

# Silicon Valley Chemist

Santa Clara Valley Section

American Chemical Society

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## Combinatorial Approaches to Catalyst Research

Howard W. Turner Catalyst Research Symyx Technologies, Inc.

### Abstract

The chemical industry is rapidly changing. Chemical industries in countries with high labor costs have to focus more and more on knowledge-intensive products while lowering costs. As competition increases, life spans of products shorten and new products need to be brought rapidly to the marketplace. This brings enormous pressure to decrease research and development times and to lower research per product.

This problem was first encountered in the pharmaceutical industry, where long development times and high research costs forced researchers to develop new techniques to dramatically accelerate the research process.

This set of techniques referred to as "combinatorial chemistry" represents a powerful research strategy when applied to problems where a large parameter space controls the properties of a product. In combinato-

rial chemistry, large libraries of structurally or compositionally diverse compounds are rapidly synthesized and processed and then screened for desired characteristics (e.g. activity or selectivity) in high-through fashion.

This lecture will review recent advances in the development and application of combinatorial methods to the discovery and optimization of homogeneous and heterogeneous catalysts. Specific applications to be discussed include catalytic olefin polymerization, carbon monoxide oxidation, and hydrocarbon oxidation.

### Biography

Dr. Turner received his BS in chemistry/chemical engineering from UC Berkeley in 1979 and his PhD. from MIT in 1982 in inorganic chemistry. From 1982 to 1996 he was a Research Scientist at Exxon Chemical Company working on the development of single sited olefin polymerization catalysts.

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## November Dinner Meeting

**Date:** Thursday, November 16, 2000

**Time:** Social hour: 6:00 pm

Dinner: 7:00 pm

Presentation: 8:00 pm

**Speaker:** Dr. Howard Turner  
Vice President, Catalysis  
Symyx Technologies

**Location:** Biltmore Hotel & Suites  
2151 Laurelwood Road  
Santa Clara, California  
(408) 988-8411  
North of 101 off the  
Montague Expressway

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

Reservations should be made by November 12 stating name, company affiliation, number of people in the party and meal preference. People can also register using our web site:

[www.scvacs.org/Local\\_Folder/din\\_mtg.html](http://www.scvacs.org/Local_Folder/din_mtg.html)

**Cost:** \$25.00 with choice of Roast Pork Loin, stuffed Chicken or Pasta Primavera

## CHAIR'S MESSAGE

The Nobel Prize ([www.nobel.se](http://www.nobel.se)) in chemistry was announced in October. Alan J. Heeger, Alan G. MacDiarmid and Hideki Shirakawa won the prize for their discovery and development of conducting polymers. I always look forward to the announcement by the Nobel committee since it gives me an opportunity to learn about seminal developments in different fields of chemistry. The interesting thing about the Nobel Prizes is they have not only captured the attention of scientists, but the imagination of the public as well. Even those people who are not familiar with science and scientific research know that winning a Nobel Prize means something big. The prizes are a fantastic opportunity to educate the public on the contributions of chemistry and science to society. And in

reviewing news articles, they have done just that: the articles present a description of the scientific breakthrough and why it is important.

This year, eight awardees are from the US, and one each from Sweden, Russia, and Japan. (As of this writing, the awardees of the Literature and Peace Prizes have not been announced.) The Bay Area usually has a prizewinner or two in medicine, physics, or chemistry but not this year. Oddly enough, with the exception of Daniel McFadden of UC Berkeley (Economics), no other Bay Area science researchers were recognized by the Nobel Committee this year. I know we have world-class, cutting-edge research here and this must have been an off year. After all, we

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Chair's Message, continued from front page  
can't win all the time. To recognize top-notch researchers in the Bay Area, including Monterey Bay, I would like to hear your nominations for Nobel-quality research. If you were to nominate a person or people for a prize, who would it be, what is their research topic and why is it important? Who do you think will get a Nobel Prize in the future? Who do you think deserves a Nobel, but may not get one? Send in your nominations and I will print the best ones next month.

Remember to vote in the ACS National Elections by November 13.

❖      ❖      ❖

*Ean Warren*

Combinatorial, continued from front page

In 1996 he became the Vice President of Catalyst Research at Symyx Technologies.

Dr. Turner will also comment about the life of a chemist in the fast paced Silicon Valley startup, Symyx.



## Editor's Corner

Please note that my e-mail address has changed to [scolby@carr-ferrell.com](mailto:scolby@carr-ferrell.com). This address should be used for correspondence regarding this newsletter.

The new address reflects a change in employment. I have taken a new position at Carr & Ferrell, LLP a law firm specializing in high technology intellectual property.

## ACS Food Drive

As many of you know, National Chemistry Week is November 5-11. The theme this year is Kitchen Chemistry and the unifying event is "Chemists Reacting to Hunger". So the Santa Clara Valley Section, in cooperation with Second Harvest, would like to encourage you to participate in a food drive during National Chemistry Week. It's easy! All you have to do is fill out a simple form. Then contact Arlene Ruffat at Second Harvest (650) 610-0800 ext. 215 or e-mail [aruffat@shfoodbank.com](mailto:aruffat@shfoodbank.com). Second Harvest will arrange to drop off food barrels and then pick them up at the end of the week. In order to gauge the success of this food drive, please let me know by e-mail [ncw@scvacs.org](mailto:ncw@scvacs.org) or phone (650) 329-4554 if you plan to participate.

Go to Second Harvest's web site [www.2ndharvest.net/a\\_bowhelp/drive\\_forms.html](http://www.2ndharvest.net/a_bowhelp/drive_forms.html) for the enrollment form and more complete information on how to running a food drive. Please contact Ean Warren if you have any questions.

Second Harvest Food Bank is a central clearing house that collects and distributes more than 21.2 million pounds of donated, surplus and purchased food each year. The Food Bank serves an average of 119,500 low income individuals each month; nearly 50% are children.

### 6th SJSU Lecture on Natural Products Drug Discovery "Bioorganic Studies on Vision"

**Speaker:** Professor Koji Nakanishi  
Department of Chemistry, Columbia University

**Date:** Friday, November 10, 2000

**Time:** 3:30 pm

**Place:** Room 109, Washington Square Hall, San Jose State University

*Sponsored by Northern California Section  
of the American Society of Pharmacognosy*

Directions and a campus map may be found on [www.sjsu.edu](http://www.sjsu.edu)  
Parking is available at the Seventh Street Garage for \$2. For questions, contact **Roy Okuda** at (408) 924-2525, or [okuda@sjsu.edu](mailto:okuda@sjsu.edu)

## CHEMPLOYMENT ABSTRACTS – NOVEMBER 2000

### CHEMPLOYMENT ABSTRACTS 3384

*Position Title:* Research Associate & Staff Scientist

*Job Description:* Apply synthetic medicinal & combinatorial chem knowledge to discovery of new drug candidates. Design & synthesize org cpds & combinatorial libraries. Work independently & as part of multidisciplinary team. A solid knowledge of synthetic org chem & analytical techniques.

**QUALIFICATIONS DESIRED**

*Education:* PhD or BS/MS with 1+ yr relevant industrial exp.

*Experience:* Multistep org synthesis preferably in a medicinal or combinatorial chem environ. Use of NMR, MS, HPLC & std cpd purification methods.

**LOCATION, SALARY, MAIL ADDRESS**

*Location:* South San Francisco

*Salary:* Competitive salary & benefits

*Description of Employer:* Focused on discovery of drugs which modulate gene expression for treatment of serious human diseases

Application Instructions: Send resume & cover letter to: Genesoft, Inc.  
Human Resources (Code:MCI-ACS)  
2 Corporate Drive, Suite 100  
South San Francisco, CA 94080  
Email: [info@genesoftinc.com](mailto:info@genesoftinc.com)  
FAX: 650-635-0222

### CHEMPLOYMENT ABSTRACTS 3385

*Position Title:* Assistant Scientist

*Job Description:* Plan, organize & conduct expts in scientific field within a broader research prog. Aid senior staff in developing expt plans and procedures, organize & execute research according to direction & establish daily or weekly routines as necessary.

Perform & report analysis of interim & final expt data. Prepare reports & papers for internal use as well as for publication, presentation to regulatory agencies or at conferences.

**QUALIFICATIONS DESIRED**

*Education:* BS chem/biochem

*Experience:* 1-2+ yrs related exp and/or training. Operational knowledge of chem & biochem hazards & handling requirements associated with lab-based biological and/or chem research. Knowledge of lab equipment & safety procedures. Needs writing skills, math, word processing, spreadsheets, internet functions, scientific graphing software.

**LOCATION, SALARY, MAIL ADDRESS**

*Location:* San Carlos

*Description of Employer:* Target Discovery, Inc.

Application Instructions: Send resume to:  
Target Discovery, Inc.  
Attn: R7977  
FAX: 818-244-0922  
email: [ig@administaff.com](mailto:ig@administaff.com)

### CHEMPLOYMENT ABSTRACTS 3386

*Position Title:* Research Chemist

*Job Description:* Synthesize substances for enzyme transformation & develop methods to synthesize products from intermediates made by biocatalysis or fermentation.

**QUALIFICATIONS DESIRED**

*Education:* BS/MS chem or related field

*Experience:* At least 2 yrs general chem exp in industry and/or academia required. Knowledge of basic synthetic chem techniques, excellent time management & communications skills required.

**LOCATION, SALARY, MAIL ADDRESS**

*Location:* Redwood City

*Salary:* Commensurate with exp

*Description of Employer:* Leader in design, development & application of directed evolution technologies to evolve new properties into single genes, multigene pathways, plasmids, viruses & genomes.

Application Instructions: Send resume to:  
Maxygen  
Human Resources,  
Job Code: CH-138  
515 Galveston Drive  
Redwood City, CA 94063  
email: [jobs@maxygen.com](mailto:jobs@maxygen.com)

### CHEMPLOYMENT ABSTRACTS 3387

*Position Title:* Research Associate

*Job Description:* Will be expected to work in multi-disciplinary team setting & play a critical role in rapid commercialization of new prods. Develop written protocols & SOPs

**QUALIFICATIONS DESIRED**

*Education:* MS/BS org chem

*Experience:* 0-2 yrs exp. Extensive exp in chem & synthesis of nucleotides, nucleosides, & phosphoramidites & their purification. Will be expected to work in multi-disciplinary team setting & play a critical role in rapid commercialization of new prods. Develop written protocols & SOPs. Excellent communication, interpersonal & problem solving.

**LOCATION, SALARY, MAIL ADDRESS**

*Location:* Mountain View

*Salary:* Competitive salary & Benefits

*Description of Employer:* Fast growing company

Application Instructions: Send resume to:  
Aclara Biosciences, Inc.  
Job Code #AC-2  
1288 Pear Avenue  
Mountain View, CA 94043-1432  
FAX: 650-210-1210  
Email: [achenna@aclara.com](mailto:achenna@aclara.com)

# CHEMEMPLOYMENT ABSTRACTS – NOVEMBER 2000

## CHEMEMPLOYMENT ABSTRACTS 3388

*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 org chem  
*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  
Microcide Pharmaceuticals, Inc.  
850 Maude Avenue  
Mountain View, CA 94043  
FAX: 650-526-3034

## CHEMEMPLOYMENT ABSTRACTS 3389

*Position Title:* Product Development/Scientist

*Job Description:* Participate in conducting lab procedures to develop diagnostic product development.

### QUALIFICATIONS DESIRED

*Education:* BS/MS biol sci, chem, or related field  
*Experience:* at least 1 yr lab exp.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* South San Francisco  
*Salary:* Competitive salary & benefits  
*Description of Employer:* Dermal Systems Intl, a transdermal diagnostic company, developing novel, non-invasive medical diagnostic tests utilizing DSI's proprietary technology.

Application Instructions: Send resume to:

DSL/HR  
213 East Grand Avenue  
South San Francisco, CA 94080  
FAX: 650-516-4592  
email: dermalsystems@usa.net

## CHEMEMPLOYMENT ABSTRACTS 3390

*Position Title:* Staff Researcher/Chemistry (2 openings)

*Job Description:* Interpretation of spectroscopic data, use of literature to solve synthetic problems, application to modern chromatog techniques for purification of synthetic targets.

### QUALIFICATIONS DESIRED

*Education:* BS/MS chem  
*Experience:* 2+ yrs industrial exp in synthetic org chem a plus. Thorough familiarity with HPLC and modern chem instrumentation is essential. Must be able to function as part of a coordinated team.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Redwood City  
*Salary:* Competitive salary & benefits  
*Description of Employer:* Discovery of small molecule drugs that bind to DNA or RNA to regulate gene expression of inactivate pathogens.

Application Instructions: Send resume to:

Genelabs Technologies, Inc,  
HR Dept. Job#2020-SV  
505 Penobscot Drive  
Redwood City, CA 94063  
FAX: 650-363-6080  
Email: hr@genelabs.com

## CHEMEMPLOYMENT ABSTRACTS 3391

*Position Title:* Senior Research Associate, Phospholipid Biochemistry

*Job Description:* Work with PhD scientists on novel phospholipid bilayer coatings & membrane protein incorporation, surface modification & surface analysis methods. Will also have the opportunity to learn, apply & optimize prep methods for liposome systems & state-of-the-art analytical techniques including fluorescence microscopy, impedance spectro, FT-IR, AFM, ellisometry & surface palsmon resonance.

### QUALIFICATIONS DESIRED

*Education:* BS/MS biochem/chem  
*Experience:* 5+ yrs exp with lipids, liposomes, membrane proteins & characterization.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Hayward  
*Salary:* Competitive salary & benefits

Application Instructions: Send resume to:

Zyomyx, Inc.  
Human Resources  
Job Code 310701  
3911 Trust Way  
Hayward, CA 94545  
FAX: 510-264-0289  
Email: hr@zyomyx.com  
Please no Phone Calls.

## CHEMEMPLOYMENT ABSTRACTS 3392

*Position Title:* Research Associate, Surface Chem/Materials Science Group

*Job Description:* Collaborate closely with research scientists on surface modification & characterization of self-assembled monolayer & novel lipid bilayer coatings. Work includes soln prep of lipid dispersion, novel bilayer forming cpds & proteo-liposomes. Will have the opportunity to learn & apply state-of-the-art surface analytical techniques including fluorescence microscopy, FT-IR, AFM, surface plasmon resonance & electrochem characterization techniques.

### QUALIFICATIONS DESIRED

*Education:* BS/MS chem, biochem  
*Experience:* 0-1 yrs exp with lipids, vesicles, liposomes & their characteristics in chem, chem engrg, or matl sci labs.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Hayward  
*Salary:* Competitive salary & benefits

Application Instructions:

Zyomyx, Inc.  
Human Resources  
Job Code 310721  
3911 Trust Way  
Hayward, CA 94545  
FAX: 510-264-0289  
Email: hr@zyomyx.com  
Please no Phone Calls.

## CHEMEMPLOYMENT ABSTRACTS 3393

*Position Title:* Peptide Chemist, Organic Chemistry Group

*Job Description:* Focus id on design, multi-step synthesis, purification & characterization of novel peptides/peptide conjugates used as candidates for protein bioconjugation surface functionalization.

### QUALIFICATIONS DESIRED

*Education:* PhD chem  
*Experience:* 9+ yrs exp in peptide synthesis preferably in an industry environment. Excellent theoretical knowledge & hands-on exp in peptide chem & IPLC is a must.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Hayward  
*Salary:* Competitive salary & benefits

Application Instructions:

Zyomyx, Inc.  
Human Resources  
Job Code 310137  
3911 Trust Way  
Hayward, CA 94545  
FAX: 510-264-0289  
Email: hr@zyomyx.com  
Please no Phone Calls.

## CHEMEMPLOYMENT ABSTRACTS 3394

*Position Title:* Research Associate - Micro-systems Technology Group

*Job Description:* Will be working in micro-fabrication technologies and in a clean room environment.

### QUALIFICATIONS DESIRED

*Education:* MS/BS appl Phys, Matls Sci, Electrical or Mechanical Engrg.  
*Experience:* 2+ yrs exp in micro-fabrication technologies and experience in a clean room environment are required.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Hayward  
*Salary:* Competitive salary & benefits

Application Instructions:

Zyomyx, Inc.  
Human Resources  
Job Code 360111  
3911 Trust Way  
Hayward, CA 94545  
FAX: 510-264-0289  
Email: hr@zyomyx.com  
Please no Phone Calls.

## CHEMEMPLOYMENT ABSTRACTS 3395

*Position Title:* Technician for Engineering & Prototyping Group

*Job Description:* Involves design & fabrication of mechanical assemblies & tooling. Will interact with several research scientists involving projects with a varying degree of complexity. Active participation in the conceptualization & design of projects is expected.

### QUALIFICATIONS DESIRED

*Experience:* Will have working exp in a model shop & have used tool room lathes, milling machines, welding equipment & other std tooling. Exp in vacuum technology & high-end research equipment is desirable. Flexibility & the capability to quickly implement changes in prototypes & tooling is a must.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Hayward  
*Salary:* Competitive salary & benefits

Application Instructions:

Zyomyx, Inc.  
Human Resources  
Job Code 300242  
3911 Trust Way  
Hayward, CA 94545  
FAX: 510-264-0289  
Email: hr@zyomyx.com  
Please no Phone Calls.

## CHEMEMPLOYMENT ABSTRACTS 3396

*Position Title:* Senior Research Associate Organic Chemistry Group

*Job Description:* Focus is on design, multi-step synthesis, purification & characterization of novel key compounds used as candidates for protein bioconjugation & surface functionalization.

### QUALIFICATIONS DESIRED

*Education:* BS/MS synthetic organic chem  
*Experience:* 7+ yrs exp in org synthesis of amphiphilic compounds and/or bioconjugation chem. In depth skills in spectroscopic methods (NMR, IR) & extensive hands-on experience with LC/HPLC work is required.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Hayward  
*Salary:* Competitive salary & benefits

Application Instructions:

Zyomyx, Inc.  
Human Resources  
Job Code 300243  
3911 Trust Way  
Hayward, CA 94545  
FAX: 510-264-0289  
Email: hr@zyomyx.com  
Please no Phone Calls.

## CHEMEMPLOYMENT ABSTRACTS 3397

*Position Title:* Research Associates - Organic Chemistry Group

*Job Description:* Focus is on scale up of multi-step synthesis including purification and characterization of novel compounds used as candidates for protein bioconjugation & surface functionalization.

### QUALIFICATIONS DESIRED

*Education:* BS/MS synthetic org chem  
*Experience:* 1+ yr exp in organic synthesis.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Hayward  
*Salary:* Competitive salary & benefits

Application Instructions:

Zyomyx, Inc.  
Human Resources  
Job Code 300244  
3911 Trust Way  
Hayward, CA 94545  
FAX: 510-264-0289  
Email: hr@zyomyx.com  
Please no Phone Calls.

## CHEMEMPLOYMENT ABSTRACTS 3398

*Position Title:* Senior Research Associate Associate Protein Production

*Job Description:* You will be part of a team of individuals involved in production, purification & quality control of recombinant proteins. Will perform small-scale pilot expts & then proceed to fermentation scale prodn.

### QUALIFICATIONS DESIRED

*Education:* MS biochem or related field & 3-5 yrs relevant exp or BS & a minimum of 5 yrs exp.  
*Experience:* Working knowledge of bacterial & yeast exp systems is essential. Exp in additional protein prodn systems is desirable. Exp with expressn of antibody fragments (scFvs & Fabns) or other peri plasmic/secreted proteins is preferred. Familiarity with NINTA purifn as well as FPLC & HPLC is required. An understanding of issues involved in large scale fermentation is necessary. Good written & oral communication skills are essential.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Hayward  
*Salary:* Competitive salary & benefits

Application Instructions: Send resume to:

Zyomyx, Inc.  
Human Resources, Job Code 400163  
3911 Trust Way  
Hayward, CA 94545  
FAX: 510-264-0289  
Email: hr@zyomyx.com Please no Phone Calls.

## CHEMEMPLOYMENT ABSTRACTS 3399

*Position Title:* Research Associate Protein Assay Development

*Job Description:* In depth qual & quant analysis of biomole interactions in soln & at solid-liquid interface of device matls. Primary responsibilities include optimization of assay conditions & biochem characterization of protein capture surfaces.

### QUALIFICATIONS DESIRED

*Education:* BS/MS phys sci or life science  
*Experience:* 5+ yrs work exp in biochem, analytical chem or enzymology. A solid foundation in basic phys & biol sciences with ability to learn new concepts & techniques quickly. Must work in multi-disciplinary environment and have excellent knowledge about the fundamentals basis of biomolecular interactions, reaction kinetics & protein chem. Required is extensive exp with various assay techniques, e.g. ELISA assays and/or fluorescence spectro based assays. Exp with surface plasmon highly desirable.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Hayward  
*Salary:* Competitive salary & benefits

Application Instructions: Send resume to:

Zyomyx, Inc.  
Human Resources, Job Code 420461  
3911 Trust Way, Hayward, CA 94545  
FAX: 510-264-0289  
Email: hr@zyomyx.com Please no Phone Calls.

# CHEMPLOYMENT ABSTRACTS – NOVEMBER 2000

## CHEMPLOYMENT ABSTRACTS 3400

*Position Title:* Research Associate I/II

*Job Description:* Responsibilities include collecting & interpreting NMR data for analyzing org cods & designing & implementing NMR expts to solve complex problems. Beyond providing high resolution NMR support to multiple scientists, you may assist with routine maintain, & troubleshoot of equipment in NMR lab.

### QUALIFICATIONS DESIRED

*Education:* BS chem or equiv  
*Experience:* 1-5 yrs exp. Strong knowledge of synthetic org chem & NMR spectroscopy & the ability to work with a team are essential. Knowledge of UNIX and Windows NT & exp with HPLC and flow NMR are preferred.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Palo Alto  
*Salary:* Competitive salary & benefits  
*Description of Employer:* Innovation in human pharmaceutical research.

Application Instructions: Send resume to:  
Roche Bioscience  
Job Code 1000LV-AC  
3401 Hillview Avenue, A-2-HR  
Palo Alto, CA 94304  
FAX: 650-42408159  
email:  
geri.filippini@roche.com  
www.roche.com/bioscience

## CHEMPLOYMENT ABSTRACTS 3401

*Position Title:* Research Associate I/II

*Job Description:* Responsibilities include HPLC, analysis for drug substance & drug prod testing, LIMS data entry & analytical method development & validation. Also maintain lab notebooks, scientific reports, QC, & equipment.

### QUALIFICATIONS DESIRED

*Education:* BS/MS chem, including analytical, Phys org or biochem or equivalent  
*Experience:* 1-3 yrs exp with HPLC, UV, dissolution, Karl Fisher, instrumental analysis, LIMS, computer data systems, GMP & GLP. Analytical method development & validation exp preferred.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Palo Alto  
*Salary:* Competitive salary & benefits  
*Description of Employer:* Innovation in human pharmaceutical research.

Application Instructions: Send resume to:  
Roche Bioscience  
Job Code 1001LV-AC  
3401 Hillview Avenue, A-2-HR  
Palo Alto, CA 94304  
FAX: 650-42408159  
email:  
geri.filippini@roche.com  
www.roche.com/bioscience

## CHEMPLOYMENT ABSTRACTS 3402

*Position Title:* Research Scientist Pharmaceutical Chem & Prod

*Job Description:* Lead a group of 3-5 Staff in characterization & control of clinical candidate in CNS/GU portfolio. Also represent your team & collaborate with multiple departments to generate Preclinical Safety Prod files. Perform Chem Characterization & analysis of API Drug Product, establish associated substance/ specification methods, contribute to mechanistic understanding of factors controlling NCE purity, stability & chem tractability.

### QUALIFICATIONS DESIRED

*Education:* PhD relevant field or equivalent  
*Experience:* 5-7 yrs exp. Must have knowledge in chematog, spectroscopy & mechanistic org chem & exp in GLP/GMP environment.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Palo Alto  
*Salary:* Competitive salary & benefits  
*Description of Employer:* Innovation in human pharmaceutical research.

Application Instructions: Send resume to:  
Roche Bioscience  
Job Code 1000LV-AC  
3401 Hillview Avenue, A-2-HR  
Palo Alto, CA 94304  
FAX: 650-42408159  
email:geri.filippini@roche.com  
www.roche.com/bioscience

## CHEMPLOYMENT ABSTRACTS 3403

*Position Title:* Research Assistant/Associate

*Job Description:* Develop/apply methods to monitor performance of high-density oligonucleotide probe arrays; fabrication processes; develop/evaluate new surfaces for synthesis of oligonucleotide arrays; & develop new methods for synthesizing arrays using photoresist chemistry (photoacid generators).

### QUALIFICATIONS DESIRED

*Education:* MS chem, biochem or related minimum or BS with at least 2yrs lab exp in industrial setting  
*Experience:* Exp with PCR, IVT, isolation, purification of RNA, DNA, labeling & fragmentation strategies as well as HPLC, UV-VIS & fluorescence spectroscopy.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Santa Clara  
*Salary:* Competitive salary benefits  
*Description of Employer:* Developer of GeneChip technology.

Application Instructions: Send resume to:  
Affymetrix, Job Code SVC-AJF642  
Human Resources  
3380 Central Expressway  
Santa Clara, CA 95051  
FAX: 408-481-0422  
Email: HR-proddeveng@affymetrix.com  
www.affymetrix.com

## CHEMPLOYMENT ABSTRACTS 3404

*Position Title:* Medicinal & Combinatorial Chemistry Research Associates

*Job Description:* Plan & conduct synthesis of target molecules to support I.D. of drug candidates.

### QUALIFICATIONS DESIRED

*Education:* BS/MS chem  
*Experience:* 1+ yr academic or industry exp. Demonstrated expertise with synthetic & medicinal chem and the ability to work independently.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Redwood City  
*Salary:* Competitive salary & benefits  
*Description of Employer:* Discovery of novel small molecule drugs

Application Instructions: Send resume to:  
Sunesis Pharmaceuticals, Inc.  
Attn: Debra Kirk  
Job Code #MCA0900CA  
3696 Haven Avenue, Suite C  
Redwood City, CA 94063  
FAX: 650-556-8824  
Email: jobs@sunesis-pharm.com  
www.sunesis-pharm.com

## CHEMPLOYMENT ABSTRACTS 3405

*Position Title:* New Technologies - Research Associates

*Job Description:* Sills in either synthetic organic chemistry or biochemistry & interests in both fields. Must have a demonstrated ability to work independently.

### QUALIFICATIONS DESIRED

*Education:* BS/MS chem or biol  
*Experience:* 1+ yrs academic or industrial exp.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Redwood City  
*Salary:* Competitive salary benefits  
*Description of Employer:* Discovery of novel small molecule drugs

Application Instructions: Send resume to:  
Sunesis Pharmaceuticals, Inc.  
Attn: Debra Kirk  
Job Code #NTO900CA  
3696 Haven Avenue, Suite C  
Redwood City, CA 94063  
FAX: 650-556-8824  
Email: jobs@sunesis-pharm.com  
www.sunesis-pharm.com

## CHEMPLOYMENT ABSTRACTS 3406

*Position Title:* Research Scientist/Sr. Research Scientist

*Job Description:* Design, execute & analyze results from preformulation, formulation & process development expts leading to commercial formulations & manfnging proc. Also coordinate & lead activities for manfnging toxicology, clinical & registration/validation batches, writing CMC sections of regulatory dossiers.

### QUALIFICATIONS DESIRED

*Education:* PhD pharma, Pharma chem or equiv

*Experience:* Res Scientist - 0-5 yrs exp in preformulation/formulation development; Sr Scientist - 5+ yrs exp in dosage form development; familiarity with exp design/statistics, pharma/anal chem & strong pharma/ physical pharmacy background. Perform research leading to publication. Strong communication skills, Excel, JMP, word & Microsoft Project.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Foster City  
*Description of Employer:* therapeutics for diseases.

Application Instructions: Send resume to:  
Job Code RF-251, Human Resources  
Gilead Sciences, Inc.  
333 Lakeside Drive  
Foster City, CA 94404  
email: careers-fostercity@gilead.com  
FAX: 650-522-5800

## CHEMPLOYMENT ABSTRACTS 3407

*Position Title:* Sr Research Scientist

*Job Description:* Design, analysis & rept of clinical pharmacokinetic studies esp anti-viral reg. submissions. Prepare & present & externally & address questions/ concerns from outside parties. Serve as resource in Biopharm Group.

### QUALIFICATIONS DESIRED

*Education:* PhD clinical Pharmacokinetics, PharmD with specialization in clinical pharmacokinetics or equiv.  
*Experience:* 4-10 yrs exp pharmacokinetics in pharmaceutical/biotech industry. Exp in design, analysis, interpretation & reporting of clinical pharmacokinetic studies in support of new drug reg. Strong communication skills & ability to work in a cross-functional team environ are essential. Must have good computer skills & with std pharmacokinetic anal, graphics & presentation software.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Foster City  
*Description of Employer:* Infectious diseases.

Application Instructions: Send resume to:  
Job Code RF-204, Human Resources  
Gilead Sciences, Inc.  
333 Lakeside Drive  
Foster City, CA 94404  
email: careers-fostercity@gilead.com  
FAX: 650-522-5800

## CHEMPLOYMENT ABSTRACTS 3408

*Position Title:* Chemistry Instructor Apply by 11/21/00

*Job Description:* Lecture and/or laboratory sections inoeffollowing and/or related assignments. Gen Chem, IntroceInorg, Inorg Chem for Health Occupations, Intro Org Chem &ceBioChem for HealthceOccupations.

### QUALIFICATIONS DESIRED

*Education:* Master's degree in chem OR meet state min qual or equiv knowledge of and commitment to community college philosophy.  
*Experience:* Effective oral & written skills, demonstrated ability to teach courses or perform duties effectively.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Aptos, Calif.  
*Salary:* Commensurat w education & experience.  
*Description of Employer:* Special community of faculty & staff emphasizing the continued growth of individuals.

Application Instructions: Contact  
Cabrillo College Personnel  
6500 Sequel Drive  
Aptos, CA 95003  
831-479-6217  
Detailed job description & applications from:  
http://www.cabrillo.cc.ca.us

## CHEMPLOYMENT ABSTRACTS 3409

*Position Title:* Research Associate/Sr Research Associate, Analytical Chemistry

*Job Description:* Determine physical parameters of chemical compounds, measure protein binding, isolate and identify metabolites and impurities. Analyze data and interpret results for reports. Analytical rigor and great attention to detail are essential.

### QUALIFICATIONS DESIRED

*Education:* BS or MS  
*Experience:* MS in Anal Chem; BS or equiv in anal, organic, or biochem with 1 yr relevant experience, preferably in pharm or biotech industry. Prior experience with HPLC is required; with LC/MS is a plus.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* S San Francisco  
*Salary:* Competitive salary with benefits  
*Description of employer:* Discovery of novel therapeutic agents

Application Instructions: Send resume:  
Advanced Medicine, Inc  
901 Gateway Blvd  
S San Francisco, CA 94080  
Fax: 650-827-8690  
www.advmedicine.com

## CHEMPLOYMENT ABSTRACTS 3410

*Position Title:* Medicinal Chemist Research Associates

*Job Description:* As a member of an integrated multidisciplinary discovery team, contribute to the design and synthesize novel drug candidates

### QUALIFICATIONS DESIRED

*Education:* MS org chem; BS with minimum 1 yr experience in pharm industry  
*Experience:* Significant skills in synthesis; ability to work independently in lab.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* S San Francisco  
*Salary:* Competitive salary with benefits  
*Description of employer:* Drug Discovery

Application Instructions: Send resume:  
Advanced Medicine, Inc.  
901 Gateway Blvd  
S San Francisco, CA 94080  
Fax: 650-827-8690  
www.advmedicine.com

## CHEMPLOYMENT ABSTRACTS 3411

*Position Title:* Scientist/Research Scientist, Analytical Chemistry

*Job Description:* Work in a collaborative research environment, with scientists in therapeutic-based discovery programs. Develop & apply innovative science & technology in structural & analytical chemistry to drug discovery research. Includes characterize discovery chemical leads by analysis and physical property determination.

### QUALIFICATIONS DESIRED

*Education:* PhD or MS  
*Experience:* PhD with 2+ yrs or MS with 10 yrs including management experience in pharm industry. In-depth knowledge of HPLC, capillary electrophoresis and sample prep is essential. Good communication and interpersonal skills are required.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* S San Francisco  
*Salary:* Competitive salary with benefits  
*Description of employer:* Discovery of novel therapeutic agents

Application Instructions: Send resume:  
Advanced Medicine, Inc  
901 Gateway Blvd  
S San Francisco, CA 94080  
Fax: 650-827-8690  
www.advmedicine.com

# CHEMPLOYMENT ABSTRACTS – NOVEMBER 2000

## CHEMPLOYMENT ABSTRACTS 3412

*Position Title:* Analytical Chemist

*Job Description:* Perform analysis of pesticide residue & non-pesticidal chemicals including insect pheromones.

### QUALIFICATIONS DESIRED

*Education:* BS or MS

*Experience:* Minimum 2-3 yrs in analytical or industry R&D or production lab. Experience with various analytical instruments/methods desirable. Demonstrated discipline in record keeping and reasonable communication skills.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Monterey area (Salinas)

*Salary:* Competitive salary & benefits.

*Description of Employer:* Global mfg./supplier of pheromone/kairomone based insect monitoring systems. Developing pheromone/kairomone based control.

*Application Instructions:* Send resume & salary reqs to:

Saji George, Trece, Inc.  
PO Box 6278

Salinas, CA 93912

Fax: 831-758-2625

email: saji@trece.com

http://www.cabrillo.cc.ca.us

## CHEMPLOYMENT ABSTRACTS 3413

*Position Title:* Organic Chemistry Instructor

*Job Description:* Part-time Instructor for Organic Chemistry. Course: 1/10/01 to term ends 5/4/01. Lecture MWF, 12:00 to 12:50 pm; laboratory Monday 2:00 to 5:30 pm and Tue 8:30 am to 12:00 Noon.

### QUALIFICATIONS DESIRED

*Education:* PhD in Chemistry

*Experience:* Some teaching experience required.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Belmont, Calif

*Description of Employer:* College of Notre Dame

*Application Instructions:* Send resume or contact:

Dr. Elizabeth Center

Chair, Dept of Natural Sci

College of Notre Dame

1500 Ralston Ave

Belmont, CA 94002

650-508-3553

Fax: 650-508-3736

## CHEMPLOYMENT ABSTRACTS 3414

*Position Title:* Scientist-Medicinal/Synthetic Organic Chemistry

*Job Description:* Responsible for design & synthesis of small molecules (both solution & solid phase) characterization of these molecules, and interactions with other members of a multidisciplinary R&D team to advance the development of clinical candidate molecules.

### QUALIFICATIONS DESIRED

*Education:* PhD in Organic or Medicinal Chemistry

*Experience:* Minimum of 2 yrs in pharmaceutical industry or related postdoc experience. Demonstrated hands-on expert in synthetic organic chem, able to design & carry out multi-step syntheses of drug target molecules. Independent problem solving & scientific creativity. Good oral & written communication skills are necessary.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Dublin, Calif

*Salary:* competitive & benefits

*Description of Employer:* Chemistry driven pharmaceutical company, discovery and development.

*Application Instructions:*

Peggy Radel, PhD

Protek, Inc.

6501 Sierra Lane

Dublin, CA 94568

Fax: 925-829-0362

Email: pradel@protek2.com

## CHEMPLOYMENT ABSTRACTS 3415

*Position Title:* Sr. Research Associate/Associate Scientist-Chemistry

*Job Description:* Plan/conduct experiments; record, analyze & report results; summarize & interpret data; prepare reagents for reactions & perform multi-step reaction sequences; use robotics equipment for synthesis; work on solid supports or resins.

### QUALIFICATIONS DESIRED:

*Education:* BS/MS in chemistry

*Experience:* BS with 8+ yrs in chem/MS with 5+; ability to operate specialized equipment (HPLC, GCMS, LCMS, NMR & FTIR) & computers. Strong analytical & written/verbal communication skills. Competent in PC world including use of ISIS, related software.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Fremont, Calif

*Salary:* competitive & benefits

*Description of Employer:* Drug discovery integrating computer based design with molecular biology, immunology & protein chemistry.

*Application Instructions:* Send resume to:

Protein Design Labs

HR Dept, Attn Job #703-SCVS

34801 Campus Drive

Fremont, CA 94555

Fax: 510-574-1448

Email: careers@pdl.com

www.pdl.com

## CHEMPLOYMENT ABSTRACTS 3416

*Position Title:* Sr. Research Associate/Associate Scientist-Bioanalytical Chemistry, Metabolism

*Job Description:* Conduct experiments coordinated within a multidisciplinary team to identify & prioritize new drug candidates. Identify and/or quantify analytes of interest in biological samples; determine the pharmacokinetic and metabolic characteristics of new compounds; perform methods development with LC-MS; in vivo pharmacokinetic studies in vitro & in vivo drug metabolism studies, protein binding to develop a mechanistic understanding of drug candidates.

### QUALIFICATIONS DESIRED

*Education:* BS/MS or equiv in analytical chemistry.

*Experience:* 5+ yrs; strong analytical chem/biochem background with focus on HPLC and LC-MS applications; hands-on exp with HPLC including CE incl MS-MS analysis.

### LOCATION, SALARY, MAIL ADDRESS

*Location:* Fremont, Calif

*Salary:* competitive & benefits

*Description of Employer:* Drug discovery integrating computer based design with molecular biology, immunology & protein chemistry.

*Application Instructions:* Send resume to:

Protein Design Labs

HR Dept, Attn Job #688-SCVS

34801 Campus Drive, Fremont, CA 94555

Fax: 510-574-1448 Email: careers@pdl.com

## CHEMPLOYMENT ABSTRACTS 3417

*Position Title:* Staff Scientist

*Job Description:* Provide support for in vitro & in vivo experiments to evaluate the ADME properties of lead discovery compounds. Assume a key role in design, develop & implementation of novel & predictive in vitro assays amenable to high throughput & automation.

### QUALIFICATIONS DESIRED

*Education:* MS (3-5 yrs exp) or PhD (0-2 yrs relevant lab exp) analytical chem/related field. Knowledge in analytical chem, skills in separation & detection methodologies. Interact with external research collaborators to acquire or develop new technologies & also contribute to the export & import of newly developed assays to other labs.

*Experience:* Chromatography and mass spec desired. Computer skills for data handling and reporting are required. Strong oral & written communication skills.

### LOCATION, MAIL ADDRESS

*Location:* Palo Alto

*Description of Employer:* Part of Galox Wellcome family, Affymax is a leader in the biopharmaceutical industry.

*Application Instructions:* Send resume to:

Affymax Res Institute

(Job code LTA001)

3410 Central Expressway

Santa Clara, CA 95051

Fax: 408-730-1393

Email: ari\_jobs@affymax.com

## CHEMPLOYMENT ABSTRACTS 3418

*Position Title:* Research Assistants

*Job Description:* Carry out peptide synthesis, peptide conjugates, organic synthesis, purification and analysis, Maintain lab inventories.

### QUALIFICATIONS DESIRED

*Education:* BS or MS in chem

*Experience:* a plus but not necessary. Able to collaborate with other scientists.

### LOCATION, MAIL ADDRESS

*Location:* Palo Alto

*Description of Employer:* Part of Galox Wellcome family, Affymax is a leader in the biopharmaceutical industry.

*Application Instructions:* Mail, fax or e-mail resume to:

Affymax Research Institute

(Job code PBA002&3)

3410 Central Expressway

Santa Clara, CA 95051

Fax: 408-730-1393

Email: ari\_jobs@affymax.com

Include job code with resume

## CHEMPLOYMENT ABSTRACTS 3419

*Position Title:* Research Assistant 1/II

*Job Description:* Develop new chemistries suitable for the construction of combinatorial libraries.

### QUALIFICATIONS DESIRED

*Education:* BS/MS in organic chem plus 0-5 yrs

research lab exp using techniques for isolation & characterization of organic compounds, including NMR, IR, chromatography and HPLC. Must be familiar with latest computer software such as Word, Chemdraw, Excel, etc.

### LOCATION, MAIL ADDRESS

*Location:* Palo Alto

*Description of Employer:* Part of Galox Wellcome family, Affymax is a leader in the biopharmaceutical industry.

*Application Instructions:* Mail, fax or e-mail resume to:

Affymax Research Institute

(Job code SUN002)

3410 Central Expressway,

Santa Clara, CA 95051

Fax: 408-730-1393

Email: ari\_jobs@affymax.com

Include job code with resume.

## CHEMPLOYMENT ABSTRACTS 3420

*Position Title:* Staff Scientist

*Job Description:* Will be responsible for designing new solid phase chemistries for combinatorial chemical library synthesis and optimization of hits for lead generation.

### QUALIFICATIONS DESIRED

*Education:* PhD in chem, emphasis on synthetic organic chem.

*Experience:* Postdoc exp & knowledge/exp in solid phase methodologies for combinatorial libraries is preferred. Ideal candidate will have excellent communication and interpersonal skills & ability to work on interdisciplinary projects.

### LOCATION, MAIL ADDRESS

*Location:* Palo Alto

*Description of Employer:* Part of Galox Wellcome family, Affymax is a leader in the biopharmaceutical industry.

*Application Instructions:* Send resume to:

Affymax Res Institute

(Job code SUN001)

3410 Central Expressway

Santa Clara, CA 95051

Fax: 408-730-1393

Email: ari\_jobs@affymax.com

Include job code with resume.

## CHEMPLOYMENT ABSTRACTS 3421

*Position Title:* Research Assistant

*Job Description:* will be responsible for the development and implementation of methods to screen shufled libraries by parallel capillary electrophoresis.

### QUALIFICATIONS DESIRED

*Education:* BS/MS in relevant scientific discipline.

*Experience:* Experience in the development & validation of separations is required. Experience in the derivitization bio-molecules, organic chemistry and protein chemistry helpful.

### LOCATION, MAIL ADDRESS

*Location:* Redwood City

*Description of Employer:* Leader in design, development and application of directed evolution technologies to evolve new properties into single genes, multigene pathways, plasmids, viruses and genomes.

*Application Instructions:* Send resume to:

Maxygen HR

Job code CH-144

515 Galveston Drive

Redwood City, CA 94063

Fax: 650-364-2715

Email:jobs@maxgen.com

www.maxygen.com

## CHEMPLOYMENT ABSTRACTS 3422

*Position Title:* Research Scientist, Synthetic Chemistry

*Job Description:* Head of the Preparative Chgistry Lab. Will supervise at least one Associate Chemist. Responsible for synthesis of intermediates and final products of up to 1 kg scale, to support medicinal chemistry program. To focus on improving existing synthetic methods to increase yields and efficiency of transformations.

### QUALIFICATIONS DESIRED

*Education:* MS in Organic Chem with 5+ yrs exp, or PhD with 2-5 yrs exp in intermediate to large-scale synthesis (1g to 1kg) in industrial environment.

*Experience:* Design experiments & solve problems using modern chem principles & laboratory techniques; knowledge of spectroscopic analysis; facility with anal & prep HPLC are essential.

### LOCATION,SALARY,MAIL ADDRESS

*Location:* Mountain View

*Salary:* Competitive & benefits

*Description of Employer:* Innovative Bay Area pharmaceutical company discovering new anti-infection agents.

*Application Instructions:* Mail or Fax resume to:

HR, Job Code 808-SCS

Microcide Pharmaceuticals, Inc

850 Maude Avenue

Mountain View, CA 94043

FAX: 650-526-3034 www.microcide.com

## URGENT We Still Need Volunteers

The Intel Carver Scholars Program is looking for 20 one-on-one science coaches for 4th to 12th grade minority students in the Silicon Valley, particularly in San Jose. The coaches will work with and encourage the students by e-mail, telephone and in person to complete a science fair project for competition on January 5, 2001 – the George Washington Carver Recognition Day and Science Fair in Calif. Contact: **Howard Peters**  
**(650) 324-1677 Ext. 20**  
**peters4pa@aol.com**



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

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#### NOVEMBER 2000 NEWSLETTER TOPICS:

Combinatorial Approaches to Catalyst Research  
Chair's Message  
November Dinner Meeting  
6th SJSU Lecture on Natural Products Drug Discovery  
ACS Food Drive  
Editor's Corner  
Urgent: We Still Need Volunteers for Intel  
Carver Scholars

#### CHEMPLOYMENT ABSTRACTS



<http://www.scvacs.org>

#### SANTA CLARA VALLEY SECTION

##### 2000 SECTION OFFICERS

Chair	Ean Warren	650-329-4554
Chair-Elect	Sally Peters	650-812-4994
Secretary	Karl Marhenke	831-479-6263
Treasurer	Hong Gao	650-494-5197
Past-Chair	Jamil Talhouk	925-449-2664

##### Councilors

1998-00	Linda Brunauer	408-554-6947
1998-00	Sally Peters	650-812-4994
1999-01	Bonnie Charpentier	650-354-2344
1999-01	Herb Silber	408-924-4954
2000-02	Maureen Scharberg	408-924-4966
2000-02	John F. Riley	650-328-2746
2000-02	Ean Warren	650-329-4554

##### Alternate Councilors

1998-00	Jamil Talhouk	925-449-2664
1999-01	Peter Rusch	650-948-0237
1999-01	Jonathan Touster	650-723-4340
2000-00	George Lechner	408-226-7262
2000-02	Roy Okuda	408-924-2525
2000-02	Donna Drogos	408-265-2600
2000-02	Lance Wong	650-829-1148

##### Newsletter Editor

Steven Colby  
e-mail: [scolby@carr-ferrell.com](mailto:scolby@carr-ferrell.com)

#### FUTURE MEETINGS

##### 2000

**Nov 5-11** National Chemistry Week  
**Nov 16** Symyx Technologies  
*Dr. Howard Turner*

**Nov 29** New Tricks in the Old  
Chemistry of Photography,  
California Section  
*Professor William Jolly*

##### 2001

**Jan 25** SCV Mosher Award Meeting

#### CHEMPLOYMENT ABSTRACTS

Shirley B. Radding, Director  
Phone: 408-246-2564 FAX: 408-296-8625  
e-mail: [sradding@att.net](mailto:sradding@att.net)



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