

Silicon Valley Chemist

Santa Clara Valley Section

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History of Chemistry and the Joseph Priestley Bicentennial

Howard and Sally Peters

2004 marks the 200th anniversary of the death of Joseph Priestly, one of the discoverers of oxygen.

The Priestley Medal is the highest award for service made by the American Chemical Society and is awarded by the ACS Board of Directors. In the past it has been awarded to pioneering chemists, ACS presidents, Nobel Prize winners and even a non-chemist lawyer - Francis Garvan in 1929 (and for whom the ACS Garvan-Olin Award is named).

Priestley in addition to oxygen is credited with the discovery of 7 other gasses - including carbon dioxide. He created carbonated water and reported it tasted refreshing - but alas never patented it. He also discovered that India rubber removed graphite pencil marks - the first rubber eraser - and didn't patent that either.

Priestley's life was filled with controversy - he was always talking politics and religion. His lab and home were burned by a mob in England about 1792, and he and his wife were on a ship to Philadelphia when Lavoiser was beheaded in Paris. He learned of this tragedy much later. In the 10 years he lived in Northumberland PA, he criticized the US Government in violation of the recently passed Sedition Acts. He never became a US citizen and would probably have been deported had it

not been for his long-time friendship with Thomas Jefferson.

The ACS Division of the History of Chemistry is sponsoring a Priestly Symposium at the upcoming ACS Meeting in Philadelphia. The authors will present the following two papers before the Division of the History of Chemistry on August 25. For more information (and 21,000 hits) on Priestley, search GOOGLE for "Joseph Priestley".

Joseph Priestley - His Life and Times

Joseph Priestley, (1743-1804)

scientist, politician and clergyman, lived in turbulent times. His early life has been documented. As a scientist, his observations and discovery of oxygen stirred up controversy. His religious views as a Unitarian minister were not popular. His outspoken support of the colonies in the Revolutionary War from 1776 to 1783 and later of people in the French

continued on next page



Jobs! Jobs! Jobs!

Have you seen the web site lately? Click on the jobs site. This is the result of the Chememployment Committee's hard work. Several hundred letters have been mailed to employers in northern California (and some in the central and southern parts of the state.)

Now we would like your help. How? Talk to the Human Resources people in your company about our service. Tell them we reach over 3500 chemists with the Silicon Valley Chemist and we probably can reach even more with the web site.

Yes, we are now placing job listings on the web site for two months each. Considering the links we have, we could be reaching chemists everywhere.

We do need your help. A few words from you may actually motivate the Human Resources people to look into our service. Try it.

Revolution caused popular opinion to turn against him to a point that his home and lab were destroyed by a mob in 1793. He and his wife fled to the U.S. and she died shortly thereafter. His death in 1804 caused not great stir beyond Pennsylvania. He and members of his family are buried in Riverview Cemetery in Northumberland PA. It was recently learned that Nicholas and Barbara Paul, the first author's 5X - great grandparents are also buried in the same Riverview Cemetery. A portion of this talk will include excerpts of a fictionalized account describing the recently discovered personal diaries of Nicholas Paul, earlier a Revolutionary War soldier in Northampton (later Lehigh) Co. PA, while he was a contemporary of Priestley in Northumberland, PA.

Patriots and Patentees

The Revolutionary War (RW) patriots (1776-1783) were comprised mainly of white, male residents as is found in the DAR Index www.dar.org or in the records of the SAR www.sar.org. The early U.S. patentees (1790 - 1890) were also predominately educated, white, male residents as is found in the U.S. Patent Digests www.uspto.gov. This paper reports on the initial findings of

matching names (and their stories) from the DAR Patriot Index with the early U.S. patentees. (Also see www.invent.org). The first U.S. patentee Samuel Hopkins (a chemical process for the making of potash) of Philadelphia was a Quaker and apparently is not reported in the DAR or SAR lists. Robert Fulton (steam-boat) was a teenager and is reported to be involved with the RW. Jedediah Morse, the grandfather of Samuel F. B. Morse (inventor of the telegraph), is

listed in the DAR Index. Other patentees investigated and discussed will include Charles Goodyear (rubber vulcanization), Eli Whitney (cotton gin), Samuel Colt (revolver), Abraham Lincoln (the only U.S. President and patentee-whose grandfather also Abraham Lincoln was in a Virginia militia and is listed in the DAR Index), Mary Kies, the first U.S. woman patentee, etc. Should the genealogical societies add "industry" to the virtues of their patriot ancestors?



CHEMPLOYMENT ABSTRACTS JULY 2004

CHEMPLOYMENT ABSTRACT 3738

Position Title: Chemistry Scientist

Job Description: The Chemistry Scientist is responsible for optimization of chemical leads for potency, selectivity, pharma-cokinetic profile, etc. Independently designs & synthesizes novel molecules with the required biol & physicochem properties to become candidates for clinical development.

QUALIFICATIONS DESIRED

Education: Ph.D. in Org Chem & 0-2 years of academic postdoctoral training
Experience: 0 to 5 years of prior pharmaceutical res exp. Proven track record of academic accomplishments required in org synthesis. Sound understanding of biol & pharmaceutical principles. Knowledge of structure-based or other computer-aided drug design tools. Knowledge of applying parallel-synthesis techniques to med chem.

LOCATION, SALARY, MAIL ADDRESS

Location: South San Francisco, CA

Salary: DOE

Description of Employer: Tularik is engaged in the discovery of novel and superior orally available medicines that act through the regulation of gene expression. Our scientists are expert at elucidating regulatory pathways and selecting the best targets for therapeutic intervention.

Application Instructions: e-mail or fax your resume with job code [Sci-Chem] to:
Tularik Inc., Human Resources,
1120 Veterans Boulevard
South San Francisco, CA 94080
e-mail: resume@tularik.com Fax: 650-825-7303

CHEMPLOYMENT ABSTRACT 3739

Position Title: Chem Research Associate

Job Description: As multi-disciplinary research team, the Chemistry Research Associate is responsible for the synthesis of novel molecules and, working closely with senior members of the department, identifying drug candidates suitable for clinical development.

QUALIFICATIONS DESIRED

Education: B.S. or M.S. in Chem & 2+ years of laboratory experience in organic synthesis
Experience: Demonstrated ability to work productively and independently in a quality research environment. Willingness to set and achieve aggressive research goals

LOCATION, SALARY, MAIL ADDRESS

Location: South San Francisco, CA

Salary: DOE

Description of Employer: Tularik is engaged in the discovery of a broad range of novel and superior orally available medicines that act through the regulation of gene expression. Our scientists are expert at elucidating regulatory pathways and selecting the best targets for therapeutic intervention.

Application Instructions: For consideration for this job opening please mail, e-mail or fax your resume with job code [RA-Chem] to:
Tularik Inc., Human Resources
1120 Veterans Boulevard
South San Francisco, CA 94080
e-mail: resume@tularik.com Fax: 650.825.7303.
Tularik is an equal opportunity employer.

CHEMPLOYMENT ABSTRACT 3740

Position Title: Scientist - Drug Metabolism & Metabolite Identification

Job Description: As a key member in the Drug Metabolism & Bioanalysis Group department, you'll be responsible for in vitro & in vivo studies of SAR compounds & development candidates.

QUALIFICATIONS DESIRED

Education: PhD in org chem, natural products chem, med chem, biochem or a related field
Experience: good knowledge of org chem/ drug metabolism/chromatography, expertise in metabolite identification using MS/MS & NMR, and strong hands-on skills with sample prep, automation techniques such as column switching, and LC/MSn. Adequate understanding of pharmacokinetics is a plus.

LOCATION, SALARY, MAIL ADDRESS

Location: South San Francisco, CA

Salary: DOE

Description of Employer: Tularik is engaged in the discovery of a broad range of novel and superior orally available medicines that act through the regulation of gene expression.

Application Instructions: With job code [Sci-DM-SM] to:
Tularik Inc., Human Resources
1120 Veterans Boulevard
South San Francisco, CA 94080
e-mail: resume@tularik.com; Fax: 650.825.7303.
Tularik is an equal opportunity employer.

CHEMPLOYMENT ABSTRACT 3741

Position Title: Research Assistant/Associate

Job Description: We seek a creative and productive contributor to join a dynamic and team-oriented research environment. Primary job duties include probe array synthesis and characterization using prototype equipment.

QUALIFICATIONS DESIRED

Education: Familiarity w/basic molecular biological and microarray hybridization & data analysis techniques beneficial.
Experience: organic chemistry & phosphoramidite DNA chemistry; and experience with instrumentation and analytical methods (HPLC, NMR, UV-VIS spectroscopy, fluorescence spectroscopy).

LOCATION, SALARY, MAIL ADDRESS

Location: Santa Clara, CA

Salary: Attractive compensation & benefits and a stimulating, state-of-the-art research environment
Description of Employer: Headquartered in Santa Clara, CA, Affymetrix (NASDAQ: AFFX) is dedicated to developing state-of-the-art technology for acquiring, analyzing & managing complex genetic information for use in biomedical research. We're a market leader in creating breakthrough tools that are driving the genomic revolution and accelerating the pace of scientific discovery.

Application Instructions: Email your resume to: jobs@affymetrix.com. Please reference the position title in the subject line of your email.

CHEMPLOYMENT ABSTRACTS JULY 2004

CHEMPLOYMENT ABSTRACT 3742

Position Title: PK Bioanalysis Scientist
Job Description: As a key member in the Bioanalysis group of the PKDM dept, you'll be responsible for the quantitative bio-analysis of discovery compounds in complex biological matrices such as plasma, tissues, and bile supporting our PK/PD/TK studies.
QUALIFICATION DESIRED
Education: PhD in anal chem, org chem, biochem, pharmacol or related field required
Experience: 3+ years of bioanal exp in an active bioanal group supporting drug discovery/development. Expertise in high throughput LCMS/MS bioanalysis through automation tech is essential. Adequate understanding of pharmacokinetics is a plus.
LOCATION, SALARY, MAIL ADDRESS
Location: South San Francisco, CA
Salary: DOE
Description of Employer: Tularik is engaged in the discovery of a broad range of novel and superior orally available medicines that act through the regulation of gene expression.
Application Instructions: For consideration for this job opening please mail, e-mail or fax your resume with job code [Sci-PBA-SM] to: Tularik Inc., Human Resources 1120 Veterans Boulevard South San Francisco, CA 94080 e-mail: resume@tularik.com Fax: 650.825.7303

CHEMPLOYMENT ABSTRACT 3743

Position Title: Product Development Chemist/Engineer
Job Description: Development work in following areas: 1. Epoxy Asphalt paving materials and mixes to improve adhesion and high temperature performance. 2. Cold cure polymeric paving materials. 3. Bond coating materials to improve adhesion to steel and concrete.
QUALIFICATIONS DESIRED
Education: Advanced degree in material science (chemistry).
Experience: Ability to conduct physical testing. Prefer background in pavement technology.
LOCATION, SALARY, MAIL ADDRESS
Location: Redwood City.
Salary and work schedule: To be negotiated.
Application Instructions:Contact Dr. Wolfgang Eisenhut Chemco Systems 2800 Bay Road Redwood City, CA 94063 650-261-3790 email: eisenhut@chemcosystems.com

CHEMPLOYMENT ABSTRACT 3744

Position Title: Bench Chemist
Job Description: Long Term Temp Position. Working in the pharmaceutical industry
QUALIFICATIONS DESIRED
Education: B.S. in Chemistry
Experience: 2-5 years Experience, GPM, GLP, HPLC (no soil sampling). Must have pharmaceutical experience.
LOCATION, SALARY, MAIL ADDRESS
Location: Petaluma, CA
Salary: \$17-19 DOE
Description of Employer: Temporary assignment through our staffing agency for a client in the pharmaceutical industry.
Application Instructions: Please email resume to elenah@certifiedemploymentgroup or fax to (707) 521-2154. All inquires contact Elena Herdman at (707) 521-2140

CHEMPLOYMENT ABSTRACT 3745

Position Title: Scientist - Analytical Biochemistry
Job Description: Will be responsible for assay development to support directed evolution of enzymes and strains for pharmaceutical and industrial chemicals manufacture and will also develop and implement creative quantitative solutions at the interface between Chemistry, Microbiology, Molecular Biology and Process Development.
QUALIFICATIONS DESIRED
Education: Ph.D or equivalent in Biochemistry or Chemistry required
Experience: Experience with a broad spectrum of analytical methods, in particular chiral analysis required. Biocatalysis and/or enzymology background highly desirable, statistical design a plus.
LOCATION, SALARY, MAIL ADDRESS
Location: Redwood City, CA
Salary: Depends on experience
Description of Company: Codexis, a majority-owned subsidiary of Maxygen, Inc., is a leading provider of biocatalysis and fermentation processes and products to the global pharmaceutical and fine chemicals industry.
Application Instructions: Email resumes to jobs@codexis.com referencing Job No. CDX-322.

CHEMPLOYMENT ABSTRACT 3746

Position Title: Organic Chemist
Job Description: Responsible for working with engineering to develop highly reliable instrumentation for pharmaceutical synthesis & purification. Serve on product development teams & conduct testing & validation of products in process. Provide feedback & contribute to product design & specifications. Develop applications using Argonaut instrumentation & participate in the publication/presentation of scientific results. Track trends in industry & interface with customer base as required.
QUALIFICATIONS DESIRED
Education: BS, org chem, anal chem or Chem Engr.
Experience: Min 2-5 yrs in chem process research & development, preferably in pharmaceutical industry. Hands on lab exp utilizing automated instrumentation for synthesis, purification or chem anal. Maintenance & troubleshooting of instrumentation in support of product research & development. Excellent verbal & written communication skills as shown through reports or publications & presentations.
LOCATION, SALARY, MAIL ADDRESS
Location: Foster City, CA (Moving to Redwood City this summer)
Application Instructions: Send resume via e-mail, fax, or mail to: Human Resources, Argonaut Technologies, Inc. 1101 Chess Drive. Foster City, CA 94404 Fax: 650-655-4300, email: hrinfo@argotech.com

CHEMPLOYMENT ABSTRACTS 3747

Position Title: Engineer, R&D
Job Description: Needs in-depth knowledge and hands-on exp with IC as applied to sample prep, method development & maintenance for several ion Chromatography systems. Duties will include running similar functions for GC-MS & GC-FID systems as well.
QUALIFICATIONS DESIRED
Education: BS Chem or related field
Experience: Minimum of 5 years industrial exp. Or an equivalent combination of education & exp. Problem solving skills & innovative approaches to complex anal. questions strongly desired. Good communication skills and ability to work under minimal supervision.
LOCATION, SALARY, MAIL ADDRESS
Location: San Jose
Salary: Highly competitive salary & benefits
Description of Employer: World's largest independent supplier of thin-film media for computer hard disk drives.
Application Instructions: Send resume, indicating position to: Komag, Inc. Staffing Dept. 1710 Automation Parkway San Jose, CA 95131 or FAX: 408-944-9543 E-Mail: jobs@komag.com

CHEMPLOYMENT ABSTRACTS 3748

Position Title: Staff Scientist
Job Description: Synthesis and Development of processes used in the manufacturing of electro and photoactive materials. Physical and chemical characterization of organic and inorganic nanomaterials.
QUALIFICATIONS DESIRED
Education: MS or PhD in polymer or inorganic chemistry or related discipline, with strong interdisciplinary skills.
Experience: At least 3-5 yrs of hands-on bench synthesis experience. Good knowledge of principles of modern synthetic chemistry, lead optimization & structure activity relationships is essential. Knowledge & Experience with organometallic reagents. Experience performing electrochemistry and photochemistry. Knowledge of absorption spectroscopy, emission spectroscopy, thermal analysis, X-ray diffraction, electron microscopy & modern chromatographic techniques.
LOCATION, MAIL ADDRESS
Location: Fremont
Description of Employer: UltraDots, Inc. Is a nanomaterial/nanotechnology based company
Application Instructions
 Please email your resume to jobs@ultradots.com

CHEMPLOYMENT ABSTRACT 3749

Position Title: R&D Scientist
Job Description: To be part of a team that works on R&D of a controlled drug delivery implantable medical device. The position will require reasonable expertise in areas of controlled drug delivery, medical devices and biomaterials. This position is very hands-on and involves the use of wet chemistry, analytical techniques such as HPLC/MS, GC/MS, dissolution testing, etc.
QUALIFICATIONS DESIRED
Education: M.S. or Ph.D. in Biochemistry, Chemistry, Pharmacology or related areas
Experience: The ideal candidate will have a minimum of 5 years experience in the area of controlled drug delivery for medical devices with knowledge of polymer development. The candidate should understand drug/polymer interactions, solubility and diffusion. It is important that the candidate know HPLC/MS, GS/MS operations and methods development
LOCATION, SALARY, MAIL ADDRESS
Location: Mountain View, CA (local candidates only please)
Description of Employer: Broncus Technologies is developing Interventional Bronchoscopy devices for the treatment of emphysema. Broncus Technologies is singularly focused on developing proprietary and cost-effective technologies to address the unmet needs of patients with emphysema.
Application Instructions: Email your resume to hr@bronus.com, Fax resume to 650-428-1542. No phone calls please

CHEMPLOYMENT ABSTRACT 3750

Position Title: R&D Chemist
Job Description: The Chemist is responsible for performing chemical, pharmaceutical testing, validation, routine analysis of raw materials, drug stability, release testing, and product development support. Mastery of the day to day function of the R&D laboratory environment, which means maintaining and keeping current the SOP's and calibration of equipment & instruments.
QUALIFICATIONS REQUIRED
Education: B.S. or M.S. in Biochemistry, Chemistry or related areas
Experience: The ideal candidate will have experience working in a chemistry research lab and has expertise in handling lab chemicals, operation of analytical instruments such as HPLC/MS, GC/MS, UV-Vis FTIR
LOCATION, SALARY, MAIL ADDRESS
Location: Mountain View, CA (local candidates only please)
Description of Employer: Broncus Technologies is developing Interventional Bronchoscopy devices for the treatment of emphysema. Broncus Technologies is singularly focused on developing proprietary and cost-effective technologies to address the unmet needs of patients with emphysema.
Application Instructions: Email resume to hr@bronus.com Fax resume to 650-428-1542 No phone calls please.

CHEMPLOYMENT ABSTRACT 3751

Position Title: Lecturer (part-time)
Job Description: Part-time instructors are required to teach laboratory sections in lower-division organic and general chemistry courses at Santa Clara University for the fall quarter, 2004. For additional information, visit www.scu.edu/chemistry.
QUALIFICATIONS DESIRED
Education: M.S. required, but Ph.D. strongly preferred.
Experience: Previous teaching experience is desired.
LOCATION, SALARY, MAIL ADDRESS
Location: Santa Clara
Salary: \$2,520 per section (maximum of 3 sections)
Employer Description: Santa Clara University is an equal opportunity/affirmative action employer and welcomes applications from women, persons of color, members of other historically under-represented U.S. ethnic groups, persons with disabilities, veterans, and Jesuits.
Application Instructions: Send CV, copies of undergraduate and graduate transcripts, and have three letters of recommendation sent to Dr. Steven Fedder Department of Chemistry, Santa Clara University 500 El Camino Real Santa Clara, CA 95053 by July 14, 2004.

CHEMPLOYMENT ABSTRACTS 3752

Position Title: Clinical Study Planner
Job Description: Manage entire proc of clinical study from inception to completion. Ability to bring multiple viewpoints/positions to final agreement. Good organizational skills with determined focus on team goals. Much flexibility to face ever changing priorities. Excellent communication skills
QUALIFICATIONS DESIRED
Education: BA,BS science related major-MAJOR-CERTIFIED MT, PHLEBOTOMIST, OR NURSE A.
Experience: 2-5 yrs in clinical setting working with clinical specimens. CLIA certified laboratory and/or other clinical exp. Good skills with relational DB exp a plus. Understanding of collection, processing, storage of various human clinical specimens.
LOCATION, SALARY, MAIL ADDRESS
Location: Redwood City
Salary: \$65-75K
Description of Employer: Investments have been made to assure we continue as a world-class biotechnology organization serving several markets.
Application Instructions: Send resume to bspisak@nelsonstaffing.com or bspisak@nelsonhr.com





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2003-05: Ean Warren	650-329-4554	ewarren@scvacs.org
2004-06: Linda Brunauer	408-554-6947	lbrunauer@scu.edu
2004-06: Sally Peters	650-812-4994	sally.peters@parc.com
2004-06: Peter Rusch	650-961-8120	pfrusch@aol.com

Alternate Councilors

2002-04: Mark Kent	408-736-0989	makent@earthlink.net
2003-05: David Parker	408-615-4961	dparker@ci.santa-clara.ca.us
2003-05: Laura Jarvis	650-210-1242	lj Jarvis@scvacs.org
2003-05: Asfia Qureshi	408-732-1705	asfiaq@yahoo.com
2004-06: George Lechner	408-226-7262	george.lechner@usa.xerox.com
2004-06: Carol Mosher	650-322-3120	cmosher2@aol.com
2004-06: Ernest Gargas	408-365-2866	eggargas@yahoo.com

Newsletter

Editor: **Laura Jarvis** 650-210-1242 editor@scvacs.org

ChemEmployment Abstracts

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

FUTURE MEETINGS

Aug 22-26	ACS National Meeting Philadelphia, PA
Sep 16	SCV Dinner Meeting Chemistry and Industrial Hygiene William Wells Palo Alto, CA
Oct 17-23	National Chemistry Week
Oct 21-22	50th Anniversary Celebration SCV ACS Local Section
Oct 27-30	Western Regional Meeting Sacramento, CA

For the latest information, please visit
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