb Silber** 247

### ALTERNATE COUNCILOR (three to be elected)

**Carol Mosher** 248 (2 YR)

**Peter Rusch** 242 (3 YR)

**Jonathan Touster** 241 (3 YR)

The Nomination & Election Committee will accept Petition Candidates any time during the year to provide the membership with greater access to become an officer of the Section. However, the petition must be received by August 1 of the year of the election. The petition must be signed by 15 members of Member Grade, and the candidate has to have agreed to serve if elected. Send all petitions to the secretary of the Section.

The Bylaws of the National ACS and the Santa Clara Valley Section state that the voter signature must appear on the outer return envelope to be a valid ballot. Thus, in this election, 8 ballots were invalidated. Please sign the outer envelope and have your vote count!



## 2003 ACS Regional Awards in High School Chemistry Teaching

The Office of the Awards Program is soliciting nominations for the nine Regional Awards in High School Chemistry Teaching that will be presented in 2003. If there is an outstanding and dedicated high school chemistry teacher in your region, nominate them for one of these awards. Each award consists of a \$1,000 cash prize, two certificates (for the recipient and the recipient's institution), and reimbursement of reasonable travel expenses to and from the regional meeting where the award will be presented. Former recipients and retired teachers are ineligible for nomination. Recipients of the Regional Award in High School Chemistry Teaching will automatically become candidates for the James Bryant Conant Award in High School Chemistry Teaching (<http://chemistry.org/awards/conant.html>) in 2004.

The deadline date for all nominating material for the 2003 Regional Awards in High School Chemistry Teaching is February 1, 2002. Earlier transmittal is encouraged. Contact Marvin Jones at [m\\_jones@acs.org](mailto:m_jones@acs.org) or 800.227.5558, x4408 for more details. The regional meetings that are being held in 2003 are:

*36th Middle Atlantic Regional (MARM)*

*35th Great Lakes Regional (GLRM)*

*58th Northwest Regional Meeting (NORM)*

*32th Northeast Regional Meeting (NERM)*

*55th Southeast (SERMACS)*

*38th Midwest Regional (MWRM)*

*59th Southwest Regional (SWRM)*

*39th Western Regional (WRM)*

*35th Central Regional (CRM)*



## Newsletter Forum

### *This month's question:*

Do we currently have the technology to counteract chemical, biological, or nuclear terrorism?

Email your contributions to [forum@scvac.org](mailto:forum@scvac.org).



*Season's  
Greetings*

## Where Are the New ACS Volunteers?

Recently, President Bush addressed the nation again after two of the most wrenching months in my memory. One part of his address focused on the request for Americans to volunteer more. This request has direct impact on the National and Local American Chemical Society - a group of volunteer chemists - which is now very visible as the largest scientific society in the world.

Two weeks ago, I traveled to Walnut Creek to be a part of the 100th anniversary of the California section. ACS president Attila Pavlath (who knows a little bit about being an unpaid volunteer) commented again that the world had changed. Over fifty years ago, Chemical Abstracts was staffed by volunteers who translated and abstracted the chemical literature for pennies per word. They laid the foundation to create the largest automated chemical database that serves the chemical world — but it doesn't come cheap. He also said that members join and

members leave — usually with the comment, "What has the ACS done for me lately?" It is a new world.

Within the Santa Clara Valley Section, we have seen some new and young volunteers step forward to accept responsibility for the Section's activities. We thank them profusely for their welcome and continued support.

I have been involved with the ACS and the Santa Clara Valley Section activities for 25 years when Shirley Radding innocently asked me to be the second name on the ballot for local councilor. Over the 25 years, I have seen most new faces at the 50 year ACS awards. That is often the first and last time they attend any ACS functions.

The Santa Clara Valley Section has been blessed over the years with a core group that has seen that things have gotten done and needs your active support. At times, it seemed that the Section has about 300 members rather than 3,500. We are all getting older.

We don't need to have elections with one candidate. We don't need to recycle the chair. I know - I have been recycled once. We have good evening dinner programs and our other organized activities have won ACS awards.

The education programs I wrote about in the last newsletter were about the need for ACS volunteer judges for the George Washington Carver Day Science Fair on Saturday, January 5, 2002 at the Santa Clara Convention Center and the concurrent Carver Kidvention. About 6 hours of time is needed. So far my e-mail has not crashed and my voice mail is not full with volunteers asking to serve.

Where are the new volunteers? Now more than ever we have important responsibilities to fulfill. Technology, science, and chemistry are major components in the resolution of the problems we face as a society and as a nation. Come on-it is time to roll.

*Howard Peters*

## Activate Your Mind and Innovate Medicine

Think of it – a place where you can use your mind to innovate human pharmaceuticals. That's the exciting drug discovery environment you'll find at Roche Bioscience. Our scientists are focused on medicines for the treatment of arthritis, osteoporosis, respiratory and viral diseases and central nervous system and genitourinary disorders. Our cutting-edge technologies and instrumentation provide us the necessary elements to achieve success. Join us and innovate medicine.

### CHEMPLOYMENT ABSTRACTS 3574

*Position Title:* Research Associates I/II/III  
Metabolism/Bioanalytical/Chemistry

*Job Description:* Assist in experimental work to identify & determine the metabolic characteristics of new cpds in animal/humans, develop & validate analytical methods & design pharmacokinetic & metabolic studies.

#### QUALIFICATIONS DESIRED

*Education:* (RAD)BS/MS, chem, Biol, or biochem, 0-3 yrs exp, (RAII) BS or equiv + 3-5 yrs or MS + 1-3 yrs exp, (RAIII) BS/MS or equiv & at least 5 yrs exp.  
*Experience:* Must have basic knowledge of chem/biochem & good lab techniques. Attention to detail, excellent communication skills & basic skills with lab instruments & tools unique to this position are also necessary. Computer proficiency, HPLC, & exp with biol samples, mass spect, automated high thruput analysis & robotics are preferred.

LOCATION, SALARY, MAIL ADDRESS  
*Location:* Palo Alto

Application Instructions: Send resume to:  
Roche Bioscience  
Job Code 2445-ACS  
3401 Hillview Avenue  
Palo Alto, CA 94304  
Email: paloalto.hr-staffing@roche.com  
(include Job Code)

### CHEMPLOYMENT ABSTRACTS 3575

*Position Title:* Research Scientist II Pharmaceutical  
Chemistry & Product Development

*Job Description:* Leading a group of scientists in analytical support for preclinical drug substance & product development, you will be responsible for methods development, validation, toxicological & clinical supply testing & release, stability studies, formulation support & physical chem characterization. Also, as the CMC coordinator, will prepare analytical documents for CMC sections of IND submissions.

#### QUALIFICATIONS DESIRED

*Education:* PhD analytical chem or phys chem  
*Experience:* 5+ yrs exp & knowledge of instrumentation in chromatog (HPLC, GC) spectroscopy (UV/Vis, IR, NMR) & physical/chem, measurements (solubility, KF, DSC, hydrolytic stability). Chromatog software knowledge a must.

LOCATION, SALARY, MAIL ADDRESS  
*Location:* Palo Alto

Application Instructions: Send resume to:  
Roche Bioscience  
Job Code 1463-ACS  
3401 Hillview Avenue  
Palo Alto, CA 94304  
Email: paloalto.hr-staffing@roche.com  
(include Job Code)

### CHEMPLOYMENT ABSTRACTS 3576

*Position Title:* Research Associate/Scientist Process  
Chemistry

*Job Description:* You will carry out process research activities (synthetic organic chemistry at bench scale) and scale-up activities (in large glassware & pilot plant equipment).

#### QUALIFICATIONS DESIRED

*Education:* RS: Requires a PhD in org chem or equiv. chem RA: Requires a BS/MS in chem.  
*Experience:* Must have bench-scale lab skills & exp in synthetic org chem & structural characterization. Knowledge of GMPs & process scale-up exp in kilo-lab/pilot plant setting preferred.

LOCATION, SALARY, MAIL ADDRESS  
*Location:* Palo Alto

Application Instructions: Send resume to:  
Roche Bioscience  
Job Code 74207-ACS  
3401 Hillview Avenue  
Palo Alto, CA 94304  
Email: paloalto.hr-staffing@roche.com  
(include Job Code)

### CHEMPLOYMENT ABSTRACTS 3573

*Position Title:* Associate Chemist

*Job Description:* Synthesis of new organic cpds to be evaluated as antimicrobial agents.

#### QUALIFICATIONS DESIRED

*Education:* BA/BS or MA/MS  
*Experience:* At least 1 yr of independent research exp is required in org synthesis. A record of publication is desirable. Should also possess excellent communication skills & have the ability to work both independently & as part of a multidisciplinary team.

LOCATION, SALARY, MAIL ADDRESS  
*Location:* Mountain View

*Salary:* Competitive salary & benefits  
*Description of Employer:* Innovative Bay Area pharmaceutical company discovering new anti-infective agents.

Application Instructions: Send resume to:  
Human Resources  
Attn: Job Code 808-MCA  
Essential Therapeutics  
850 Maude Avenue  
Mountain View, CA 94043  
FAX: 650-526-3034

### CHEMPLOYMENT ABSTRACTS 3577

*Position Title:* Scientists & Senior Scientists Medicinal  
Chemistry

*Job Description:* Working in an interdisciplinary program, will be responsible for all aspects of design & preparation of new chemical entities

#### QUALIFICATIONS DESIRED

*Education:* PhD Chem  
*Experience:* 3-8 yrs exp small molecule after PostDoc, a record of success in medicinal chem, proven leadership qualities, solid track record of scientific achievement thru patents & progression of hits to leads & success with clinical candidate selection in one or more medicinal chem programs. Exp with molecular modeling or parallel synthesis a plus.

LOCATION, SALARY, MAIL ADDRESS  
*Location:* South San Francisco

*Salary:* Dependent on Exp  
*Description of Employer:* Cytokinetics is an exciting drug discovery company focused on the cytoskeleton.

Application Instructions: Send resume, references & cover letter to:  
Cytokinetics HR Department  
Attn: Job #CH01-09ACSSV  
280 East Grand Avenue  
South San Francisco, CA 94080  
FAX: 650-624-3010  
Email: hr@cytokinetics.com  
www.cytokinetics.com

### CHEMPLOYMENT ABSTRACTS 3578

*Position Title:* Research Associate/Senior Research  
Associate Analytical Chemistry

*Job Description:* Provide analytical support for pharmacokinetics/drug metabolism, pre-formulation, & stability studies, as well as analytical methods development.

#### QUALIFICATIONS DESIRED

*Education:* MS/BS org or analytical chem or related field  
*Experience:* Knowledge of analytical chem/techniques, training in separation science, chromatog & analytical instrumentation, & 2+ yrs relevant industry/academic exp. Familiarity with pharmacokinetics, bioanalysis & drug metabolism in a drug discovery & development environment a plus.

LOCATION, SALARY, MAIL ADDRESS  
*Location:* South San Francisco

*Salary:* Dependent on Exp  
*Description of Employer:* Cytokinetics is an exciting drug discovery company focused on the cytoskeleton.

Application Instructions: Send resume, references & cover letter to:  
Cytokinetics HR Department  
Attn: Job #CH01-04ACSSV  
280 East Grand Avenue  
South San Francisco, CA 94080  
FAX: 650-624-3010  
Email: hr@cytokinetics.com  
www.cytokinetics.com

### CHEMPLOYMENT ABSTRACTS 3579

*Position Title:* Research Scientist Organometallic  
Chemist

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

#### QUALIFICATIONS DESIRED

*Education:* PhD org/organometallic chem  
*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:* Developing a new generation of all-optical components.

Application Instructions: Send resume to:  
Ultraphotonics, HR  
46975 Fremont Blvd.  
Fremont, CA 94538  
Fax: 510-226-3979  
Email: kathy.richie@ultraphotonics.com  
www.ultraphotonics.com

### CHEMPLOYMENT ABSTRACTS 3580

*Position Title:* Research Assistant/Analytical Chemist

*Job Description:* Responsible for analytical method development & physical/chemical characterization of organic & inorganic compounds.

#### QUALIFICATIONS DESIRED

*Education:* BS/MS, analytical chemistry  
*Experience:* At least 3-5 yrs exp. Strong knowledge of HPLC/GC, GPC, FTIR, UV-Vis

LOCATION, SALARY, MAIL ADDRESS  
*Location:* Fremont

*Salary:* Competitive salary & benefits  
*Description of Employer:* Developing a new generation of all-optical components.

Application Instructions: Send resume to:  
Ultraphotonics, HR  
46975 Fremont Blvd.  
Fremont, CA 94538  
Fax: 510-226-3979  
Email: kathy.richie@ultraphotonics.com  
www.ultraphotonics.com

### CHEMPLOYMENT ABSTRACTS 3581

*Position Title:* Research Assistant/Organo-metallic  
Chemist

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

#### QUALIFICATIONS DESIRED

*Education:* BS/MS in organic/organometallic chemistry  
*Experience:* At least 7 yrs of industrial experience performing organic chemistry.

LOCATION, SALARY, MAIL ADDRESS  
*Location:* Fremont

*Salary:* Competitive salary & benefits  
*Description of Employer:* Developing a new generation of all-optical components.

Application Instructions: Send resume to:  
Ultraphotonics, HR  
46975 Fremont Blvd.  
Fremont, CA 94538  
Fax: 510-226-3979  
Email: kathy.richie@ultraphotonics.com  
www.ultraphotonics.com

## As the pioneers of PCR technology, Roche Molecular Systems

has embarked on an incredible adventure that has not only launched the global genetics revolution, it has unlocked the molecular man and dramatically altered the future of medical care.

Every day is a new opportunity to create novel diagnostic tools, close the gap on infection and detection, and take the power of genomics to the next level. It's an exciting place to be.

And the journey has just begun. We currently seek a capable and experienced Sr. Scientist for our Alameda (San Francisco Bay Area) campus.

### CHEMPLOYMENT ABSTRACTS 3582

*Position Title:* Sr. Scientist

*Job Description:* Work in a team environment to supply high quality oligonucleotides in support of R&D. Includes performing purification and analysis of small-scale, fluorescent dye-modified oligonucleotides by HPLC. Also perform manufacturing feasibility studies & prepare reports & presentations to Manufacturing & Development group leaders.

#### QUALIFICATIONS DESIRED

*Education:* MS Chem or Biochem + 2-3 yrs relevant exp or BS with 5-6 yrs relevant exp.

*Experience:* Should have ability to design & analyze expts & demonstrated HPLC methods development exp. Special consideration will be given for exp with nucleic acids and/or fluorescent mols.

LOCATION, SALARY, MAIL ADDRESS  
*Location:* Alameda

*Salary:* Competitive salary & benefits

Application Instructions: Send resume to:  
Roche Molecular Systems  
Human Resources, Job Code 01-RM155-ACSS  
P.O. Box 9002  
Pleasanton, CA 94566-0900  
EMAIL: usa.rms\_resumes@roche.com  
Principles only, please  
www.roche.com/diagnostics/content/molsys

**CHEMPLOYMENT ABSTRACTS 3583**

*Position Title:* Research Associate, Medicinal Chemistry

*Job Description:* As a member of our Medicinal Chemistry group, you will synthesize novel organic molecules with potential biological activity & will focus efforts on optimizing chemical leads for potency, selectivity & pharmacokinetic profile

**QUALIFICATIONS DESIRED**

*Education:* BS/MS org chem  
*Experience:* A min of 2 yrs lab exp in organic synthesis

**LOCATION, SALARY, MAIL ADDRESS**

*Location:* South San Francisco  
*Salary:* We offer competitive salary with an attractive equity position & full benefits  
*Description of Employer:* Tularik is a leading biopharmaceutical company focused on the development of novel small molecule drugs that work through regulation of gene expression.

*Application Instructions:* :  
For immediate consideration, please email resume to: resume@tularik.com or mail to:  
Tularik Inc.  
HR Department  
Two Corporate Drive  
South San Francisco, CA 94080  
www.tularik.com

**CHEMPLOYMENT ABSTRACTS 3584**

*Position Title:* Analytical Chemistry Group Leader

*Job Description:* Supervise chemists in analysis of drug products & raw materials for product release & stability assessment.

**QUALIFICATIONS DESIRED**

*Education:* BS chem biochem or related discipline  
*Experience:* 10+ yrs exp in a FDA regulated industrial pharmaceutical lab; & extensive exp with pharmaceutical analysis, especially HPLC, UV/Vis, FTIR & dissolution testing.

**LOCATION, SALARY, MAIL ADDRESS**

*Location:* Temecula, CA  
*Description of Employer:* Guidant Corp. researches, manufactures & markets systems for cardiac rhythm management, vascular intervention & cardiac/vascular surgery worldwide.

*Application Instructions:* To be considered for this opportunity, please visit: www.guidant.com/careers

**CHEMPLOYMENT ABSTRACTS 3585**

*Position Title:* Associate Scientist

*Job Description:* Perform and interpret quantitative analysis for various drugs that will include total loading and dissolution profile; perform stability testing for drug coated stent; & maintain laboratory notebooks to document all data.

**QUALIFICATIONS DESIRED**

*Education:* BS chem  
*Experience:* 3+ yrs exp in FDA regulated industrial pharmaceutical lab; hands-on exp with HPLC, UV/Vis, FTIR and dissolution testing.

**LOCATION, SALARY, MAIL ADDRESS**

*Location:* Temecula, CA  
*Description of Employer:* Guidant Corp. researches, manufactures & markets systems for cardiac rhythm management, vascular intervention & cardiac/vascular surgery worldwide.

*Application Instructions:* To be considered for this opportunity, please visit: www.guidant.com/careers

**EMPLOYMENT HELP  
IN OTHER AREAS  
OF CALIFORNIA**

The following are 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  
49 Quail Court, Walnut Creek, CA 94596  
925-287-8055  
e-mail: office@calacs.org

**California Los Padres Section**

Dr. Sandra Lamb  
Chemistry Dept. of UC Santa Barbara  
Santa Barbara, CA 93106-9510  
e-mail: lamb@chem.ucsb.edu

**Mojave Desert Section**

Dr. Peter Zarras  
NAWCWD, Code 4T4220D  
1 Administration Circle  
China Lake, CA 93555  
760-939-1396  
e-mail: zarrasp@navair.navy.mil

**Orange County Section**

Geoff Anderson & Hycor Biomedical  
78272 Chapman Avenue  
Garden Grove, CA 92641  
714-895-9558  
Ron Denedour  
23731 Coronel Drive  
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

**San Geronigo 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

**CHEMPLOYMENT ABSTRACTS 3586**

*Position Title:* Research Associate I/II: Chemistry

*Job Description:* Contribute to the design, synthesis & characterization of compounds undergoing biological evaluation.

**QUALIFICATIONS DESIRED**

*Education:* BS/MS synthetic chem  
*Experience:* Up to 5 yrs exp.in chemical synthesis with a strong background in chromatographic techniques, NMR & MS

**LOCATION, SALARY, MAIL ADDRESS**

*Location:* San Diego  
*Salary:* Competitive salary & benefits  
*Description of Employer:* A drug discovery company using proprietary advances in biology, chemistry & automation to accelerate discovery of new medicines. Our core technologies include a broad portfolio of proprietary fluorescence assay technol & screening platforms designed to provide an integrated soln for drug discovery.

*Application Instructions:* Send resume to:  
Aurora Bioscience Corp.  
HR (Ref Job #144LM)  
11010 Torreyana Road  
San Diego, CA 92121  
Email: hr@aurorabio.com  
FAX: 858-404-6720

**CHEMPLOYMENT ABSTRACTS 3587**

*Position Title:* Research Associate I/II: Chemistry

*Job Description:* Synthesis/purification of fluorescently-labeled peptides & small molecules.

**QUALIFICATIONS DESIRED**

*Education:* BS or MS in chem  
*Experience:* Min 1 yr peptide synthesis exp using automated peptide synthesizers or manual synthesis. Strong knowledge of synthetic chem methods & analytical techniques (TLC, flash chromatography, NMR, UV/VIS & fluorimetry) & exp with HPLC & LC/MS in analytical & purification applications essential.

**LOCATION, SALARY, MAIL ADDRESS**

*Location:* San Diego  
*Salary:* Competitive salary & benefits  
*Description of Employer:* A drug discovery company using proprietary advances in biology, chemistry & automation to accelerate discovery of new medicines. Our core technologies include a broad portfolio of proprietary fluorescence assay technol & screening platforms designed to provide an integrated soln for drug discovery.

*Application Instructions:* Send resume to:  
Aurora Bioscience Corp. HR (Ref Job #223DH)  
11010 Torreyana Road  
San Diego, CA 92121  
Email: hr@aurorabio.com  
FAX: 858-404-6720

**CHEMPLOYMENT ABSTRACTS 3588**

*Position Title:* Research Associate Medicinal Chemistry

*Job Description:* Carry out synthesis & characterization of small molecule drug candidates & develop clinical drug candidates for an oncology, cardiovascular or inflammation based research program.

**QUALIFICATIONS DESIRED**

*Education:* BS and/or MS, org chem  
*Experience:* Solid grasp of org synthesis; strong analytical skills using NMR, MS, HPLC. Good communication skills & ambition to join a growing team of multidisciplinary scientists.

**LOCATION, SALARY, MAIL ADDRESS**

*Location:* South San Francisco  
*Salary:* Competitive  
*Application Instructions:* Send resume to:  
Celera Genomics  
HR Dept., Attn: Job #MC-RA-ACS  
180 Kimball Way  
South San Francisco, CA 94080  
FAX: 650-866-6650  
Web: www.celerajobs.com

**CHEMPLOYMENT ABSTRACTS 3589**

*Position Title:* Scientist, Medicinal Chemistry

*Job Description:* Carry out the design, synthesis & characterization of small molecule drug candidates & develop clinical drug candidates for oncology, cardiovascular or inflammation based research program.

**QUALIFICATIONS DESIRED**

*Education:* PhD org or medicinal chem  
*Experience:* 2 yrs of postdoctoral or relevant research exp; solid grasp of org synthesis as demonstrated by relevant publications; strong analytical skills using NMR, MS, HPLC. Good communication skills & the ambition to join a growing team of multidisciplinary scientists.

**LOCATION, SALARY, MAIL ADDRESS**

*Location:* South San Francisco  
*Salary:* Competitive  
*Application Instructions:* Send resume to:  
Celera Genomics  
HR Dept., Attn: Job #MC-SCI-ACS  
180 Kimball Way  
South San Francisco, CA 94080  
FAX: 650-866-6650  
Web: www.celerajobs.com

**CHEMPLOYMENT ABSTRACTS 3590**

*Position Title:* Research Assistant/Chemist

*Job Description:* Develop, improve & evaluate analytical methods for environmental & biological samples. Provide analytical support for manufacturing & quality control.

**QUALIFICATIONS DESIRED**

*Education:* BS/MS org chem, chem or equivalent  
*Experience:* At least 1-3 yrs lab exp. Have solid understanding of org & analytical chem; be familiar with std analytical techniques. In-depth knowledge & first-hand exp in HPLC is required.

**LOCATION, SALARY, MAIL ADDRESS**

*Location:* Mountain View  
*Salary:* Dependent on experience  
*Description of Employer:* Develop HPLC assays for environmental & biomedical markets. Manufacture reagents & supplies.

*Application Instructions:* Send resume to:  
Human Resources  
Pickering Laboratories, Inc.  
1280 Space Park Way  
Mountain View, CA 94043  
Email: personnel@pickeringlabs.com  
FAX: 650-968-0749

**CHEMPLOYMENT ABSTRACTS 3591**

*Position Title:* Customer Support Chemist

*Job Description:* Handle technical inquiries from end-user & resellers; perform field installation; represent company at seminars, exhibitions & workshops; create & support training programs; provide technical & user inputs for new consumables & hardware products.

**QUALIFICATIONS DESIRED**

*Education:* BS/MS chem or related discipline  
*Experience:* At least 1+ yrs relevant exp is desirable; knowledge of HPLC; good communication skills.

**LOCATION, SALARY, MAIL ADDRESS**

*Location:* Mountain View  
*Salary:* Dependent on experience  
*Description of Employer:* Develop HPLC assays for environmental & biomedical markets. Manufacture reagents & supplies.

*Application Instructions:* Send resume to:  
Human Resources  
Pickering Laboratories, Inc.  
1280 Space Park Way  
Mountain View, CA 94043  
Email: personnel@pickeringlabs.com  
FAX: 650-968-0749

**CHEMPLOYMENT ABSTRACTS 3592**

*Position Title:* Research Associate/ Sr. Research Associate, Exploratory Research

*Job Description:* Responsible for performing synthesis & characterization of new chem entities, e.g., metallo-tetraphyrins & various other porphyrin-like macrocyclic drug candidates for treatment of cancer & cardiovascular diseases & other biomedical applications/technologies.

**QUALIFICATIONS DESIRED**

*Education:* BS/MS in chem with conc in synthetic org chem  
*Experience:* 1-5 yrs academic or industrial exp in a synthetic research and/or development environment.

**LOCATION, SALARY, MAIL ADDRESS**

*Location:* Sunnyvale  
*Salary:* Competitive salary & benefits/stock options  
*Description of Employer:* Pharmaceutical R&D company  
*Application Instructions:* Send resume to:  
Pharmacycies, Inc.  
Attn: Human Resources  
995 E. Arques Avenue  
Sunnyvale, CA 94085  
FAX: 408-990-7361  
Email: hr@pcyc.com



SANTA CLARA VALLEY SECTION  
AMERICAN CHEMICAL SOCIETY  
P.O. Box 395, Palo Alto, CA 94302

Non-Profit  
Organization  
U.S. Postage  
PAID  
Permit No. 344  
Palo Alto, CA

#### DECEMBER 2001 NEWSLETTER TOPICS:

From Chiral Synthesis to Glaciers and Galaxies, It's All Chemistry  
Chair's Message

Professor James Morrison Will Present His Award Address  
Workshop for Teachers Celebrates Chemistry and Art  
Election Returns for 2002 Operating Year  
2003 ACS Regional Awards in High School Chemistry Teaching  
Newsletter Forum  
Where Are the New ACS Volunteers?

#### CHEMPLOYMENT ABSTRACTS



<http://www.scvacs.org>

To receive emails when newsletters are published on the web site,  
send an email to [scvacs-newsletter-request@lists.best.com](mailto:scvacs-newsletter-request@lists.best.com) with  
the word "subscribe" in the body.



## SANTA CLARA VALLEY SECTION

### 2001 Section Officers

|                                 |              |  |
|---------------------------------|--------------|--|
| Chair: <b>Sally Peters</b>      | 650-812-4994 | <a href="mailto:speters@parc.xerox.com">speters@parc.xerox.com</a>           |
| Chair-Elect: <b>Jon Touster</b> | 650-723-4340 | <a href="mailto:touster@leland.stanford.edu">touster@leland.stanford.edu</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>Ean Warren</b>   | 650-329-4554 | <a href="mailto:ewarren@scvacs.org">ewarren@scvacs.org</a>                   |

### Councilors

|                                    |              |  |
|------------------------------------|--------------|--|
| 1999-01: <b>Bonnie Charpentier</b> | 650-354-2344 | <a href="mailto:charpentierbon@yahoo.com">charpentierbon@yahoo.com</a> |
| 1999-01: <b>Herb Silber</b>        | 408-924-4954 | <a href="mailto:hbsilber@sjsu1.sjsu.edu">hbsilber@sjsu1.sjsu.edu</a>   |
| 2000-02: <b>Maureen Scharberg</b>  | 408-924-4966 | <a href="mailto:scharbg@pacbell.net">scharbg@pacbell.net</a>           |
| 2000-02: <b>John F. Riley</b>      | 650-328-4036 | <a href="mailto:jfriley@atdial.net">jfriley@atdial.net</a>             |
| 2000-02: <b>Ean Warren</b>         | 650-329-4554 | <a href="mailto:ewarren@scvacs.org">ewarren@scvacs.org</a>             |
| 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:speters@parc.xerox.com">speters@parc.xerox.com</a>     |

### Alternate Councilors

|                                |              |  |
|--------------------------------|--------------|--|
| 1999-01: <b>Peter Rusch</b>    | 650-941-8120 | <a href="mailto:pfrusch@aol.com">pfrusch@aol.com</a>                           |
| 1999-01: <b>Jon Touster</b>    | 650-723-4340 | <a href="mailto:touster@leland.stanford.edu">touster@leland.stanford.edu</a>   |
| 2000-02: <b>Roy Okuda</b>      | 408-924-2525 | <a href="mailto:okuda@sjsu.edu">okuda@sjsu.edu</a>                             |
| 2000-02: <b>Donna Drogos</b>   | 408-265-2600 | <a href="mailto:ddrogos@geosyntec.com">ddrogos@geosyntec.com</a>               |
| 2000-02: <b>Lance Wong</b>     | 650-829-1148 | <a href="mailto:lwong@valentis.com">lwong@valentis.com</a>                     |
| 2001-03: <b>George Lechner</b> | 408-226-7262 | <a href="mailto:george.lechner@usa.xerox.com">george.lechner@usa.xerox.com</a> |
| 2001-03: <b>Carol Mosher</b>   | 650-322-3120 | <a href="mailto:cmosher2@aol.com">cmosher2@aol.com</a>                         |

### Newsletter

Editor: **Laura Rasay** 650-859-4782 [editor@scvacs.org](mailto:editor@scvacs.org)

### Chememployment Abstracts

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

## FUTURE MEETINGS

|                  |   |
|------------------|---|
| <b>Jan 10</b>    | Executive Committee Meeting   |
| <b>Jan 17</b>    | SCV Dinner Meeting<br><i>James Morrison</i>                             |
| <b>Feb 21</b>    | SCV Dinner Meeting<br><i>Harry Cook, USGS</i>                           |
| <b>Feb 24-27</b> | Process Chemistry in the<br>Pharmaceutical Industry<br>Barcelona, Spain |
| <b>Mar (TBD)</b> | Chemistry Olympiad  |
| <b>Apr 7-12</b>  | ACS Spring Meeting<br>Orlando, FL                                       |

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



Printed on  
recycled paper.