

Silicon Valley Chemist

Santa Clara Valley Section

American Chemical Society

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Chemistry Olympiad Finalist

– Catherine Chang –

Catherine is the Santa Clara Valley section's finalist in the U.S. National Chemistry Olympiad! She scored among the top 18 high school students in the country in the USNCO on April 20th and has been invited to participate in the study camp at the Air Force Academy from June 2 to 16. The international competition occurs July 5-15 in Groningen, the Netherlands.



awards in World and American History! Her extracurricular activities include playing the French horn for four years in the Wind Ensemble and Symphonic Band.

But her main extracurricular activity is tutoring.

She has been an active participant of the school's STAR Tutor program for two years. Chemistry students are her specialty and she readily admits what any good teacher knows, that she learns more than her students! She is also a teacher's assistant for the current AP class.

Jim Flores, her AP teacher, has many good things to say about Catherine. "Catherine is a highly

continued on next page

As a senior at Lynbrook High School, Catherine is an enthusiastic, intelligent, outgoing young woman, who enjoys all subjects. She took Honors Chemistry her sophomore year and AP Chemistry her junior year, winning awards in both classes. Not to mention winning corresponding

– Reminder – Beer Tasting, Family Picnic and Awards Ceremony

Prepayment and mail-in registration is required. See the registration form on the next page.

There is still time to register for the annual picnic. This year it will take place on Saturday, June 29 at the Keck chemistry building on the Stanford campus. Bring your family, taste some wonderful beer, and honor our fifty-year members and many section volunteers. Visit our Web site www.scvacs.org or see the May newsletter for more information.

Chair's Message

In 2003, our local section dues will increase 33% to \$12.00 per year. Among other things, the increase will help to defray the higher cost of postage. While local section dues are voluntary, 78% of our 3,374 Santa Clara Valley Section members pay them. There was some discussion during the last Executive Committee meeting as to whether this was a high, low, or average percentage. I'm not sure, but I think it's good when more than three-quarters of the members make this contribution to the section. The funding makes possible our programs, from those aimed at children, high school, college, or minority students, to speakers at our monthly dinner meetings.

With the substantive part of the message complete, I'll proceed to my musings for the month.

I have piles of things on my desk, things I want to get to, unfinished

continued on page 3

Chemistry Olympiad Ten of Our Bravest and Brightest!

Calvin Chan	Monte Vista
Catherine Chang	Lynbrook
Emily Chen	Monte Vista
Alina Fu	Lynbrook
Jenny Jin	Lynbrook
Peter Lee	York
James Li	Mountain View
Heather Robinson	Los Altos
Chris Rochester	Hillsdale
George Schnurle	Woodside Priory

These ten sophomores, juniors and seniors from the Santa Clara Valley joined 18 students from the California section to participate in the U. S. National Chemistry Olympiad (USNCO) on April 20th at Las Positas College in Livermore.

The USNCO is a multi-tiered competition designed to stimulate and promote achievement in high school chemistry. The students compete locally, regionally, nationally, and internationally. Since 1984 the U.S. has sent a team of its four brightest students to compete internationally. Our section sent a student internationally in 1995 and 1996.

This year in February, over 400 high schools in our section were contacted about the exam and its schedule. The teachers at 11 schools chose to have their Advanced Placement students take the first round of exams

continued on next page

Finalist, continued from front page

intelligent individual whose natural talent allows her to quickly absorb the course material. She also supplements this ability with a strong work ethic. She refuses to coast through a class but instead exerts herself fully to master all of the concepts presented. Catherine is never satisfied with simply getting the "right" answer. She prefers to understand all of the reasoning used to arrive at that answer. In addition to her role as my TA, Catherine volunteers her time to tutor my Honors Chemistry students. She regularly meets with not one but several struggling students in order to boost their performance and their confidence. She teaches them proper problem solving strategies and coaches them on how to quickly complete the more involved calculations. Such generosity and strong desire to help her peers is impressive and refreshing to see in someone so young. During the time that I have known her, I have found Catherine to be a highly motivated, extremely capable, and very powerful student."

Her college plans are not yet definite, but she will be attending school in California. Some of her options include UC Berkeley in the North to Caltech in the South. So you can see how intelligent this young woman is!

Catherine lives in San Jose with her parents and sister, Shirley. You will have the opportunity to meet Catherine in June at our annual Awards Ceremony and Family Picnic.

Chemistry Olympiad, continued from front page

in early April. (If your local high school did not compete, contact their science department and volunteer to help administer the test next year!) Tricia Takahara from Roche Bioscience graded 96 exams and contacted the 18 top scorers, a maximum of 3 from each high school.

Ten of those 18 students volunteered to give up Saturday, April 20th, to be in the next level of competition. That level consisted of the USNCO national exam, a three-part, four and one-half hour exam. It was administered locally to 900 students across the country. The California section hosted the exam for both sections at Las Positas College in Livermore. Part I was a 90-minute, 60 multiple-choice examination covering a broad range of topics. Part II, a 105-minute free response section, required written responses for a multi-step problem requiring in depth knowledge of chemical theories and models. Part III, the 75-minute, two-item laboratory practical, evaluated the students' ability to problem-solve in the laboratory. The volunteer proctors agreed with the students that Part I was hard and that Part II was harder yet! Everyone was ready for the pizza lunch that the California section provided. Part III allowed more flexibility as the students had to design and carry out two

separate experiments, using only the chemicals and equipment provided. After 90 minutes everyone, including the proctors, looked shell-shocked and appreciated the chocolate bars that Howard Peters provided!

The 28 students who participated came from as far away as Mendocino, Turlock, and Monterey. Our ten brave, brilliant, and weary students had a thorough mental workout!

A special thanks to Howard Peters, Jamil Talhouk, Bruce Raby, and Tricia Takahara for helping out. We were all amazed at the ability and composure that the students displayed. If you want to test your wits against the high school students, go to the 2002 exam as posted on the web page at www.chemistry.org. Since the url is long, search for "chemistry olympiad" and find your way to the exam questions. The answers are given at the end of each part of the exam.



RESERVATION FORM

Annual Wine Tasting, Family Picnic and Awards Ceremony

Stanford University – Saturday, June 29, 2002 Deadline for Reservation – Monday, June 24, 2002

Name(s): _____ Telephone No.: (_____) _____

No. of Reservations at \$15.00 _____

No. of Children (age of 4-12) at \$5.00 _____

Total Amount Enclosed\$ _____

Make check payable to: Santa Clara Valley Section – ACS

Mail check and reservation form to: Ms. Shirley Radding, 2994 Cottonwood Court, Santa Clara, CA 95051

Please check if you can volunteer: I can help set-up I can help clean-up

Chair's Message, continued from front page

business, and good intentions waiting to be fulfilled. (I hope I'm not alone in this.) Rarely do things escape a pile on their own. Recently, when I was sick, my wife filled in for me, interviewing a student for a tutor position (we live in Stanford's Freshman-Sophomore residential college). Afterward, she called me from my office and said, "There's a great cover story in Chemical & Engineering News; I'll bring it home." When I got off the phone, I racked my brain trying to think of a recent issue that would catch my wife's attention. I couldn't think of any. When she got home, she pulled from her bag the January 10, 2000 issue. It had surfed to the top of a pile, caught her eye, and been rescued. The cover story was about Oliver Sacks, the famous neurologist and author, and his youthful love affair with Chemistry, or more accurately, the periodic table. I had only glanced at the article two years ago, and set it aside with the intention of finishing it. Now I had my chance.

Sacks was a budding chemist as a

boy. His uncles, who used chemistry in their work in industry, nurtured young Oliver's interest. He eventually had his own home lab complete with running water, fume hood, and, we assume, "real chemicals." The article, by Madeline Jacobs (the current Editor-in-chief of Chemical & Engineering News), notes that Sacks has "bemoaned the demise of real chemicals in chemistry sets." He was an experimenter who loved the excitement of working in the lab. For him, the thrill of chemistry was sensory: it was full of tactile, olfactory, and visual experiences. (No wonder he went into neurology where he could study the basic nature of how our brains experience the senses.) In his love of descriptive chemistry, he focused on the periodic table. He was a regular visitor to the London Science Museum's exhibit of the periodic table, which displayed samples of many of the elements. Sacks was dissuaded from a career in chemistry by his parents, who he later followed into medicine.

While reading the article, I was most interested in Sacks' view of chemical education. He is most decidedly an experimentalist. Not only did he decry the diminution of chemistry sets, he did not like chemistry confined to the classroom and chalkboard. For the next generation of chemists, Sacks recommends "vivid experiments - there is nothing like chemistry demonstrations, they're colorful and dramatic...and make kids feel they are contemporaries of Lavoisier, Davy, [and] Dalton." He goes on to express views that may rankle some chemists: "chemists need to have enjoyable and accessible books about chemistry...We need to get rid of jargon and esoterica...We need to get rid of the elitism of chemistry. Chemists or outsiders such as myself might draw people in by sharing a love and enthusiasm of chemistry connected with its explanation and insights." Overall, I think he has a winning formula. I just wish we had more outside spokespeople with his passion and enthusiasm for chemistry.

Councilor's Report – ACS National Meeting

April 7-11, 2002 Orlando, Florida

The Spring 2002 ACS National Meeting was attended by Santa Clara Valley Section Councilors Linda Brunauer, Bonnie Charpentier, Sally Peters, Jack Riley, Maureen Scharberg, Herb Silber, and Ean Warren. As well as attending technical sessions, the Councilors served on a variety of governance committees and task forces, and participated in the Western District Councilors' Caucus and the Council Meeting. Overall meeting attendance was over 14,300. Some highlights from the meeting are provided here.

Younger Chemists Committee

Ean Warren reports that the YCC continues to act on the local, regional and national levels on behalf of younger chemists to make the ACS relevant, increase the involvement of younger chemists, and to develop mechanisms to integrate younger chemists into the profession. Among

numerous other activities at the meeting, the First Annual Fun Run/Walk was held Monday morning; 145 people registered for the event.

The YCC will continue to present Chemluminary Awards to those local sections that show excellence in local section YCC activities. A new activity this year is YCC Leadership Development Workshops to be held at the Boston National Meeting and 2003 regional meetings (http://membership.acs.org/y/ycc/updates_02/ycc_ad.htm). The YCC is continuing a successful program, the Younger Chemists Network (<http://membership.acs.org/scripts/y/ycc/ycn/ycnintro.asp>) to coordinate volunteers with volunteer opportunities. Finally, the YCC is planning programming for national meetings out to 2003. The Boston meeting will feature programming including "Keys to Financial Success";

"Non-Traditional Careers for Chemists"; "Graduation, What's Next"; "Building Your 60 Second Sketch" – how to pitch yourself to VCs; and a blood drive with a theme of "Chemistry is in Our Blood".

National Chemistry Week

National Chemistry Week will be held October 20-26, 2002. The theme is "Chemistry Keeps Us Clean" focusing on the chemistry of soaps, detergents, and other cleaning products. Watch this newsletter for plans and volunteer opportunities for the Santa Clara Valley Section celebration.

Chemical Abstracts Service

Sally Peters is now serving on the Committee for CAS. A focus of this meeting was the successful placement of SciFinder Scholar in hundreds of small to medium size colleges and universities by having groups of schools form consortia and share the expenses. CAS was adding one school per business day in 2001.

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Council Policy Committee and Council Votes

As a member of the Council Policy Committee, Bonnie Charpentier served on the subcommittee to evaluate and make recommendations regarding a petition for change in the funding of local sections and divisions. There was a great deal of discussion on this petition in several different venues, and it was ultimately recommended that the petition be withdrawn, reworked to resolve perceived deficiencies, and presented at the Boston meeting. The petitioners agreed to do so.

Bonnie also has been serving on a task force to assist the Committee on Committees in an evaluation of governance committee structure and responsibilities. The task force spon-

sored a well-attended "town meeting" on Monday afternoon to hear ideas, concerns, and suggestions from members. A petition to increase the size of Society Committees was postponed until Boston to allow the task force to complete its recommendations.

Council approved petitions to (1) change the status of the Women Chemists Committee from an "Other" Committee of the Council to a Joint Board-Council Committee; (2) change the section territory of the Minnesota Local Section to annex two unassigned counties; and (3) authorize the previously-approved dues escalator. ACS dues for 2003 will be \$116.00.

Council voted to select the following nominees as candidates for ACS President-Elect: Charles P. Casey of the University of Wisconsin, and

Alvin L. Kwiram of the University of Washington. The results of the selection of candidates for District III and VI Directors (done by mail ballot to Councilors of those districts) were announced. The candidates for District VI are Howard W. Peters, Stanley C. Pine, and Stephen A. Rodemeyer. Please read the statements of these candidates and remember to vote in the fall election.

Future Meetings

The next ACS National Meeting will be held in Boston August 18-22, 2002. If you have questions or suggestions regarding ACS locally or nationally, please contact one of your Councilors or Officers listed in this newsletter.

Bonnie Charpentier



Patent Truths

1. I have heard the story that Dr. Herman Mark, the famous polymer chemist, was Jewish and needed to leave Germany just before WWII. He is reported to have converted most of his families' possessions into platinum metal, had it drawn into wire, made coat hangers of the wire, and left Germany on a trip with his family and with their clothes on the hangers. Upon arrival to the US, the platinum metal was his \$100,000+ nest egg to start over. Can anyone find a written reference to this story for me?? Did he ever win the Nobel Prize in chemistry for his work?
2. Roy Plunkett was a coinventor of polytetrafluoroethylene (TEFLON). The U.S. Patent 2,230,654 issued in 1938 and was inducted into the National Inventors Hall of Fame in 1985 (See www.invent.org). Plunkett earned a Masters degree in chemistry from Ohio State in the 1930s. His roommate at OSU was Paul Flory, the late Nobel Prize winning polymer chemist at Stanford.
3. Over thirty five years ago when I finished at Stanford, I interviewed with Roy Plunkett at DuPont for a

research position in organic fluorine chemistry. Plunkett had long sought at DuPont the catalyst that would polymerize tetrafluoroethylene (TFE) - to no avail, five new tanks of TFE were delivered to his lab. One tank showed the correct weight, but zero pressure. Plunkett related to me how he had literally sawed the tank in half and found the first polymerized TFE having great physical and chemical properties. His further investigation identified the history of the TFE tank and the possible trace contaminants from previous fillings that had caused the spontaneous catalysis. His investigation narrowed and the rest is history.

4. Did you know that the US Postal facility in Washington DC - Brentwood is the one that ALL the US mail passes through for the U.S. Patent and Trademark Office (and many of the other federal agencies)? Because of the anthrax emergency, all U.S. Patent Office mail was quarantined and then irradiated before it was delivered. These mail delays were devastating. If you saw your local patent attorney tearing hair out from October through

December, it was because no one in the public was informed of this problem for an incredible five weeks!! The present irradiation often melts the ink on the submitted pages gluing them permanently together and usually requires a completely new submission of the documents.

5. Robert Sarnoff, the long time president of the Radio Corporation of America (RCA) was a strong promoter of commercial radio and then television. He came to public attention in April 1912 as a young wireless operator on the top floor of the Woolworth Building in New York City. He was the first person in the US to receive the faint message that the Titanic had struck an iceberg and sunk with great loss of life. He stayed on the job for three solid days relaying the wireless messages and stayed in the public eye after that. When RCA was acquired by GE over ten years ago, SRI International in Menlo Park received the RCA Sarnoff Labs in Princeton, NJ as a donation and significant funds to maintain it for a five year transition period.

Do you have any patents truths to share? contact Howard Peters at peters4pa@aol.com

The Division of Environmental Chemistry

The Division of Environmental Chemistry was organized in 1913 as a waste water treatment division, much favored by water chemists and engineers. In 1973, the division acquired its current name. The division now has about 6000 members. Since 1990, they have organized about 140 symposia across a broad range of topics, including analysis, monitoring, fate and effects of synthetic chemicals, air pollution, regulatory and toxicity issues, and new remediation science and technologies.

At the next National ACS meeting in Boston in August the Division of Environmental Chemistry will sponsor or cosponsor 11 symposia covering such diverse topics as synchrotron radiation as an analytical tool, the biogeochemistry of marine organic matter and electrochemical methods for wastewater.

Ted Mill, the program chair of the Division of Environmental Chemistry, has been a member of the division since about 1975:

I joined the division at that time as a direct result of my new research interests in the fate of chemicals in the air and water environments and in characterizing details of photochemical and hydrolysis reactions in natural waters. One of the early studies, supported by NSF, was to characterize the flux of free radicals in natural waters exposed to sunlight. Coincidentally, the division was also shifting its emphasis away from waste water treatment to the study of environmental chemical processes, so it was good match of interests.

An important issue for the Division of Environmental Chemistry is increasing proliferation of environmental programming in other divisions which competes for the attention of our members. A practical consequence is diminished attendance at division symposia with a consequent reduction in reimbursements from ACS to the division. I am working more closely with other program chairs to develop shared programming with shared revenue and sched-

uling that avoids time conflicts.

Another problem for the division is the lack of younger members in division governance. As a result, the executive committee is beginning to look like a geriatric ward; I'm probably the oldest member of the committee, but not by much. We are making a concerted effort to attract the under-40 crowd to participate more fully in running the division by becoming activities chairs, assistant chairs as well as organizing symposia.

I would urge all SCVACS members with environmental interests to join the Division of Environmental Chemistry. For a nominal \$15 a year, members receive periodic newsletters together with a CD for each national meeting of the division (two a year) containing all of the division programming in the form of extended abstracts. I would also urge these chemists to consider organizing symposia in areas of importance in the environmental sciences for national meetings. Next year ACS (and the Division of Environmental Chemistry) meets in New Orleans in March and New York in September; in 2004, meetings are held in Anaheim and Philadelphia in spring and fall, respectively. Anyone interested in organizing a symposium, especially for New York or beyond, should contact me at ted.mill@sri.com to discuss any ideas.

Hike in Big Basin Park

Younger Chemist Committee Event

Date: Saturday, July 13th

Time: All day

Feature: Dr. Chris Brinegar

San Jose State University
Redwoods Expert

This event involves an 11 mile hike through the redwoods, with some science and lots of fun.

For more information, please check the YCC website:

www.scvacs.org/ycc/index.html

To participate in the hike, please RSVP to Claire Komives before July 8 (ycc@scvacs.org)

SCV-ACS Nominations for 2002

Petition candidates can be nominated by the membership. Offices are: Chair-Elect, Secretary, Treasurer, Councilor, and Alternate Councilor

The requirements are:

- Member (grade) of SCV Section.
- Agreement to run for the office
- Agreement to attend Executive Committee meetings
- Signatures of 15 members (member grade) of the SCV Section
- Petitions along with a brief biography and statement must be received by August 1, 2002.

Mail nominations to: Dr. Karl Marhenke
1710 Wilshire Drive, Aptos, CA 95003-2836.



Editor's Corner: Corrections

Mistakes seem to slip through the editing system from time to time and I appreciate the readers who actually point them out (who actually read the newsletter). In the April issue, Darwin's "Origin of Species" was misprinted. In the May issue, the 37th National Organic Symposium was listed in the event calendar; yet, it was held last year in Bozeman, Montana at Montana State. Also in the May issue, I believe I miscounted the number of technical divisions - put it this way: I'll try my best to get as many, if not all, of the technical divisions to submit an introduction to the newsletter. This month, I interviewed a fellow SRI chemist: Ted Mill, Chair of the Environmental Chemistry Division.

Again, your comments or questions are always appreciated and encouraged (editor@scvacs.org).

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CHEMPLOYMENT ABSTRACTS – JUNE 2002

CHEMPLOYMENT ABSTRACTS 3627

Position Title: Associate Chemist

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

QUALIFICATIONS DESIRED

Education: BS/BA or MS/MA org

Experience: At least 1 yr of independent research exp in org synthesis is required. A record of publication is desirable. Should also possess excellent communication skills & should 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 3628

Position Title: Research Associate, Chemistry

Job Description: Design, synthesis, & characterization of a wide variety of org compounds like heterocyclic compounds, lipids, & polymers. Ability to use & maintain NMR. Detailed study report writing.

QUALIFICATIONS DESIRED

Education: M.S. synthetic org or medicinal chem with 2 to 5 years of industrial exp

Experience: Exp with lipid synthesis is preferred. Exp as a team player with the ability to do chiral synthesis & characterization. Strong skills in interpretation of NMR, IR, and mass spectral data. Exp with periodic cryogen filling. Extensive exp in semi preparative & preparative HPLC and other preparative chromatographic techniques is essential. Online literature search, collect data & design & execute org chem experiments Excellent presentation and writing skills.

LOCATION, SALARY, MAIL ADDRESS

Location: Palo Alto

Salary: Competitive Salary and Benefits, DOE.

Description of Employer: Targesome is a leading company in the development of targeted therapeutic drugs. EOE.

Application: Please submit your resume via e-mail to: jobs@targesome.com

No fax/phone calls please.

CHEMPLOYMENT ABSTRACT 3629

Position Title: Research Associate I/II/III Metabolism/Bioanal Chemistry

Job Description: Exptl work to support identification of analytes in biol samples & help detn metabolic characteristics of new cpds in animals & humans. Develop & validate anal methods for identification & quant of drugs in biol samples, help design pharmacokinetic & metabolic studies, analyze samples & document results. Present reports to the dept & outside of the department.

QUALIFICATIONS DESIRED

Education: Requires BS/MS in Chem, Biol or Biochem & basic knowledge of chem, biochem, and lab tech, instruments and computers unique to this position. RAI: Requires a BS with up to 3 yrs of exp. RAI: Requires a BS with 3-5 yrs exp or MS with 1-3 yrs. RAIII: Requires a BS/MS & 5+ years of experience.

Experience: Should be detail oriented with excellent communication, problem solving and documentation skills. Exp with HPLC, cell/tissue culture, biol sample handling, immunoassay, mass spect, automated high-throughput analysis and robotics is preferred.

LOCATION, SALARY, MAIL ADDRESS

Location: Palo Alto

Application Instructions: To apply, send your resume, indicating Job Code 2442-ACS, to paloalto_hr_staffing@roche.com
http://paloalto.roche.com

CHEMPLOYMENT ABSTRACTS 3630

Position Title: Sr. Scientist, Peptide/Protein Chemist Job Code: DL 05-SSPP

Job Description: We are seeking a highly motivated PhD scientist to join our Technology Development team. The Technology Development group discovers and develops innovative methods that contribute to Gryphon's comprehensive approach to chemically synthesized protein therapeutics.

QUALIFICATIONS DESIRED

Education: PhD in Chem or Biochem

Experience: 2-3 yrs exp in Biotech Industry or a combination of industry and post-doctoral work in a related area. Exp relating to synthesis of peptides or other complex org mole on solid phase. Exp with small mol org synthesis, solid phase org chem &/or combinatorial chem a plus. A strong background in the chem of peptides &/or proteins. Excellent communication & writing skills

LOCATION, SALARY, MAIL ADDRESS

Location: South San Francisco

Salary: competitive compensation & benefits package & project team-based work environment. An equal opportunity employer.

Application Instructions: Send resume to: Gryphon Sciences, Inc. Attn: HR Manager
250 East Grand Ave, Suite 90
South San Francisco, CA 94080
Telephone: 650-952-7714 FAX: 650-952-3055
Email: resume@gryphonsci.com

CHEMPLOYMENT ABSTRACTS 3631

Position Title: GMP Production Manager/Assoc. Dir. Job Code: LG 01-GPM

Job Description: Member of company's GMP Manufg dept to produce therapeutic peptide prods for clinical & toxicol studies. Responsible for day-to-day clean (class 10,000) room operations to ensure peptide prod (via chem methods) is on schedule. Work with the Proc Development group to implement proc changes to syn & purification steps as needed (tech trans). Peptide ligation & folding, HPLC based purifn, conc/diafiltration. Write, review & revise SOP's & MPR's. Generate & distribute prodn schedules. Implement facility modifications to ensure GMP compliance.

QUALIFICATIONS DESIRED

Education: PhD, MS, BS org chem, chem, or related field 10+ yrs ind exp with a BS or MS; 5+ yrs ind exp with a PhD

Experience: 3+ yrs of hands-on exp with cGMP manfg. Exp in peptide syn, protein folding & purifn, & supervision of GMP prodn. Good communication skills

LOCATION, SALARY, MAIL ADDRESS

Location: South San Francisco

Salary: competitive compensation & benefits

Application Instructions: Send resume to:

Gryphon Sciences, Inc. Attn: HR Manager

250 East Grand Ave, Suite 90

South San Francisco, CA 94080

Telephone: 650-952-7714 FAX: 650-952-3055

Email: resume@gryphonsci.com

CHEMPLOYMENT ABSTRACTS 3632

Position Title: Sr. Scientist, Peptide/Organic Chemist Job Code: LM 01-SSPOC

Job Description: Develop state-of-the-art methods for synthesis of highly bioactive proteins for therapeutic application. Innovative scientist with exp in modern soln & solid-phase peptide & organic chemistry. Conceive & plan efficient syn routes to moles of interest. Isolate & characterize prods using state-of-the-art techniques.

QUALIFICATIONS DESIRED

Education: Ph.D. in Chem, Org Chemistry

Experience: 2 yrs ind or post-doctoral exp is required. Knowledge of or exp with HPLC, NMR, &/or Mass Spect, Sound knowledge of syn org chem, Strong background in the chem syn of peptides & proteins, Strong interest in protein chem, Ability to work on multidisciplinary teams

LOCATION, SALARY, MAIL ADDRESS

Location: South San Francisco

Salary: competitive compensation & benefits package & project team-based work environment. An equal opportunity employer.

Application Instructions: Send resume to:

Gryphon Sciences, Inc. Attn: HR Manager

250 East Grand Ave, Suite 90

South San Francisco, CA 94080

Telephone: 650-952-7714

FAX: 650-952-3055

Email: resume@gryphonsci.com

CHEMPLOYMENT ABSTRACTS 3633

Position Title: Sr. Scientist, Analytical, Job Code: LG 03-SSA

Job Description: Leader & key team member within the company's prog to develop analytical methods to support the API production, formulation development & manufacturing, & the assessment of quality & purity of GMP materials. Develop & transfer anal methods for API's & drug prods. Provide support for proc development, prodn & formulation studies, Characterize structure of API's & side products

QUALIFICATIONS DESIRED

Education: Ph.D. anal chem, chem, biochem & 3+ yrs of industrial experience

Experience: Exp in anal techniques for characterization of protein therapeutics such as HPLC, SDS-PAGE, peptide mapping map, amino acid sequencing, & other related assay methods, knowledge of GMP & regulatory filings is a plus, Excellent communication & writing skills

LOCATION, SALARY, MAIL ADDRESS

Location: South San Francisco

Salary: competitive compensation & benefits package & project team-based work environment. An equal opportunity employer.

Application Instructions: Send resume to:

Gryphon Sciences, Inc. Attn: HR Manager

250 East Grand Ave, Suite 90

South San Francisco, CA 94080

Telephone: 650-952-7714 FAX: 650-952-3055

Email: resume@gryphonsci.com

CHEMPLOYMENT ABSTRACTS 3634

Position Title: Scientist, Peptide/Protein Chemist Job Code: LM 02-SPPC

Job Description: The Peptide/Protein Chemist will be part of a team that synthesizes highly bioactive peptide proteins for therapeutic application. We are seeking a candidate with experience with protein purification & folding, & peptide chemistry.

QUALIFICATIONS DESIRED

Education: B.S. Org or Peptide Chem with 3 yrs of ind

&/or res exp, or M.S. with 2 yrs of res exp
Experience: 2 yrs of practical exp with routine lab instrumentation e.g., anal/prep HPLC, mass spect, & electrophoresis, knowledge of basic peptide syn, exp in purifying proteins, ability to multitask in a lab environment.

LOCATION, SALARY, MAIL ADDRESS

Location: South San Francisco

Salary: competitive compensation & benefits package & project team-based work environment. An equal opportunity employer.

Application Instructions: Send resume to:

Gryphon Sciences, Inc. Attn: HR Manager

250 East Grand Ave, Suite 90

South San Francisco, CA 94080

Telephone: 650-952-7714

FAX: 650-952-3055

Email: resume@gryphonsci.com

CHEMPLOYMENT ABSTRACTS 3635

Position Title: Scientist, Peptide Synthesis (2 openings) Job Code: NC 01-SPS

Job Description: Scientist will be a key team member within the peptide syn group. Responsible for syn, purifn & characterization of high purity syn peptides. Perform automated & manual solid phase peptide syn, perform post-syn modifications, perform prep scale HPLC purifn, work closely with Research & Technol Development groups, provide tech support for peptide outsourcing efforts, generate procedures, check-lists & protocols as needed, perform routine maintenance of lab equipment.

QUALIFICATIONS DESIRED

Education: B.S., M.S. chem, biochem, or biochem engg

Experience: Min 3 yrs of biotech ind exp. Must have knowledge of ES-MS & must know HPLC in anal characterization of peptides. Exp with HF cleavage a plus. Must have excellent communication skills & a demonstrated ability to contribute in a team environ.

LOCATION, SALARY, MAIL ADDRESS

Location: South San Francisco

Salary: competitive compensation & benefits package & project team-based work environment.

Application Instructions: Send resume to:

Gryphon Sciences, Inc. Attn: HR Manager

250 East Grand Ave, Suite 90

South San Francisco, CA 94080 Telephone: 650-952-7714

FAX: 650-952-3055 Email: resume@gryphonsci.com

CHEMPLOYMENT ABSTRACTS 3636

Position Title: Application Engineer

Job Description: Responsible for tech proj both internal & external to JSR. Work on resist development, proc development & integration activities for JSR mats. Support sales efforts by prep tech data & presentations. Evaluate new mats at Sunnyvale Plant. Occasional support & take part in tech evaluations at customer sites. Prepare customer repts & distribute to Tech Management & other application engrs & techs. Internal trouble-shooting of prods related to JSR prods. Attend ind tech confs. Train & act as mentor for QC & application techs.

QUALIFICATIONS DESIRED

Education: BS Chem, Phys, Engrg field.

Experience: Min 3 yrs related exp or 5 or more years exp as an Engr or Scientist in lithography. Trouble-shooting skills & understanding of basic chem. Knowledge of computers & statistics applied to semi-cond manufg. Knowledge of semi cond photolithographic proc equipment is mandatory.

LOCATION, SALARY, MAIL ADDRESS

Location: Sunnyvale

Salary: 85K Annually

Description: JSR Microelectronics, Inc makes photoreists related prods for use in semiconductor manufg

Application Instructions: Submit your resume as Word attachment to email with Job Title in subject line to: rmattos@jsrusa.com

CHEMPLOYMENT ABSTRACTS 3637

Position Title: Development Engineer

Job Description: Responsible for tech proj internal & external to JSR. Work on resist development, proc development & integration activities pertaining to JSR mats. Assist with development of new products. Support sales efforts by prep tech data & presentations. Evaluate new mats at Sunnyvale Plant. Occasional support & participate in tech evaluations at customer sites. Prep customer repts & distribute to Tech Management & other application engrs & techs. Internal trouble-shooting of problems related to JSR products.

QUALIFICATIONS DESIRED

Education: BS Chem, Phys, Engrg.

Experience: Min 3 yrs related exp or 5+ yrs exp as an Engr or Scientist in lithography. Good trouble shooting skills & understanding of basic chem. Knowledge of computers & statistics applied to semi-conductor manufacturing. Knowledge of semiconductor photolithographic processing equipment is mandatory.

LOCATION, SALARY, MAIL ADDRESS

Location: Sunnyvale

Salary: 85K Annually

Description of Employer: JSR Micro-electronics, Inc makes photo-resists related prods for use in semiconductor manufg

ApplicationInstructions: Submit resume as Word attachment to email with Job Title in subject line to: rmattos@jsrusa.com

CHEMPLOYMENT ABSTRACTS 3638

Position Title: Production Engineer

Job Description: Performs process-engineering functions under the guidance of the Production Manager. Perform Process Engineering Functions; Monitor & collect process data for analysis. Assist in development of process studies in order to optimize process parameters. Participate in quality improvement program. Adhere to all plant safety and environmental policies.

QUALIFICATIONS DESIRED

Education: BS or MS, Chemical Engineering.

Experience: Min 1 yr integration or process engineering experience. Must be detail oriented and highly analytical.

LOCATION, SALARY, MAIL ADDRESS

Location: Sunnyvale

Salary: \$50K annually

Description of Employer: JSR Microelectronics, Inc. designs, manufactures, sells, distributes and services photoreists and other related products used in the manufacture of semiconductors.

Application Instructions: Please submit a resume as Word attachment to email that includes the position title in the subject line to: rmattos@jsrusa.com

CHEMEMPLOYMENT ABSTRACTS 3639

Position Title: Synthetic Chemist

Job Description: Perform synthesis, run analysis & interpret data for development of new colloidal inks. Will be expected to work closely with senior scientists & maintain a lab notebook.

QUALIFICATIONS DESIRED

Education: BS/MS chemistry
Experience: 1 yr in the handling & manipulation of air-sensitive compounds using Schlenk-line & glove-box techniques. Experience in optical spectroscopy, FTIR, HPLC, NMR & thermal analysis.

LOCATION, SALARY, MAIL ADDRESS

Location: Redwood City
Salary: Competitive salary
Description of Employer: NanoTechnica is a brand new Kleiner-Perkins backed startup developing electronics using colloidal inks of inorganic nanoparticles.

Application Instructions: For immediate consideration, please Email your resume to: jobs@print-this.com

CHEMEMPLOYMENT ABSTRACT 3670

Position Title: Organic Chemistry Instructor

Job Description: A part-time instructor is needed to teach the organic chemistry lecture and laboratory sections for a year-long organic chemistry course. The fall semester begins Wednesday August 28, 2002, and ends Friday December 13, 2002. The spring semester begins Wednesday January 8, 2003, and ends Friday May 2, 2003.

QUALIFICATIONS DESIRED

Education: Ph.D. in chemistry.
Experience: Prior teaching experience strongly preferred.

LOCATION, SALARY, MAIL ADDRESS

Location: Belmont, CA
Description of Employer: Founded in 1851, Notre Dame de Namur University is a dynamic institution whose reputation for excellence and commitment to the development of the whole person comes from its heritage as a Catholic institution.

Application Instructions: Please contact Dr. Elizabeth Center, Chair, Department of Natural Sciences Notre Dame de Namur University 1500 Ralston Avenue Belmont, CA 94002 Phone: (650) 508-3553 Fax: (650) 508-3736 email: ecenter@ndnu.edu

CHEMEMPLOYMENT ABSTRACT 3671

Position Title: Quality Control Chemist II/III

Job Description: Perform routine chem & phys assays on raw mats, in-process mats & final prods. Review & verify tests. Collect, calculate, & compute data, analyze & submit interpreted results to manager for disposition; report abnormalities at once; investigate, analyze & resolve problems; write nonconformance reports. Evaluate & improve techs & assays. Review & revise SOP's as needed. Coordinate use, calibration & maintenance of instruments.

QUALIFICATIONS DESIRED

Education: BS/BA in Chem, Biochem, or related field.
Experience: Min. 2-3 yrs of recent exp in a QC environment & have a thorough understanding of cGMP & GLP guidelines. Min. 2-3 yrs of recent, continuous hands-on HPLC exp, pharm exp or have worked in a pharm co. Must be detail oriented, flexible, team player, & possess leadership skills.

LOCATION, SALARY, MAIL ADDRESS

Location: Cupertino
Description of Employer: DURECT Corp is pioneering development & commercialization of pharm systems for treatment of chronic debilitating diseases & enabling biotech-based pharm products.

Application Instructions: Send resume to: DURECT Corp., HR www.durect.com 10240 Bubb Road Cupertino, Ca. 95014 FAX: 408-777-3577 Email: jobs@durect.com

CHEMEMPLOYMENT ABSTRACTS 3672

Position Title: Senior Research Scientist Req. #RF1-329

Job Description: Direct & conduct method development & characterization efforts for both drug substances & drug products to ensure successful completion of IND, CTX, NDA & MAA submissions.

QUALIFICATIONS DESIRED

Education: PhD chem, analytical chem or pharm chem with 4-8 yrs exp in pharm industry is desired. Will consider candidates with 0-3 yrs exp at non-supervisory level.
Experience: Ability to characterize solid-state properties of active ingredients is necessary. Development & validation of HPLC, GC & other analytical techniques is desired.

LOCATION, SALARY, MAIL ADDRESS

Description of Employer: Gilead Sciences is a biopharmaceutical company that discovers, develops & commercializes therapeutics to advance the care of patients suffering from life-threatening diseases worldwide & has five marketed products & focuses its research & clinical programs on anti-infectives, including antivirals, antifungals and antibacterials. Headquartered in Foster City, CA, Gilead has operations in the United States, Europe and Australia.

Apply online today at www.gilead.com

CHEMEMPLOYMENT ABSTRACTS 3673

Position Title: Chemist

Job Description: Duties include some, or all of the following: quality control, coating formulation, especially with high resistance to constant water immersion, writing technical bulletins and msds's, coordination with sales on properties, merits and limitations of products.

QUALIFICATIONS DESIRED

Education: B.S. or M.S. in chemistry
Experience: 3 or more yrs in coating formulation or related experience.

LOCATION, SALARY, MAIL ADDRESS

Education: South San Francisco
Salary: Competitive, plus 401-K, health insurance, vacation, etc.
Description of Employer: Small aggressive company with reputation for quality world wide recognition room to grow for the individual with initiative.

Application Instructions: Send resume with experience.education to: Stanton@eurekafluidfilm.com

CHEMEMPLOYMENT ABSTRACTS 3674

Position Title: Director, cGMP Operations

Job Description: Establish policies/procedures & provide training & audits to ensure regulatory compliancy. Responsibilities include supervising staff in conducting GMP file audits, document control, data archiving, equipment qualification, computer validation, documentation and training programs; ensuring quality aspects of lab information system & data acquisitions system development; & providing regulatory support & strategy in CMC filings, inquiries/requests from FDA or regulatory agency from abroad.

QUALIFICATIONS DESIRED

Education: BS or MS in Pharm, Chemistry or related field.
Experience: 10 yrs exp in GMP lab or in pharma industry. Extensive knowledge of GMPs within R&D environment, significant supervisory exp & ability to be team player are necessary.

LOCATION, SALARY, MAIL ADDRESS

Location: Mountain View, CA
Description: ALZA, a member of the Johnson & Johnson family of companies.

Application Instructions: Please send resume, indicating Job Code 02-102, to ALZA Corporation, HR Dept. 1900 Charleston Road, PO Box 7210 Mountain View, CA 94039-7210; fax:(650) 564-5656; email: jobs@alza.com (ASCII files only) Job Hotline: (650) 564-5319

CHEMEMPLOYMENT ABSTRACT 3675

Position Title: Chemist II/III/Senior

Job Description: Provide anal method development & validation in support of protein/peptide formulation res & prod development, including performing HPLC, in vitro release rate assay, CE, Peptide mapping, SDS-PAGE, IEF, & other protein characterization techniques. Conduct anal, summarize expt results & present findings.

QUALIFICATIONS DESIRED

Education: BS Chem, Biochem
Experience: Hands-on anal pharm exp (2-6 yrs) including HPLC, CE, SDS-PAGE, IEF, & protein/peptide analysis & characterization exp. Familiar with computerized data acquisition systems, GMP environment operations, & applications including major scientific charting software is necessary.

LOCATION, SALARY, MAIL ADDRESS

Location: Mountain View, CA
Employer Description: ALZA, a member of the Johnson & Johnson family of companies, is focused on developing products with enhanced therapeutic value based on our innovative drug delivery technologies.

Application Instructions: Send resume, showing Job Code 02-090, to ALZA Corporation, HR Dept. 1900 Charleston Road, PO Box 7210 Mountain View, CA 94039-7210; fax: (650) 564-5656; email: jobs@alza.com (ASCII files only) Job Hotline: (650) 564-5319 ALZA is proud to be an EOE.

CHEMEMPLOYMENT ABSTRACTS 3676

Position Title: Senior Medicinal Chemist/Scientist

Job Description: Responsible for design, synthesis & evaluation of small molecule drug candidates for biological assays in treatment of cancer, cardiovascular & immunological diseases and/or other related technologies. Will support R&D of lead candidates for IND/NDA submissions.

QUALIFICATIONS DESIRED

Education: PhD org/medicinal/synthetic chemistry
Experience: 2-5 yrs pharmaceutical exp & strong written/verbal communication skills. Must also have a high level of knowledge in syn org methodology & reaction mechanisms (e.g. pyrrolic-type macrocycles, peptide syn, carbohydrates, etc.) & thorough familiarity with scientific literature. (Job # SJ0519-SMC)

LOCATION, SALARY, MAIL ADDRESS

Location: Sunnyvale
Salary: Attractive salary & benefits & stock options
Description of Employer: To learn more about us, visit www.pharmacyclics.com

Application Instructions: Send resume to: Pharmacyclics, Inc., HR Attn: Job #SJ0519-SMC 995 E. Arques Avenue Sunnyvale, CA 94086 FAX: 408-774-0340 Email: hr@pharmacyclics.com

CHEMEMPLOYMENT ABSTRACT 3677

Position Title: Research Associate, Exploratory Research

Job Description: Responsible for performing syn & characterization of new chem entities, such as metallo-tetraphyrins & other porphyrin-like macrocyclic drug candidates for treatment of cancer & cardio-vascular diseases, & other biomedical applications/technol. Primary assignments will involve design & syn new chem entities for drug lead discovery, prep of key syn intermediates. Make detailed observations, analyze & interpret data with little guidance. Exercise judgement within broadly defined assignments in selecting methods, techniques & evaluation criteria for obtaining results.

QUALIFICATIONS DESIRED

Education: B.S. and/or M.S. in Chem
Experience: 1-5 yrs acad or industrial exp in syn res &/or development environment.

LOCATION, SALARY, MAIL ADDRESS

Location: Sunnyvale
Salary: attractive salaries, benefits and generous stock options.

Application Instructions: Send resumes to: Pharmacyclics, Inc. Attn: HR 995 E. Arques Avenue, Sunnyvale, CA 94086; FAX: (408) 774-0340; email: hr@pcyc.com. www.pharmacyclics.com

CHEMEMPLOYMENT ABSTRACT 3678

Position Title: Sr. Research Associate, Exploratory Research

Job Description: Assist with design & execution of in vivo expts (i.e. growth delay assay) as well as in vitro expts including tissue culture, biol assays. Exp with animal handling (general care, dosing, surgery) a plus. Perform in vivo expts (dosing, & growth delay assay). Perform in vitro assays (measuring cell viability, clonogenic survival). Establish & maintain of mammalian cell lines (tissue culture). Radioactive contamination monitoring & associated record keeping.

QUALIFICATIONS DESIRED

Education: B.S or M.S. in Biol, Biochem, or related areas.
Experience: 2 yrs of exp in performing tissue culture work & animal handling. Exp is a must, but with sufficient aptitude it is not required. However, to handle small rodents must not have allergies to animals.

LOCATION, SALARY, MAIL ADDRESS

Location: Sunnyvale
Salary: Attractive salary, benefits & stock options

Application Instructions: Send resume to: Pharmacyclics, Inc. Attn: HR 995 E. Arques Avenue Sunnyvale, CA 94086 FAX: 408-774-0340 Email: hr@pcyc.com www.pharmacyclics.com

CHEMEMPLOYMENT ABSTRACTS 3679

Position Title: Scientist, Analytical Chemistry

Job Description: General oversight, operation & maintenance of analytical chemistry lab w/supporting personnel. Analyze & release raw materials, intermediates & finished goods in support of ISO 9001:2000 certified chemical production. Provide method development & analytical service support of R&D. Maintenance of document & inventory control systems. Supervise finished goods packaging operations.

QUALIFICATIONS DESIRED:

Education: Min BS Chemistry
Experience: 4+ yrs hands-on exp in operation & maintenance of analytical instrumentation in a manufacturing quality control environment. Strong computer skills required. Supervisory exp preferred.

LOCATION, SALARY,MAIL ADDRESS:

Location: Foster City
Salary: Competitive salary benefits package

Application Instructions: Submit resume to: hrinfo@argotech.com Argonaut Technologies, Inc. Attention: Human Resources 101 Chess Drive Foster City, CA 94404 www.argotech.com





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JUNE 2002 NEWSLETTER TOPICS:

Chemistry Olympiad Finalist: Catherine Chang
Chemistry Olympiad: Ten of our Bravest and Brightest!
Reminder: Beer Tasting, Family Picnic and Awards Ceremony
Chair's Message
Councilor's Report—ACS National Meeting
Patent Truths
Illustrating Nature
The Division of Environmental Chemistry
Hike in Big Basin Park
SCV-ACS Nominations for 2002
Editor's Corner

CHEMPLOYMENT ABSTRACTS

The production staff apologizes for the delay of getting this month's issue to our subscribers on time. We had computer problems resulting in some major repairs involving the logic board.

SANTA CLARA VALLEY SECTION

2002 Section Officers

Chair: Jon Touster	650-723-4340	touster@leland.stanford.edu
Chair-Elect: Maureen Scharberg	408-924-4966	scharbrg@pacbell.net
Secretary: Karl Marhenke	831-479-6263	karlmar@armory.com
Treasurer: Hong Gao	650-564-5197	hong.gao@alza.com
Past-Chair: Sally Peters	650-812-4994	speters@parc.xerox.com

Councilors

2000-02: Maureen Scharberg	408-924-4966	scharbrg@pacbell.net
2000-02: John F. Riley	650-328-4036	jriley@atdial.net
2000-02: Ean Warren	650-329-4554	ewarren@scvacs.org
2001-03: Linda Brunauer	408-554-6947	lbrunauer@scu.edu
2001-03: Sally Peters	650-812-4994	speters@parc.xerox.com
2002-04: Bonnie Charpentier	650-948-3931	charpentierbon@yahoo.com
2002-04: Herb Silber	408-924-4954	hbsilber@sjsuvm1.sjsu.edu

Alternate Councilors

2000-02: Roy Okuda	408-924-2525	okuda@sjsu.edu
2000-02: Donna Drogos	408-265-2600	ddrogos@geosyntec.com
2000-02: Lance Wong	650-697-1900	lwong@valentis.com
2001-03: George Lechner	408-226-7262	george.lechner@usa.xerox.com
2001-03: Carol Mosher	650-322-3120	cmosher2@aol.com
2002-04: Peter Rusch	650-941-8120	pfrusch@aol.com
2002-04: Jon Touster	650-723-4340	touster@leland.stanford.edu

Newsletter

Editor: **Laura Rasay** 650-859-4782 editor@scvacs.org

ChemEmployment Abstracts

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

FUTURE MEETINGS

Jun 29	Annual Family Picnic and Awards Ceremony Stanford Chemistry Department
Jul 6-15	International Chemistry Olympiad Groningen, the Netherlands
Aug 18-22	ACS National Meeting Boston, MA
Sep 26	SVC Dinner Meeting <i>Dr. Hongjie Dao</i> Stanford University
Sep 22-25	Combinatorial Chemistry Leesburg, VA
Oct 19	Outstanding Western Regional High School Award San Jose State University

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



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