



CALIFORNIA
STATE UNIVERSITY
LONG BEACH

CHEMISTRY DEPARTMENT NEWSLETTER



Dr. Harry Gray, Tenth Distinguished Lecturer

Dr. Harry B. Gray, Tenth Distinguished Lecturer

Professor Harry B. Gray of California Institute of Technology delivered the 10th Annual Distinguished Lecture Series on March 8 and 9 of this year. His visit was made possible by a generous gift from the Unocal Corporation and marked the highlight of the Department's weekly seminar program.

In the first of his three presentations, entitled "Long Range Electron Transfer in Proteins," Dr. Gray discussed how electrons could "jump" several tens of Angstroms--a phenomenon thought to be impossible until recently by most chemists--and explained the techniques used in detecting and measuring such long distance transfers. His second seminar, entitled "Can Chemists Make Fuel from Water and Sunlight?" was designed for a general audience. Dr. Gray's captivating talk outlined what is already known about photochemical generation of hydrogen from water and what obstacles remain to be overcome to make the process feasible. In his last lecture Dr. Gray discussed the "Photochemistry of Binuclear Complexes."

Dr. Gray did his undergraduate work at Western Kentucky College and received his PhD at Northwestern University. After a year of postdoctoral work in Copenhagen, he joined the faculty of Columbia University where four years later he became a full professor, the youngest ever in the history of that institution. In 1965, Dr. Gray moved to Caltech where he is now Arnold O. Beckman Professor of Chemistry.

Dr. Gray is the recipient of numerous awards and honors, including the American Chemical Society's awards in pure chemistry and in inorganic chemistry. He has been a member of the National Academy of Sciences since 1971.

Following the last seminar in the series, Dr. Gray's friends, colleagues, and students joined him for dinner on campus. In a relaxed and congenial atmosphere the dining extended well into the late hours of the evening. Those of us not well acquainted with the works of the best-selling author, Joseph Wambaugh, learned from Dr. Gray that Wambaugh's novel, "The

CSULB Among Top Producers of Chemistry Bachelor's and Master's Degrees In Nation

The report of the Committee on Professional Training of the American Chemical Society, published in the June 19, 1989, issue of *Chemical & Engineering News*, ranked CSULB among the top producers of bachelor's and master's degrees in the nation for 1987-88. The rankings included some ties and are as follows (CSULB rankings among 584 ACS approved colleges and universities are in parentheses):

Total bachelor's graduates (17)
ACS certified bachelor's (14)
Master's degrees (8)

In 1987-88 CSULB graduated 45 bachelor's students, including 23 ACS certified bachelor's, and 14 master's students. Among California colleges and universities, Long Beach ranked behind UCLA, UC Berkeley, UC Irvine, and California Polytechnic State U at San Luis Obispo for the total production of bachelor's students. For certified bachelor's CSULB ranked behind only Berkeley and UC San Diego, and for the graduation of MS candidates in California, CSULB was second only to UC San Diego.

It should be pointed out that some MS-producing institutions grant non-research masters, and some PhD institutions routinely award master's degrees to PhD candidates *en passant* to the PhD without submission of a thesis. Our department has always insisted upon submission of a research-based thesis as the culmination of graduate studies. Many institutions are permitted to award two bachelor's degrees simultaneously, e.g., BS in Biology and BA in Chemistry. At CSULB, although requirements for more than one bachelor's degree may be met simultaneously, only one degree is awarded. Our non-certified degree is also strong, requiring the same organic sequence as for certified BS students, and a year of physical chemistry. Our department's degree productivity is all the more impressive, recognizing all these limitations.

Chairman's Report

In 1988-89 the department experienced a slight decline in total enrollments in chemistry classes. This can be attributed to several factors. (1) More Nursing and Home Economics majors appear to be taking required chemistry courses in community colleges. (2) Following a national trend, there has been a decline in the number of majors in the Chemical Engineering program whose students rely heavily on course offerings in the Chemistry and Biochemistry Department. (3) Some of the other areas of the sciences which require chemistry courses have experienced declining numbers of majors as well. Offsetting these declines to some extent are increasing enrollments in our general education chemistry offering, Chemistry 100.

Without further comment in this column, I would like to direct you to three significant events of the past year covered in separate articles in this *Newsletter*, (1) the excellent level of support of this department by alumni and friends, (2) the high degree of student activity and involvement in the student organization, the Student Affiliates of the American Chemical Society, and (3) the high ranking of the department in the nation in the production of chemistry graduates for 1987-88. Other events of note:

Renovation of Chemistry facilities. Our renovation project still has not begun, although we have been planning it for several years. We have had problems with inadequate funds and have had to withdraw our original plans because they were too ambitious for the money available. Then there was a change in the concept for air handling and discharge of chemical effluents. Next, numerous architectural errors had to be corrected. Finally, there were disagreements about the location of laboratories which had to be arbitrated. Dr. Bob Loeschen, Chairman of our Space and Facilities Committee, managed in some way to maintain his sanity throughout all this turmoil, and it appears that we are at last to commence construction in the fall of this year. The project is scheduled to be completed, hopefully with a minimum of class disruption, by the fall of 1990. We expect that the result will be a more efficiently organized and safer system of laboratories.

Students entering doctoral programs. An unusually large number of students have been admitted to doctoral programs from this year's class, a total of 24! This includes 16 entering PhD programs, five accepted to medical school, one entering dental school, and two to study for their PharmD degrees. I believe that this is another record for our department, and it comes at a time when there is mounting national concern over the dwindling number of US citizens who plan to prepare themselves for careers in the sciences.

Department name change. To reflect the growing size of the biochemistry area in our department and the fact that the department offers two degrees in biochemistry, the BS and the MS, the faculty voted to change the department's name to the **Department of Chemistry and Biochemistry**. The department's request has been approved by the Academic Senate and the President of the University. The name change is now official! However, unless there are outcries from the biochemistry faculty and alumni, the *Newsletter* will continue to be called the *Chemistry Department Newsletter* for simplicity.

Staff reorganization. Until this year the Director of Laboratories, Joyce Kunishima, in addition to her other duties, had responsibility for supervising the operation of the Stockroom and its personnel as well as monitoring the department's safety programs, waste collection and disposal of chemical wastes, maintaining inventories of chemicals and equipment, processing breakage fees, and ordering chemicals and equipment. This amounted to an enormous task for a department of our size and complexity. With the help of Dr. Hiden Cox, Acting Dean of the School of Natural Sciences, and the concurrence of the University administration, we were able to hire a Stockroom Director who operates the Stockroom and supervises Stockroom personnel on a full-time basis, freeing Joyce to devote her time to her other responsibilities. The new Stockroom Director, Bob Mattice, assumed his duties in January, 1989. This change has been exceptionally beneficial in improving laboratory operations and safety.

Alumni. I have exchanged over one hundred letters with alumni in the past year. It is gratifying that you have continued to maintain an active interest in our department, and that alumni giving to the department's programs continues to grow each year. We are grateful for both your interest and support! Best wishes to all of you, and I hope you enjoy reading this edition of the *Newsletter*.

Sincerely, *Ken Marsi*

Dr. Gray: From Page 1

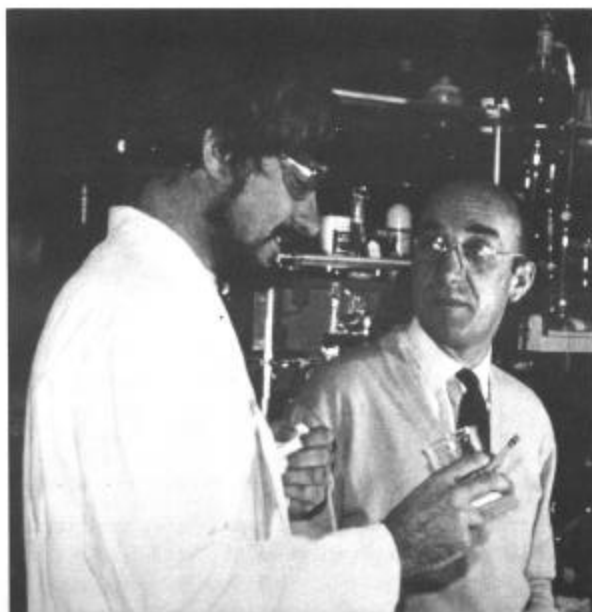
Delta Star," is probably the first of its kind named after a spectroscopic state of a molecule. The novel, based at Caltech, recounts certain fictitious events in which one character is real and mentioned by name: Chairman Harry Gray of the Division of Chemistry.

**Dr. Kimberly Schugart
Appointed
Assistant Professor of
Chemistry**



Dr. Kimberly Schugart

Dr. Kimberly A. Schugart, a full-time lecturer during the 1988-89 academic year, was appointed Assistant Professor of Chemistry after a nation-wide search for a tenure-track inorganic chemist. Prior to her appointment as lecturer at CSULB, Dr. Schugart was a postdoctoral associate of Professor William A. Goddard, III, at California Institute of Technology. Dr. Schugart received her PhD at the University of Wisconsin where she conducted research under the direction of Dr. Richard F. Fenske. The subject of her dissertation was devoted to understanding the properties of a series of bis-bridged organometallic complexes using Fenske-Hall molecular orbital theory. Her postdoctoral work involved the use of *ab initio* methods to elucidate how H-H and C-H bonds become activated in the presence of early transition metal systems. Although a Southern Californian from Palos Verdes, Dr. Schugart received her BS degree from Northwestern University where she was elected to Phi Beta Kappa.



Michael Monahan (left) and Dr. Roger Guillemin, Nobel Laureate

**Dr. Michael W. Monahan
1935-1989**

It is with regret that we report the death of Dr. Michael W. Monahan on January 20, 1989. Mike received his BS in Chemistry at CSULB in 1963 and his PhD from UC San Diego in 1968. During 1985-87, the two years prior to his lengthy illness, he served as a full-time lecturer in our department. Mike regarded his membership on our faculty as the single greatest honor of his successful career as a scientist.

His PhD thesis involved the stereochemistry and mechanism of addition of hydrogen chloride to cyclohexene and was conducted under the supervision of Dr. R. C. Fahey at UC San Diego. Following receipt of the PhD he continued at UCSD as a post-doctoral fellow and instructor. During the period, 1970-76, he was Assistant Research Professor at the Salk Institute for Biological Studies, where he became an authority in peptide and natural product chemistry. His expertise in peptide synthesis included both solution and solid-phase methodologies. There he was associated with Nobel Laureate, Dr. Roger Guillemin, and was involved in the design of peptide analogs to explore hormone substrate-receptor interactions. He synthesized more than 150 analogs of the luteinizing hormone, including *in vitro* antagonists and analogs having greater potency than the parent hormone.

In 1976-78 he served as Senior Research Scientist with Beckman Instruments, Inc., and in 1978 he became President and Founder of California Medicinal Chemistry Corp., now named Creative Biomolecules. He subsequently sold his interest in that firm and became a chemistry instructor at Grossmont College and San Diego Community College in 1984, returning to CSULB as a full-time lecturer in 1985.

During his scientific career Mike published a total of 41 papers and patents.

Dr. Monahan was especially proud to have been offered a teaching position at CSULB, because he had the greatest esteem for the undergraduate program of which he was a product. Mike often mentioned the fact that he received the highest scores in his class on the PhD qualifying examinations at UCSD and attributed this to his superior undergraduate training.

Dr. Monahan was a devoted teacher who influenced a number of students to consider careers in chemistry. One student wrote in evaluating Dr. Monahan's teaching, "It's been my pleasure being your student. I appreciate the times you've helped and also the times when you made me think it out for myself." Regarding Dr. Monahan's laboratory skills another student remarked, "He knew every trick in the book." During the 1986-87 academic year Mike was appointed seminar coordinator for the department. It was a job he assumed with great enthusiasm and dedication, and he put together probably the finest weekly seminar series ever offered in the department.

Dr. Monahan willed all his holdings in Creative Biomolecules, his share of patent income, and a sizeable portion of cash proceeds from his estate to the Department of Chemistry and Biochemistry at CSULB to help support student research programs.

Faculty News

Dr. Roger Acey has two new graduate students, Jim Lozano and Martha Lopez, both supported by the Minority Biomedical Research Support (MBRS) program. New undergraduate research students are Jim Thurmond and Liisa Perkio. Continuing research support comes from the Citrus Research Board and Chevron Oil Field Research Corporation. Utha Hellman received her MS and Erich Keller his BS in Biochemistry. They will continue on for the PhD at UC Davis and UC Santa Barbara, respectively. Those continuing in the Acey group are Stacie Bailey, Kathy Bedolla, Mike Bundy, Sharon Squires, Lori Ishizawa, David Miller, Ginny Ofstein, and Mike Mustillio.

Dr. D. M. Anjo has had a paper on the determination of diffusion coefficients accepted for publication. This work was done by Stuart Nowinski (MS 1988). A second paper has been submitted dealing with activation of carbon electrodes. Mike Kahr, Majid Khodabakhsh, Stuart Nowinski, and Michael Wanger contributed to that paper. Michael Wanger is also working on a system to computerize and automate electrochemical experiments. Charlene Reeder has done work on the surface modification of carbon electrodes, and Karen Watson is working on the pH-dependent adsorption of catecholamines to carbon electrodes. Michael Aguon has been involved in research with the carbon film electrode as a spectro-electrochemical cell. Research student, Tim Bacon, has been accepted for graduate studies at UC Riverside.

Dr. Roger D. Bauer, after leaving the position of Dean of the School of Natural Science, has "enjoyed working more closely with students in several classes as well as working on special projects in the Office of the Chancellor. The central office of the CSU system does provide me with a somewhat different view of the entire educational process. One specific project in which I will be involved in the coming year is the development and offering of Chautauqua courses. These are part of a faculty development program, sponsored by the National Science Foundation, which provides special assistance to faculty seeking to become updated in their disciplines."

Dr. Jack Berry reports that "John Oldenburg and Eri Hirumi are writing their MS theses this summer. Jeff Shapiro is working on muscle antigen immunoblots for autoantibody profiles in Myasthenia Gravis patients. Support comes from a Memorial Hospital grant, and the co-investigator is John Keeseey, MD, of Memorial Hospital. Jeff will attend medical school this fall. Kausar Akhoun is preparing immunogen conjugates to raise antibodies to methylmalonic acid and homocysteine; we plan to devise an immunoassay for these compounds. The clinical importance is that these substances are elevated in hematologically subclinical vitamin B12 deficiency. Stewart Schesnack is purifying Pepsinogens I and II to develop antibodies for an immunoassay for these zymogens, indicators of gastrointestinal disease.

Dr. Jeff Cohlberg has received a \$166,000 grant for two years to study "Phosphorylation and the Structure and Assembly of Neurofilaments." Roy Avalos, Earl Chase, and he are presenting a poster, "In vitro studies of the binding of intermediate filament proteins to mitochondria," at the NIH-MBRS Symposium in Houston in October. Other members of the Cohlberg group are Pari Alipourjehdi, Roy Guillermo, Tom Wroblewski, Rong Guan, and Melissa Primus. Dr. Cohlberg was coauthor, along with faculty from Biology and Microbiology, of a successful NSF proposal which will enable CSULB to buy a new transmission electron microscope.

"My composition, 'Ketone Bodies Is the Game To Play,' to the tune of 'A Policeman's Lot Is Not a Happy One,' from Gilbert and Sullivan's 'Pirates of Penzance,' received its second biennial performance in Chemistry 441B this spring."

That familiar face you saw on the TV game, Jeopardy, on the evening of June 26 was indeed that of Jeff Cohlberg. Can you answer the following? Which depression-era president received the most honorary degrees? Which states have women governors? Jeff now knows the answers to those questions!

Dr. Dorothy M. Goldish mentions, "This has been a most unusual year for me. I was on a part-time assignment in the School of Business Administration, helping the faculty accomplish curriculum changes needed for accreditation and assisting the Acting Dean. I stayed on in the spring to help the new Dean get started. At the end of March, I was asked to take over immediately as Acting Dean of the School of Natural Sciences, replacing Dr. Hiden Cox, who had asked to be relieved of the job. This is an honor--especially since there are few large universities that have had women science deans--and I've enjoyed the job, but I'm looking forward to the arrival of a permanent dean for the school." Dr. Goldish has also just finished a revision of her popular book, *Basic Mathematics for Beginning Chemistry*, published by Macmillan.

Dr. James L. Jensen is busy preparing the third-year renewal of the \$505,000 MBRS grant. During the summer of 1989, the proposal requesting support for the next four-year period must be prepared. Fortunately, the seven faculty and fourteen students involved in the CSULB MBRS program have been working hard, and there is a lot to report to the NIH. Hopefully, NIH will have sufficient funds to allow us to involve more of our deserving students in biomedical research projects.

In August of 1988, Dr. Jensen resigned as Associate Dean of the School of Natural Sciences. This made it possible to devote the time necessary to develop the MBRS program to the point of justifying further support. A new interdisciplinary course for the university's general education program has been developed, the philosophy and purpose for which was presented at the National Association for Science, Technology, and Society in Washington in February. A manuscript on the same subject will be published in *Technological Literacy IV* in late 1989.

Bob Siegel's work appeared in *J. Org. Chem.* in 1988. It looks as if the papers based on the work of Ty Smith, Greg Shaw, David Maynard, Stephanie Po, and Frank Hwang will appear in early 1990. Three papers will be presented in Europe during August, followed by one at the Pacific Conference in October. Rick Pagliery will present two papers in October, based on a productive summer of studying thallium-promoted hydrolysis of an *O,S*-acetal.

Dr. Marco A. Lopez reports that "my wife and I were blessed with the birth of our second child, Jessica Anne, on September 29, 1988. I presented a paper entitled, 'Application of Forcefield Methods to Heme Models,' at the 196th meeting of the ACS in Anaheim, CA, in September, 1988." Dr. Lopez presented seminars at both CSULB and CSULA on computer simulation of iron porphyrins; he was awarded an NIH AREA grant of \$69,000 for a two-year period for the proposal, "Nonlinear Decomposition of Heme."

Dr. Tom J. Maricich notes, "Last September I accepted Acting Dean Hiden Cox's request to become Acting Associate Dean of the School of Natural Sciences. The transition from the classroom to administration was aided greatly by the guidance of Jim Jensen and Pat Lawrence. The demands of adjusting to a new schedule has temporarily interrupted my laboratory research activity, but I was invited to give seminars on our new method of regioselective O-alkylation of sulfonamides at UC Santa Barbara and Western Washington University this last semester. My former research students who worked on this or related projects are off to new adventures. Brett Kislin has been employed at Johnson and Johnson Biotechnology in La Jolla for the past year, Kevin Jeter will be entering Law School at UC Davis in August, and Clayton Harris has been accepted into the PhD program in Chemistry at UC Irvine."

Dr. M. Stephen McDowell has supervised an active undergraduate research program. Students Carter White and Susan Boggs presented research papers at the ACS-Section sponsored Undergraduate Research Conference at UCLA in the spring. Carter White, Susan Boggs, and Darin Hayton are continuing on to PhD programs, and Burt Secrest was the recipient of the 1989 SAACS undergraduate research award. "I am looking forward to teaching Chemistry 111A in the University Scholars Program this fall."



Dr. Margaret Merryfield (left) with undergraduate research student, Judith Hicks

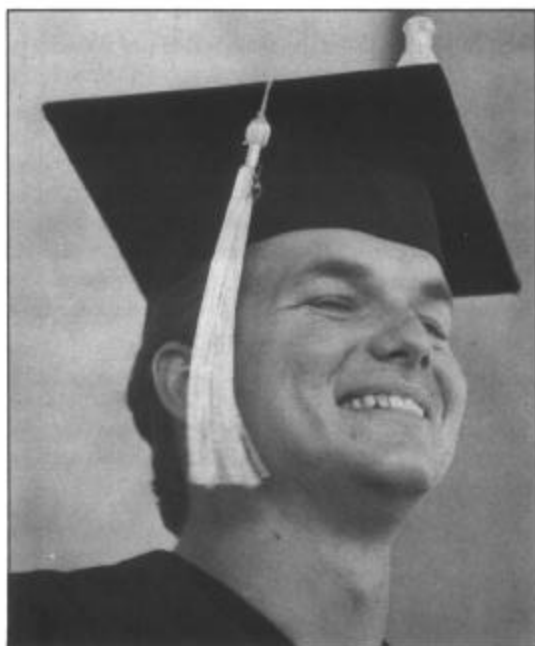
Dr. Margaret Merryfield relates, "The fall semester in the Merryfield lab was marked by the departure of two graduate students, Dianne Meacher, who completed her thesis for the MS in Nutrition, and Benny Dickens, who is now working for GAF while completing his thesis. In the spring, we traveled to the National Conference on Undergraduate Research in San Antonio, TX, where Jose Sanchez presented a poster on his work concerning the mechanism of inhibition of branched chain alpha-keto acid dehydrogenase (BCKDH) kinase by ADP. We have continued to study the regulation of BCKDH by phosphorylation over the past year, and have recently received NIH support to begin a more general study of the regulation of protein phosphorylation, in several different enzyme systems, by polyamines."

Dr. Ken Nakayama states, "During the past two years, since joining the department as a tenure-track faculty member, I've had the opportunity to become thoroughly involved with the organic chemistry course for majors. It has been great fun interacting with students and other faculty about course progress and possible ways in which it could be improved. In terms of research, my group, consisting of one MS student and three undergraduate students, has just completed the synthesis of a chiral compound derived from *L*-tartrate which we hope to employ in asymmetric induction. MS student, Jon Rainier, and undergraduate student, David Lee, are continuing on to the PhD at UC Riverside and UC Davis, respectively."

Dr. Henry Po continues his work in electrochemistry and kinetics. Jeff Masse had his first paper accepted for publication in *Synthesis*. Jeff is a summer ACS-PRF summer undergraduate research scholar and will continue his research in reaction kinetics during the coming year. David Anvar and Ming Yuan are investigating the redox reactions involving complexes of iridium and osmium. Gary Beck is presently at Allergan and is conducting FTIR investigations of metal ion effects on polymer conformations. Za Shariff and Rosa Mahmud have determined the thermodynamic constants of several thiols in solution, and Ann Tran and Shu-Chin Shen are seniors who have just joined Dr. Po's group.

Dr. Gwendolyn Raine has resigned her position as Assistant Professor in physical chemistry to assume an equivalent position at Portland State University in Portland, OR. She and Dr. Alan Shusterman, an organic chemist, will be married this summer. Dr. Shusterman has accepted a position as Assistant Professor of Chemistry at Reed College, also in Portland, OR. Both have been post-doctoral associates of Dr. Warren Hehre at UC Irvine during the past academic year.

Dr. Nall Senozan has a paper with Mike Briggs in *Comparative Biochemistry and Physiology* entitled, "Hemocyanin Levels in the Giant Keyhole Limpet, *Megathura Crenulata*, from the Coast of California." An earlier paper, "Hemocyanin Levels in *Octopus Vulgaris* and the Cuttlefish, *Sepia officinalis*, from the Aegean Sea," was published in the same journal in December 1988.



Carter White

Student Affiliates of the American Chemical Society

by Carter White, President 1988-89

This year the CSULB Chapter of the Student Affiliates of the American Chemical Society (SAACS) continued the tradition of past years by taking an active role in the department and in campus affairs. The membership in the organization remained steady at about 50, with some students graduating, while many new members joined.

The year's activities began with a Back-to-School/New Member Party held at the Soroptimist House on campus. Old and new members attended, along with faculty and graduate students, with everyone enjoying dancing and refreshments. In October we held a Halloween Costume Party, also well attended and with many good costumes in evidence. In November, SAACS, with the help of Jeff Schapiro, a biochemistry graduate student, coordinated the First Annual School of Natural Sciences Thanksgiving Food Drive. The Annual Taco Feast was held at the same time with donation of canned food as an admission fee. Approximately 1200 pounds of food were collected and donated to the Long Beach Food Bank. In December we sponsored the Annual Winter Holiday Party at Dr. Marsi's house, with faculty and students filling his home to overflowing.

After a well-deserved winter break, the Student Affiliates, along with the Geology Students Association, held a Back-to-School/Valentine's Day party on February 10th. This event gave both groups the opportunity to get to know each other. In March SAACS held a St. Patrick's Day Bash with green beer, refreshments and dancing. April was busy with organizing displays for Kaleidoscope, and the School of Natural Sciences's Open House. Demonstrations of chemiluminescence, oscillation reactions, and hydrogen balloons were all very popular. The year's activities culminated with the Pizza Awards Banquet, this year held at Avenue #3 Pizza Parlour. About 150 people attended. At the Awards Banquet, two Summer Undergraduate Research scholarships were given, one to Burt Secrest and the other to Shu-Chin Shen. They will be involved in research with Dr. McDowell and Dr. Po, respectively. Funding for these scholarships was derived from the sales of laboratory glasses and aprons.

The Student Affiliates would like to thank Dr. Marsi for once again being our faculty advisor. Without his support the year would not have been so successful. I would also like to thank the out-going officers for their help in organizing and completing the many projects of the year. They were: Erich Keller, Vice President; Stacie Bailey, Treasurer; Lindi Willhite, Secretary; Tammie Siefert and Barb Simon, Publicity; September Rivera and Cathy Bedolla, Activities.

Officers for 1989-90 are: Kristi Miyade, President; September Rivera, Vice President; Clyde Jones, Treasurer; Lisa Bedolla, Secretary; Eloisa Gonzalez and Sharon McKelvey, Publicity; Rich Charlebois, Activities.

BS/MS: From Page 1

There is an alarming decline of bachelor's and master's degrees awarded by the nation's colleges and universities. During the past five years the production of bachelor's graduates has declined each successive year from 10,043 in 1983 to 8,848 in 1988. Our department has resisted this trend, maintaining about 200 undergraduate and 50 graduate majors during this period.

Recent Appointments to the Chemistry Advisory Council

The Chemistry Advisory Council plays a vital role in advising and supporting the Department of Chemistry and Biochemistry. Council members meet twice annually with faculty of the department and key university administrators to exchange ideas and information, with the purpose of helping to advance the programs of the department and to assist with the placement of students in part-time jobs and graduates in full-time positions. The Council consists of twenty-five representatives from the private sector. The membership of the Council changes as representatives are transferred, retire or have expired terms. New members added during the past year are listed.

Mr. Kenneth Francis, Jr., Technical Manager, Quality Assurance, Shell Chemical Co., Torrance, CA.

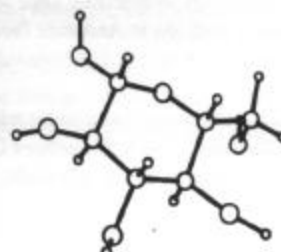
Dr. David Jeffrey, Group Leader-Analytical Chemistry, Chevron Oil Field Research Co., La Habra, CA.

Dr. William C. Lake, Director, Extracorporeal Therapy Separation Technologies, Baxter Healthcare Corp., Santa Ana, CA.

Dr. Raymond F. Maddalone, Program Manager, Applied Chemistry Department, TRW, Redondo Beach, CA.

Dr. Arle Passchler, Manager, Autonetics Electronics Systems, Rockwell International, Anaheim, CA.

Ms. Vickie Teas, Technical Resources, Dow Chemical USA, Torrance, CA.



Current Activities of Some of Our 1988-89 Graduates

Michael Aguon, BS Chem.	Radiation Safety Officer
Angela Adams, BS Biochem.	Lever Brothers, City of Industry
Erin B. Alles, MS Biochem.	Pharmacy, UC San Francisco
Kelly J. Anderson, BA Chem.	Kendall McGaw Laboratories, Inc., Irvine CA
Ralph Anderson, BS Chem.	McDonnell Douglas, Long Beach
David J. Anvar, BS Chem.	MS Program CSULB
Timothy A. Bacon, BS Chem.	PhD Program, UC Riverside
Andrea A. Baxter, BS Biochem.	Baxter Healthcare Corporation, Santa Ana, CA
Mohammad Bayati, BS Chem.	MS Program CSULB
Rachelle R. Blue, BS Chem.	GeoTest, Long Beach
Susan Boggs, MS Chem.	PhD Program, UC Santa Barbara
J. Guy Breitenbacher, MS Chem.	PhD Program, UC Riverside
Dorothy Caughey, BS Biochem.	Hillcrest Biologicals, Cypress, CA
Fermin A. Chavez, BA Chem.	Medical School, USC
Karen Sue Curtis, BS Biochem.	McDonnell Douglas, Long Beach, CA
Carroll B. Dickens, MS Biochem.	GAF Chemicals Corp., Irvine, CA
Peter Eleopoulos, BA Chem.	Owner, "Big E Pizza," Long Beach, CA
Clayton G. Harris, BS Chem.	PhD Program, UC Irvine
Darin R. Hayton, BS Chem.	PhD Program, U of Essex, England
Patricia A. Healy, MS Biochem.	La Jolla Cancer Research Foundation, La Jolla, CA
Utha Hellmann, MS Biochem.	PhD Program, UC Davis
Kimsour Hing, BS Chem.	Analytical laboratory
Ron M. Kagan, BS Biochem.	PhD Program, UCLA
J. Erich Keller, BS Biochem.	PhD Program, UC Santa Barbara
Hieu Thi Le, BS Chem.	Environmental laboratory
David A. Lee, BS Chem.	PhD Program, UC Davis
E. Kenneth Lesniewski, MS Chem.	GAF Chemicals Corp., Irvine, CA
Steve L. Martin, BA Chem.	PhD Program, U of Arizona
Kevin R. Miller, MS Chem.	CSULB Faculty
Anne H. Nguyen, BA Chem.	Chemistry Staff, CSULB
John F. Oldenburg, MS Biochem.	Instructor, Rolling Hills School, Rolling Hills, CA
Henry Pham, BA Chem.	Pasadena College of Chiropractic, Pasadena, CA
Jon Rainier, MS Chem.	PhD Program, UC Riverside
Charline Reeder, BS Chem.	Environmental laboratory
Christine Resch, BS, Chem	IT Corp., Cerritos, CA
Jeff M. Schapiro, MS Biochem.	Medical School, Albert Einstein U
Michael L. Schlador, BA Chem.	MS Program, CSULB
Stephanie Lyn Schwartz, BA Chem.	MS Program, CSULB
*Alex Seizew, MS Chem.	PhD Program, UC Santa Barbara
Elizabeth A. Siegfried, BA Chem.	Science Education, CSULB
Rodney M. Solgonick, BS Biochem.	Medical School, UC Davis
Martha Speckman, BA Chem.	Pharmacy, UC San Francisco
Sharon Squires, MS Biochem.	American Qualex, La Mirada, CA
David E. Tast, BS Biochem.	PhD Program, USC
Nga Vuong, BA Chem.	BCL Laboratories, Huntington Beach, CA
William R. Walton, BA Chem.	Dental School, U of Nebraska
Carter J. White, BS Chem.	PhD Program, Iowa State U
Stephen N. Wilhelm, BS Chem.	Niklor Corp., Long Beach, CA
Sarina Williams, BS Biochem.	Medical School, Baylor U
Louie V. Wollenberger, MS Biochem.	PhD Program, Lund U, Sweden
Marco Wong, BA Chem.	Medical School, Wayne State U

*Student accepted into program without degree

Honors to 1988-89 Graduates and Continuing Students

Kauser Akhoun	California Foundation for Biochemical Research Summer Fellowship
Scott Allen	Analytical Chemistry Award; Chemistry Alumni Award; Graduation with Distinction
James Breitenbucher	Rachelle Award; Chemistry Alumni Award; election to Phi Lambda Upsilon
Karen Sue Curtis	Graduation Magna Cum Laude; election to Phi Lambda Upsilon
Marcel Goldberg	Election to Phi Lambda Upsilon
Jamie Hancock	Election to Phi Lambda Upsilon
Utha Hellman	Rachelle Award; Chemistry Alumni Award; Advisory Council Tuition Scholarship
Ron Kagan	American Institute of Chemists Award; Chemistry Alumni Award; Graduation Summa Cum Laude; election to Sigma Xi; election to Phi Lambda Upsilon
Erich Keller	School of Natural Sciences Recognition for Service
Kari Kramer	Merck Award in Organic Chemistry; Chemistry Alumni Award
E. Kenneth Lesniewski	Outstanding Thesis in Chemistry; Chemistry Alumni Award
Hung Luu	Election to Phi Lambda Upsilon
Jeffrey Masse	Merck Award in Organic Chemistry; Polymer Chemistry Award; John H. Stern Award; Inorganic Chemistry Award; Chemistry Alumni Award; election to Phi Lambda Upsilon
Kevin Miller	Robert B. Henderson Award; Graduate Dean's List; election to Phi Lambda Upsilon
Richard Pagliery	Election to Phi Lambda Upsilon
David Porzio	Merck Award in Organic Chemistry; Chemistry Alumni Award; election to Phi Lambda Upsilon
Jeffrey Schapiro	Election to Phi Lambda Upsilon
Londa Schechinger	Election to Phi Lambda Upsilon
Stephanie Schwartz	Biochemistry Award; Chemistry Alumni Award; Graduation Cum Laude
Burt Secrest	SAACS Undergraduate Summer Research Scholarship
Shu-Chin Shen	Freshman Chemistry Award: CRC Handbook; Chemistry Alumni Award; SAACS Undergraduate Summer Research Scholarship
Rodney M. Solgonick	Graduation with Distinction
Martha R. Speckman	Graduation Magna Cum Laude; election to Phi Lambda Upsilon
James Thurmond	Freshman Chemistry Award: CRC Handbook; Chemistry Alumni Award
Michael Wanger	Election to Phi Lambda Upsilon
Michael Weiler	Merck Award in Organic Chemistry; Chemistry Alumni Award
Carter White	Toni Horalek Award for Service; School of Natural Sciences Recognition for Service
Stephen Wilhelm	Graduation Magna Cum Laude; election to Phi Lambda Upsilon
Sarina Williams	Dean Robert Rhodes Award; Graduation Magna Cum Laude; election to Phi Lambda Upsilon
Marco Wong	David L. Scoggins Award; election to Phi Lambda Upsilon

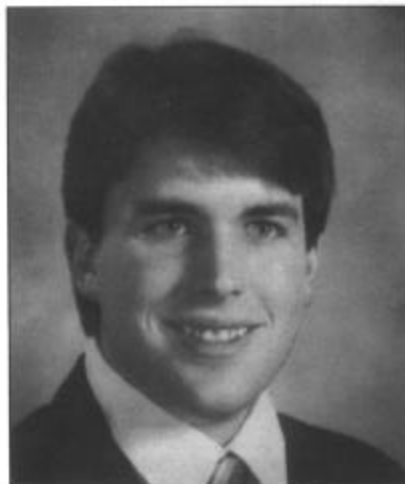


Some Members of the 1988-89 Graduating Class. *Front row, left to right:* Carter White, William Walton III, Martha Speckman, Marco Wong, Michael Aguon, Stephen Wilhelm, Fermin Chavez, David Lee, Scott Allen, M. Majid Khodabakhsh. *Back row, left to right:* Karen Watson, Angela Adams, Nga Vuong, Rachelle Blue, Charline Reeder, Utha Hellman, Louie Wollenberger, Benny Dickens, Debi Green, Sharon Squires, Erich Keller, Christine Resch, Sara Williamson, Darin Hayton, Anne Nguyen, Dr. Ken Marsi (Chair, Chemistry/Biochemistry), Kimsour Hing, Rita Glor.

Recipients of Endowed Awards

Henderson Award

Kevin Miller, completing the MS degree in Chemistry this year, was designated by the chemistry faculty to receive the prestigious Robert B. Henderson Award. The Henderson Award is given annually to the BS or MS Chemistry student who best exemplifies the scholarship in chemistry and the commitment to the profession of chemistry shown by the late Robert B. Henderson, a faculty member for 28 years and the first chairman of the Department of Chemistry. Kevin also received his BS in Chemistry in 1986 from CSULB. Throughout his undergraduate and graduate careers in our department he maintained a perfect 4.0 grade point average, an unprecedented record in the department annals. As an undergraduate he was the recipient of numerous other awards, including the Physical Chemistry Award, the Scoggins Award, Graduation with Great Distinction, and election to Phi Lambda Upsilon. For 1987-88 he also received the Rachelle Medal as the outstanding graduate student of the year in the MS program in Chemistry.



Kevin Miller, Henderson Scholar

Kevin will join the CSULB Chemistry and Biochemistry Department for the 1989-90 academic year as a part-time lecturer in Chemistry, and then will enter a PhD program to study physical chemistry beginning the fall of 1990. Kevin's MS research was conducted under the supervision of Dr. Nail Senozan. His thesis is entitled, "Oxygen-binding Characteristics of Hemoglobin in the Presence of Carbon Monoxide According to the Model of Monod, Wyman and Changeux."

Scoggins Award

The David L. Scoggins Award memorializes a former graduate student in our department and is given each year to the outstanding BA Chemistry graduate who plans a career in one of the health sciences. This year's recipient, named by the chemistry faculty, is Marco Wong. Marco's past honors include an American Heart Association Student Research Fellowship, election to Phi Lambda Upsilon, and the Associated Students Gold Nugget Award, all conferred in 1987-88. Marco has been admitted to medical school at Wayne State University, which he plans to enter beginning the fall of 1989.



Marco Wong, Scoggins Scholar

Briefcase By John Louthan



"No, you won't get a master's if you come through the line again."

Stern Award

Jeffrey Masse, is the first recipient of the John H. Stern Award in Physical Chemistry. Jeff, completing his junior year as a BS Chemistry major, is currently an undergraduate research student for Dr. Henry Po, and also a past award winner, having received the Student Affiliates of the American Chemical Society Summer Research Scholarship in 1988 and the Freshman Chemistry Award in 1987. In addition to the Stern Award, this year Jeff also was designated by the chemistry faculty to receive the Merck Award for excellence in organic chemistry; the Inorganic Chemistry Award; and the Polymer Chemistry Award, given for the first time this year by the Division of Polymer Chemistry of the American Chemical Society. He was also elected to membership in Phi Lambda Upsilon, the honorary chemistry society. This much-honored student hails from Maine and entered the university as a dietetics major in the Home Economics Department. He soon realized that the ultimate basis of health and nutrition was chemical and changed his major to chemistry at the end of his freshman year. After receiving his BS degree in May 1990, he plans to continue on for the PhD in theoretical physical chemistry.



Jeffrey Masse, Stern Scholar

Dr. John H. Stern, for whom this award is named, was a faculty member in the chemistry department for 29 years until his death in 1987. He was internationally recognized for his research in solution thermodynamics.

Staff News

Joyce Kunishima, Director of Laboratories, in her new position, is responsible for ordering and receiving, the laboratory safety program, collection and disposal of hazardous materials, chemical and equipment inventories, billing students for breakage, and other activities relating to the smooth operation of our laboratory programs.

Sandra Lee, Instructional Support Technician (Stockroom), and her husband, Dr. Albert Lee, became parents on October 31, 1988. The new baby's name is Andrea Mai. Sandy is on a year's leave of absence.



Robert Mattice

Bob Mattice, Stockroom Supervisor, our newest staff member, joined the department in January. Bob holds a BA degree in Chemistry from Hiram College in Ohio (1975) and a MBA degree from CSULB (1983). Bob has over eleven years of experience in the chemical industry; first as Research Chemist with Essex Chemicals, specializing in polysulfide adhesives; then as Production Manager with PQ Corporation, manufacturing sodium silicate. Prior to coming to CSULB he was Plant Manager for Aristech Chemicals, a manufacturer of polyester resins.

Fran McLuen, Secretary, celebrates two anniversaries this year: her fifteenth in the department and her thirtieth year of marriage to Chuck. Fran has served the department longer than any other staff member.

Anne Nguyen, Instructional Support Assistant, received her BA degree in Chemistry in May, 1989. Her husband, Dr. Richard Nguyen, was promoted to Professor in the Department of Civil Engineering, School of Computer Science and Engineering.

Jeannette Santage, Department Secretary, has just marked the tenth anniversary of her service to the Chemistry and Biochemistry Department.

Bob Soukup, Equipment Technician, and his wife Elizabeth were blessed with the birth of a daughter, Jennifer Kristen, on January 19, 1989. Bob has taken well to his new role as father. Bob has been busy this past year upgrading our office computing capabilities, teaching WordPerfect to the faculty and staff, and maintaining all those balances and instruments in the department.

Bernadine Sparta, Secretary, after nearly seven years of dedicated service to the department, has resigned her full-time position to assume a half-time position in the Department of Journalism. Her part-time position will allow her more time with her family and the freedom to pursue some other interests.

John Tomaszewski, is a temporary member of the Stockroom staff, replacing Sandy Lee during her leave of absence. John manages to balance his three-quarter time position and his undergraduate work very well. He is an honors student in chemistry.

Chinh Tran, Instructional Support Technician (Stockroom), and her husband, Vincent, announced the arrival of a son, Kevin, on December 13, 1988.

Dr. Fred Shair Named Dean of Sciences

Dr. Fred Shair, Professor of Chemical Engineering and a Staff Member of the Environmental Quality Laboratory, California Institute of Technology, was appointed Dean of the School of Natural Sciences late this summer. Dr. Shair succeeds Dr. Hiden Cox and Dr. Dorothy



Dr. Fred Shair, Dean, School of Natural Sciences

Goldish who were successive Acting Deans during the past academic year, and Dr. Roger Bauer, who had been the Dean since the inception of the School of Natural Sciences in 1975 and until the fall of 1988.

Dr. Shair was born in Denver, CO, but grew up in Illinois. He earned a BS in Chemical Engineering from the University of Illinois, Urbana-Champaign, and his PhD, also in Chemical Engineering, from UC Berkeley in 1963. He was employed by General Electric until 1965 when he joined the faculty at Caltech. His interests have spanned a broad range of topics: diffusion in non-equilibrium plasmas, cataphoresis, electron capture detection, transport and dispersion of airborne pollutants, and indoor air pollution. He has authored approximately 70 research publications.

He has been active in the Southern California Section of the American Chemical Society, where he was co-chair of the program committee with Dr. Ken Marsi in 1972-73; he is a member of the Southern California Section of the American Institute of Chemical Engineers, serving as its chairman in 1983; he has been a committed member of Sigma Xi, locally and nationally, and will serve as President of the national organization during 1989-90.

After a national search, which netted a large number of qualified applicants, the Search Committee overwhelmingly recommended Dr. Shair's appointment to Academic Vice President Beljan and President McCray.

The Search Committee perceived that

Continued on Page 11

Dr. Shair, although a chemical engineer by training, possesses a broad interest and remarkable depth of knowledge in fundamental science. Furthermore, the committee was impressed with the vision for the future for CSULB which Dr. Shair holds, and his vital concern for quality undergraduate education in the sciences.

The faculty of the Department of Chemistry and Biochemistry voted overwhelmingly to offer Dr. Shair tenure in the department. Although the Chemical Engineering Department is now part of the School of Computer Science and Engineering, it had its beginning in the Department of Chemistry in 1967 with Dr. J. Nelson Reeds as its first faculty member. Dr. Lloyd Hile, the present Chairman of the Department of Chemical Engineering, also began his career as a CSULB faculty member in the Chemistry Department.

Gifts by Individuals to the Department

During 1988-89, a total of \$9,837.25 in cash was given to the Department of Chemistry and Biochemistry by 95 alumni and friends. This represents an increase of 44.2% over 1987-88, for which the department is most grateful.

The money we receive is used for student scholarships and awards, the weekly seminar program, publication of the *Chemistry Newsletter*, student recruitment, and miscellaneous expenses such as for supplies and small items of equipment for which other funds are insufficient or not available.

Without your support, and help from businesses and industry in the area, we could not carry out the ambitious programs of this department.

Every gift is acknowledged by a personal letter from the department chairman, and your name is listed in the *Newsletter* and in alumni publications of the University.

If you are solicited by telephone by a University representative in connection with the Phonathon program, we would be most grateful if you would request that your gift be made to the Department of Chemistry and Biochemistry. Many employers will match contributions; if you do not already know if your company does, you might want to investigate this as a possibility.

If you prefer to send your contribution directly to the department, you may make your check payable to:

CSULB Foundation/Chemistry Fund
Department of Chemistry and Biochemistry
California State University, Long Beach
Long Beach, CA 90840-3903

Gifts to the Department from Organizations

In addition to supplies and services, the organizations listed below have donated a total of \$12,450 to the Department of Chemistry and Biochemistry. Such support fills a great need for supplementary help, because our program is relatively underfunded in terms of our aspirations for excellence. The faculty, staff, and students wish to take this means to express our gratitude for the thoughtful assistance provided by the following organizations:

Aerospace Corporation
American Fiber Optics
Baxter Foundation
California Foundation for Biochemical Research
GAF Corporation
Hyland Laboratories
Imperial Chemical Industries
Johnson & Johnson Family Company
Shell Oil Company
Student Affiliates of the American Chemical Society, CSULB

TRW
Unocal

Honor Role of Individual Contributors, 1988-89

Dennis J. Allen	Harutyn Eran	Lily Anne Lim	Raymond Ouellete
Kathleen E. Allen	Randy R. Estrada	Francisco M. Llort	Richard C. Parker
Christopher Appleton	Stephen M. Fritch	Kurt A. MacLean	Daniel Peek
Thomas D. Augimeri	Dwight Gergens	Lawrence Manes	Steve L. Pentoney
Peter Baine	William Givens	Debra Marr-Leicy	Donald Peterson
Marc Barajas	Bernard L. Goeders	Kenneth L. Marsi	Mark Cary Phillips
John R. Berg	Rick T. Goyt	Steven Masuda	Mike Porter
Walter A. Boyle	Scott Greer	William A. McCully	Robert Proffitt
Elizabeth Brinkman	Jon C. Helman	Partick McKay	Robert F. Pucilla
Oliver Brown	Dora Henderson	Anthony McLaughlin	Michael Salman
Victor Cachia	Don Honda	Tom McLaughlin	James P. Sandstrom
A. R. Calloway	Michael Hoover	Philip Megdal	Alan J. Senzel
Myriam E. Cardenas	Richard L. Hudspeth	Dorothy H. Middleton	Gregory Shaw
William Clare	Robert Hutchins	Gayane Mooradian	Coleman A. Smith
Maria E. Co Sarno	Mary Hutchins	Dan Moothart	David M. Smith
Marlene M. Corriere	Douglas Infiesto	David Moromisato	Lisa Thompson
Phil R. Cowan	David B. Kanne	Donna Moromisato-Nagata	Ernest J. Valfre
Donald Crider	Tina Kishishita	Paul Morrow	Theresa R. VanAndler
Violeta D. Dadufalza	Robert E. Klenck	Paul V. Mosher	Dennis Van Westerhyzen
Robert J. Deal	Bette T. Korber	James W. Neely	Gerald C. Wicker
James R. Denman	John D. Kulluk	Raymond C. Newsom	Stephen Wilhelm
James E. DeOlden	William Lake	Richard Nighswonger	Gerald E. Wuenschell
Fred Dorer	John E. Leeb	Michael Nishina	Ken Yamaguchi
Peter E. Eleopoulos	E. Ken Lesniewski	Stuart Nowinski	

Results of Alumni Questionnaire

As part of our periodic five-year review, which concludes with the visit of an external reviewer in 1990, we secured retrospective evaluations of our department by alumni. For all of you who participated by filling out a lengthy questionnaire, "Thank you!" We thought you might be interested in a brief summary of alumni responses.

- 55.6% of the alumni responding hold a doctorate, 78.7% earned graduate degrees, and 27.8% possess the PhD in Chemistry or Biochemistry.
- 38.8% had changed their majors to Chemistry or Biochemistry from another major as undergraduates.
- The highest scores earned in the department evaluation were for the "helpfulness of the faculty."
- By far the most cited reason for majoring in Chemistry or Biochemistry was that it was a "more interesting subject."
- The greatest strength most often cited was the "friendliness, accessibility, dedication and caring of the faculty."
- Overwhelmingly cited as a weakness was "out-of-date equipment and facilities."
- Most frequent suggestions for addition to the curriculum were: industrial chemistry, more experience with computers, polymer chemistry, environmental chemistry, and biotechnology.
- 56% of respondents received direct assistance from the department in job placement.

Alumni News

News appearing in this section is extracted primarily from your *Newsletter* responses. The alumni section of the *Newsletter* is used in counseling with students about careers in chemistry, thus your responses serve a useful function. Please use the *Newsletter* form on the inside of the back page, together with the enclosed post-paid envelope, to inform us about yourself. We'll see that it is published in the 1990 *Newsletter*.



The Homer Family. Left to right: Michael, Barbara, Jason and David

1962

G. David Homer, BA, MS 1966 (PhD UC Davis), is Associate Scientist with the Materials Research Division of Aerojet TechSystems in Sacramento, CA. Dave and his wife, Barbara, have two sons, Michael (11) and Jason (17).

John Jasnosz, BS, is Technical Service Manager for Hill Brothers Chemical Co. in Industry, CA. John has worked in the areas of surfactants and agriculture for 14 years and holds three surfactant patents.

Richard Parker, BS (PhD U of WA), is Professor and Associate Dean of Engineering at New Jersey Institute of Technology. He was appointed Associate Dean on July 1, 1989. He is the newly-elected chairman of the Oceanport, NJ, Environmental Commission.

Terrence C. Van Buskirk, BS, is Senior Technical Representative for AKZO Chemicals, Inc., in Huntington Beach, CA. "I have been involved in chemical sales for the past 16 years, 8 with AKZO Fine and Functional Chemicals Division, a major world-wide producer of fatty amine chemicals. Because of their cationic properties, these chemicals are used in a wide variety of industries, including as fuel and lubricant additives, fabric softeners, floatation agents in mining, agricultural chemical formulations, organo clays, etc. When I was a student at CSULB, I had no idea that I would eventually be selling chemicals, but it has been most rewarding!"

1964

Per B. Christiansen, BS, is General Manager for Nalco Chemical Co., Naperville, IL.
Evord F. Knights, BS (PhD Purdue, MBA CSU Fullerton), continues as Vice President of the Unipure Group of Unocal.

1965

Paul M. Farr, BS, works at Microlaboratories in San Diego.

Jack L. Wolf, MS (BS, MS Education Purdue), is Professor of Chemistry at El Camino College in Torrance, CA.

1966

Roger T. Clark, BS, MS (PhD U of Utah), is Research Scientist at Pennwalt's Central Research Laboratory in King of Prussia,

PA, conducting research in catalysis.

Jon C. Helman, BA Biol., Minor Chem. (DDS U of the Pacific), practiced dentistry in San Francisco until 1978 and is now a periodontist practicing in South Lake Tahoe, CA. He and Mrs. Helman have two children, ages 7 and 10.

1967

Robert Jordan, BS, MBA 1976, is Assistant Quality Assurance Manager for Vlastic Foods in Industry, CA.

Ralph Knights, BS (PhD Purdue), works at New Zealand Milk Products, Inc., in Petaluma, CA, where he is Manager, New Business Technology. "I wear several hats as teacher and advocate for R&D, as part-time legal counselor for new business contracts, as a food scientist in making 'yuck' stuff taste good, as an immunologist in studying passive protection from disease, and as a salesman in getting a good return for investments of time, effort and capital. Jackie [his wife] and Craig (5) think the move from Indiana is great!"

Bill Lake, BS, MS Biochem. 1969 (PhD Purdue), is Director, Fenwal Division, Baxter Healthcare Corp., in Santa Ana, CA. "The past year has been a special one for me because of the unique opportunity to reestablish a relationship with the Chemistry Department as an Advisory Council member and Adjunct Professor in Biochemistry. My laboratory group has hired two excellent students from CSULB [Andrea Baxter, BS Biochemistry 1988, and Michael Weller, a continuing student]."

Tom McLaughlin, BS (PhD UC San Diego), is Senior Environmental Scientist with CH2M Hill in Reston, VA. Tom married a 1974 graduate of CSULB, Elaine Lasserly, and they have a daughter, Ellen (7), and son, Paul (4). His work deals with environmental chemistry: sample management and risk assessment at a number of hazardous waste sites. He was formerly with the Environmental Protection Agency.

Alan J. Senzel, BS (MS, PhD UC Los Angeles), is a consultant, currently working with Ciba-Geigy Corporation in Greensboro, NC, on pesticide registrations, and with other firms in the area of toxic chemicals and hazardous waste matters. His wife, Phyllis is Child Support Supervisor for Wake County, NC. Son, Richard, will be in college next fall, and daughter, Lisa, is a junior at the NC School of Science and Mathematics in Durham.

1968

William Clare, BS, MS Chem. Engin. 1970, works as an Instrumentation Engineer for the Sanitation District for the County of Los Angeles. He has a child now attending CSULB.

Alan DiStefano, BS, is Director of Marketing and Sales for Hamilton Company in Reno, NV.

Norman E. Hester, BS (MS, PhD UC Riverside), serves as Technical Director at Truesdail Laboratories in Tustin, CA.

James R. Scott, BS (DDS USC), is a staff dentist with United Health Centers, Inc., in Parlier, CA. The clinic serves migrant farm workers as well as the local population.

1969

Don Byers, MS Biochem. (BSc McGill U), is Chemistry Instructor at Northern Alberta Institute of Technology in Edmonton. He is presently Biotechnology Coordinator in the post-diploma biotechnology program which he initiated in 1987. The program graduated its first class of 17 students in 1988. He is president and director of Manchester Resources Corporation, an Alberta-based public resource company. The Byers have two children, Kyle (2) and Joan Kaylee (4).

John E. Leonard, BS, MS Biochem. 1973 (PhD UC Riverside), is Research Scientist with IDEC Pharmaceuticals in La Jolla, CA, where he has been since August of 1988. His company develops purification and conjugation methods for various monoclonal antibodies; synthesizes, purifies and conjugates peptides; and also serves as a resource for tumor immunology and AIDS research groups.

Andrew Mitchell, MS Student, (MD UC Los Angeles), is a self-employed physician in Lake Isabella, CA.

1970

Kenneth W. Arledge, BS, MS 1971, is Vice President of Western Data in Fallbrook, CA.

Bill Bottenberg, MS (PhD), lives in Thousand Oaks, CA.

David J. Carre, BS, MS 1971 (PhD UC Santa Cruz), is Research Scientist for The Aerospace Corporation in El Segundo, CA.

William Hulbrock, BS, MS Biochem. 1974, is Product Manager for Diagnostic Products in Los Angeles, CA, which specializes in radioimmuno assay relating to drugs of abuse and therapeutic drugs.

Claude R. Lassigne, BS (PhD Simon Fraser U), is a chemistry professor at Kwantlen College in Port Moody, British Columbia, Canada. "I teach first and second year physical chemistry and love every minute of it."

Michael L. Porter, BS, owns his own company, Atmosphere Assessment Associates, in Woodland Hills, CA. He is an environmental consultant offering laboratory services for measuring trace contaminants in the atmosphere. His wife of 23 years, Mary Elizabeth, also a graduate of CSULB (Political Science), is a lawyer practicing medical law as a defense attorney. They have two children, Michael (22) and Karen (21).

1971

Bill Givens, BS (MPA U of Colorado), is a minister in the Anglican (Episcopal) Church of New Zealand in Putaruru, NZ.

Jim Merrill, BS, continues as a quality control chemist for Nutrilite Products Co. in Buena Park, CA.

Joseph Oberlander, MS, has been promoted to Senior Chemist with his company, Dynachem. Joe and Paulette have two sons, Michael (pre-school) and Joseph (second grade).

Alan Rosenstein, MS Biochem. (BA Zool. UCLA), continues as Research Associate in the Department of Psychobiology at UC Irvine.

1973

Walter A. Boyle, Student (MD UC San Francisco), is Assistant Professor of Anesthesiology at Washington University School of Medicine in St. Louis, Mo.

Charles A. McCombs, BS (PhD UC Los Angeles), is Senior Research Chemist with Tennessee Eastman Company in Kingsport, TN

Robert Rona, MS, (PhD Rutgers U), is a chemist with Swedlow, Inc., in Garden Grove, CA. Swedlow's primary products are high-tech transparencies for the aerospace industry. The Rona's latest addition to the family is Daniel, now 2.

1974

Randy R. Estrada, BS (MD U Autonoma de Guadalajara School of Medicine), is a pediatrician at St. Joseph's Hospital Medical Center in Paterson, NJ. His wife, Laura, is also a medical doctor.

1975

Chet Callaway, BA, is an Intern Pharmacist at Kohll's Westgate in Omaha, NE, while working on his BS in Pharmacy. Mrs. Callaway graduated in 1987 from CSU Fullerton with a BS in Physical Education and is employed as a manager in an Athletic Club in Omaha.

John Landrum, BS, MS 1978 (PhD U Southern California), is Associate Professor of Chemistry at Florida International University in Miami, FL. John is the Graduate Coordinator for the newly initiated MS program in Chemistry.

Stuart Nowinski, BS, MS 1987, is a community college chemistry instructor at Glendale Community College in Glendale, CA. He observes, "The Newsletter gets better every year!"

1976

Patricia T. Abe, BA, is Research Scientist II at Kendall McGaw Laboratories in Irvine, CA.

Scott Greer, MS Biochem. (BS UC Irvine, MD U of Utah). "Gastroenterology remains satisfying despite government intrusion and malpractice costs. As a local delegate to the California Medical Association, I hope to address mounting problems in our health care system." Scott is a gastroenterologist practicing with Parkway Medical Group in San Diego, CA.

Michael Nishina, BA (MBS Pepperdine U), is Group Leader in the Semiconductor Products Division of Rockwell International in Newport Beach, CA. "I am enjoying growing up with my six-year-old son, Brett."

Ercan Unver, MS (PhD USC), is Director of the Biochemistry and Protein Chemistry Departments of Diagnostic Products Corporation in Los Angeles, CA.

1977

Paul Morrow, BA, MBA 1985, is a Senior Staff Engineer in Materials and Process Engineering at Hughes Aircraft Co., in Irv-

ine, CA. He and Debbie, also a CSULB graduate, live in Mission Viejo and have a daughter, Allison (5 1/2) and a son, Michael (3 1/2).

Lee Senecal, BS Chem. Engin., is Chemical Engineering Manager for J. C. Schumacher Co., in Carlsbad, CA.

1978

Elvira A. Bernabe, BA, is Quality Assurance Manager with Blue Coral, Inc., a division of McKay Corp., in Los Angeles, CA.

Betty Burri, MS Biochem. (PhD UC San Diego), is a research chemist with the Western Human Nutrition Research Center of the US Department of Agriculture at the Presidio in San Francisco, CA.

Ray Calloway, BA, is Manager, Laboratory Administration for The Aerospace Corp. in El Segundo, CA.

Henry Eran, MS (PhD U Southern California), is Scientific Project Manager for Alpha Therapeutic Corporation in Los Angeles, CA.

Raymond E. Lyons, BA (MD U of MN), is a resident in Nuclear Medicine at the Veterans Administration Medical Center in St. Louis, Mo.

Kurt A. MacLean, BA, (JD UC Los Angeles), is a patent attorney and partner with Poms, Smith, Llande & Rose, Los Angeles, CA. He heads his firm's Orange County office. His wife, Stephanie, is in the process of obtaining her Master's in Psychology at Chapman College.

Marianne Marsi, BS (PhD UC Los Angeles), is a Research Chemist for DuPont Company, Wilmington, DE, specializing in Nafion perfluorinated membranes. Her husband, Lewis Manning, is also a Research Chemist for Du Pont in the Polymer Products Department. They have a daughter, Teresa (1 1/2).

Joshua D. Prager, BS (BS Visual Science, OD Southern California College of Optometry), is an optometrist with Kaiser Permanente.

Shirley Rothnie, Biochem. MS Student, lives in Issaquah, WA. "We now have 4 children, 3 sons and one daughter, ages 7 years-3 months. We home school them and already are getting into chemistry. Raising children is the most challenging job anyone can have. Being a biochemistry graduate student was easy in comparison!"

John H. Schweitzer, BS (MS Petroleum Engin. U Southern California), is a Senior Engineer in Prudhoe Bay with ARCO Alaska, Inc., Anchorage, AK.

David Smith, Student (PharmD U of the

Pacific), is Staff Pharmacist with Longs Drugs, Inc., in Santa Cruz, CA. His wife, Sonja, is also a pharmacist working for Longs Drugs. They have two children, Serena (5) and Chad (1).

Malcolm Windsor, BS Chem. Engin., is an Environmental Engineer with the Department of Defense at Little Rock Air Force Base in Arkansas.

Gerald E. Wuenschell, BS (PhD U Southern California), is a Research Fellow in Francis H. Arnold's laboratories at California Institute of Technology. He is concentrating on new methods of protein purification, emphasizing achievement of increased selectivity between similar proteins. Carol is a postdoc in the Biology Department, also at Caltech.

1979

Thomas D. Augmerl, MS Student, BA Psych. 1977, BS Bus. Admin. 1979, is a tax analyst with CCH Computax, Inc., in Torrance, CA. "Organic chemistry taught me a great deal about how to handle a large and complex body of information which has carried over to my accounting, tax and computer work."

Stephen Fritch, MS (BS U of CO), is a Criminalist with the City of Long Beach Police Department. "We have been busy with narcotic analysis and blood alcohol and are installing new breath instruments which use IR detectors to determine alcohol concentrations."

Jeff Hagenah, BS (PhD UCLA), is Technical Assistant to the Vice President, Division of Research, in the Agricultural Chemicals Division of Chevron Chemical Co. and lives in Pleasant Hill, CA. His wife, Pamela (BA Chem., JD UCLA), is an associate with the law firm of Brobeck, Flager and Harrison in San Francisco and practices corporate law.



Tom Johnson

Tom Johnson, BS, works as a model for Glamour Hommes in Paris, France. His work enables him to travel extensively throughout Europe and the world.

Gary LaRowe, BA (MBA CSUS Hayward), is an analytical biochemist and Group Leader for Quality Control at Genentech, Inc., in South San Francisco, CA. "Laurie and I have just had our third child, Hilary Ann."

Pat McKay, MS Biochem., is a Research Associate with Genentech, Inc., in South San Francisco, CA. "I am working in protein purification but will be transferring from the research end of the company to the process development side. My job will essentially be the same, except that I will be doing it on a larger scale. I will have the opportunity to work in many different areas by providing purified materials to a large number of researchers." Pat and Mary are parents again, and Brian became an older brother, as Allison Marie, born May 21, 1989, joined the McKay clan.

Curtis Winters, BS (MD USC), has returned to California after two years as a resident in Houston, TX. He and his wife, Jane, currently live in San Diego. Curtis is affiliated with Anesthesia Service Medical Group which supplies 50% of the anesthesia positions in San Diego County. Curtis has passed both written and oral examinations and has been "Board Certified" for the past year.

1980

Mark W. Brisley, BA, (DDS U Southern California), is self-employed, practicing dentistry in Laguna Beach, CA.

Victor Cachla, BA (DPM California College of Podiatric Medicine), practices at the Mission Medical Tower in Mission Viejo and the Irvine Family Health Center in Irvine, CA.

Frederick (Fritz) Coffman, MS Biochem. (PhD UC Riverside), has accepted a position as Assistant Professor at Hahnemann University in Philadelphia, PA. He is teaching and conducting research in the area of protein chemistry in the School of Medicine. His wife, Stephanie, will begin her second year of medical school at Temple University in Philadelphia.

Brian Dubow, BS, is Program Manager and Project Engineer for General Dynamics, Convair Division, in San Diego, CA. He is involved in systems engineering development on the joint NATO Consortium Modular Stand-off Weapon Program.

Thomas R. Eldridge, BA (DC Los Angeles College of Chiropractic), is a self-employed chiropractor in Aurora, CO.

Kelly Hendrix, BA Biol., Minor Chem. (DDS Baylor College of Dentistry), is a dentist with General Medical Center in Anaheim, CA.

Don Honda, BA (PharmD UC San Francisco), works as Assistant Chief Pharmacist at Kaiser Permanente in Roseville, CA, managing a staff of 40, filling an average of 1,800 prescriptions per day. He and Mrs. Honda have a son, Nicholas, born July 10, 1988.

Brian Imal, MS, completed his PhD in Biochemistry with Dr. Morton Bradbury at UC Davis, where he continues to work as a postdoctoral associate. They are examining the effects of histone acetylation on the structure of chromatin, both at the level of the nucleosome and higher order structures. During the coming year Brian will relocate to Los Alamos National Laboratory, where Dr. Bradbury has been appointed Life Science Division Leader, although continuing as Chair of the Department of Biological Chemistry at UC Davis School of Medicine.

Robert Klenc, BA (MS Chem. U of Az, MD U of Southern California), is a resident in orthopaedic surgery at Los Angeles county-USC Medical Center. He has just completed his third year of residency and plans to practice general orthopaedics after the completion of his fifth year. "My wife, Susan, is a Senior Customer Service Coordinator with IBM in Los Angeles."

K. Scott Marsl, BA (MS San Diego State U), is Senior Product Engineer in the Surfactant Chemicals Division of GAF Chemicals Corp., Wayne, NJ. His wife, Linda, is a Sales Manager for Ironwood Realtors in Victory Gardens, NJ. They and daughter, Aiko (3 1/2), live in Hopatcong, NJ.

Cheryl Yuen Shlmazu, MS, after nine years of service as a part-time faculty member in the Department of Chemistry and Biochemistry at CSULB, has accepted a tenure-track position as a chemistry faculty member at Cerritos College. Her help with Chemistry 101 will be sorely missed.

Susan Torlan, Student (PharmD UC San Francisco), is staff pharmacist at College Hospital in Cerritos, CA.

Kenneth Yamaguchi, BS, MS 1981 (PhD UC Riverside), is a research chemist with L'Air Liquide in Jouy-en-Joses, France.

1981

Richard Hudspeth, MS Biochem. (PhD U Southern California), is a Senior Scientist for Phytogen, Inc., in Pasadena, CA, isolating genes of interest from corn. He has authored a paper on the DNA sequence and expression of a gene encoding an enzyme

involved in C4 photosynthesis (phosphoenolpyruvate carboxylase).

Paul A. Manos, BA (DDS UC Los Angeles), is Insurance Administrator in quality Assurance for National Healthcare Systems, Inc., in Irvine, CA.

Laurene Duke Montgomery, BA (DDS UC Los Angeles), is a dentist in Lakewood and is active in the Los Angeles Association of Women Dentists. The Montgomerys have two children, 3 1/2 and 19 months.

James W. Neely, Student (BS U of MO, DO U of Health Sciences), is a self-employed physician in St. Joseph, MO.

Ikuhisa Sawada, MS Student (PhD UC Davis), has been appointed to a research position at Tokyo Medical and Dental University, Tokyo, Japan.

Gary Steelman, BS (MS U of WI), is a synthetic organic chemist in the Pharmaceutical Division of ICI in Wilmington, DE.

1982

Marly K. Eldsness, BA (PhD U of Cincinnati), is Research Associate in the Department of Chemistry, School of Chemical Sciences, U of Georgia in Athens, GA.

Mario Fernandez, MS (PhD UC Irvine), works for Syntex/Mexico, Mexico City, in the area of antiulcer agents. He is coauthor of a paper, "Generation and cycloadditions of hydroxy (and trimethylsiloxy) phenylethynylketene," *Tetrahedron Letters* 1988, 29, 2765.

Renee G. Hermes, BA, is Laboratory Shift Supervisor for ARCO Products Co. at the Los Angeles Refinery Quality Assurance Laboratory. She is currently enrolled in the MBA program at Pepperdine.

V. Greg Krall, BS, is a student at the California College of Podiatric Medicine in San Francisco.

Debra Marr-Lelcy, BS (PhD UC San Diego), is Product Development Manager for Molecular Ophthalmics, Inc., in Torrance, CA.

David Moromiso, BA (MD Loyola Stritch U), is a Chief Pediatric Resident at Los Angeles County-USC Medical Center.

Arlene Oto, BS, is completing her MS in Chemistry at CSULB while working as a chemist at IT Corporation in Cerritos, CA.

1983

Marc Barajas, BA (PharmD UC San Francisco), works as a practicing clinical pharmacist at three hospitals in the Palm Spings area. His specialties include psycho-pharmacology and pharmacokinetics.

Marlene M. Corriere, BA (MD Temple U), has begun residency training in anesthesiology in Philadelphia and is planning to do research during her residency toward her PhD in Physiology.

Bradley G. Davis, BA (DO College of Osteopathic Medicine, Pasadena), is a family practice resident with the Kern Medical Center in Bakersfield, CA.

Thomas Dillon, Student (DDS U of Southern California), practices dentistry in Downey, CA, with his brother, Tom Dillon, Student 1977 (DDS U of Southern California).

Stefan Isak, BS, is a research assistant and graduate student in the Department of Chemistry at the University of Utah. "My research involves the monitoring and time resolution of the non-radiative decay process using both thermal and photoacoustic techniques in liquids and solids. At one time I did work with Stan Pons (of 'cold fusion' fame) on photoelectrochemistry."

Sonia Molina, BA, has graduated with a DMD from the Harvard School of Dental Medicine and from the Harvard School of Public Health with the degree of MPH.

Donna Moromiso-Nagata, Student (DDS Loyola U, Chicago), is a self-employed dentist in Westminster, CA.

Lester Pfahl, BS (MS Agricultural Chem. CSU Fresno), is Associate Food Scientist with Joseph F. Seagrams and Sons and lives in Wappingers Falls, NY.

Johan-Chanh Tran, MS Biochem., received his PhD in biochemistry from UC Riverside in June, 1988. His dissertation was entitled, "Characterization of 19-Nor-10-oxo-25-hydroxyvitamin D3 Production by Solubilized Chick Kidney Mitochondria," and was written under the direction of Professor Helen L. Henry. He is presently a postdoctoral student in the Department of Medicine at UC San Diego, working with Dr. Daryl Fanestil.

1984

Kathleen Allen, BS, is a Chemist-Group Leader in the R&D Polymer Laboratory at Hitco in Gardena, CA.

Jean-Bernard Durand, Student (MD Wisconsin College of Medicine), is a resident at Loyola University of Chicago Medical Center in Maywood, IL.

Dwight Gergens, BS (MS, MBA UC Irvine), is Technical Service Chemist with Ablestik Laboratories in Gardena, CA. Ablestik, a company employing about 150, makes conducting adhesives. Dwight says, "Hi!" to the Class of '84.

Tom Kowalke, Student, is Research Associate at Kendall McGaw Laboratories in Irvine, CA.

Sharareh Moaddell, MS, is Chemical Test Engineer in the Test and Development

Center of the Southern California Gas Company in Los Angeles, CA.

Paul Mosher, BS, is Senior Engineer/Chemist at Hitco in Gardena, CA.

Theresa Beltran Rohr, BA, graduated from Cornell University Medical College, where she was active in Phi Delta Epsilon and in Students for Equal Opportunity in Medicine. She served on the university's admissions committee and worked on a public health project in Lima, Peru. She has completed her first year of residency at Case Western Reserve University in Cleveland, OH.

Dale G. Shrum, Student (BS, DPM California College of Podiatric Medicine), is a Podiatrist/Intern at the Los Angeles County-USC Medical Center.

1985

James Bonander, BS, is Research Engineer in the Research and Development Center of the Beloit Manhattan Division of Beloit Corp. in Clarks Summit, PA.

Joy Condon, BS, continues as a pharmacy student at the University of Southern California and is a pharmacy intern at Memorial Medical Center, Long Beach. "This past year I served as Vice President of Professional Affairs for the Academy of Students of Pharmacy and as a delegate to the California Pharmacists Association Annual Meeting in San Diego. I was also elected a member of Phi Lambda Sigma, the National Pharmacy Leadership Society, and will serve on the Professional Affairs Committee for the California Pharmacists Association for 1989."

Lily Anne Lim, BS, is in the teacher credential program in Physical Science at CSULB. "I am also taking French so I can "parlez" with my husband (Dr. Stuart Berryhill). We are expecting a small package on October 31. I'm taking a year off, so I won't be teaching until the fall of 1990."

Mary Martha Molina, BA, received her MD degree on June 10, 1989, from the University of California Irvine College of Medicine. She will intern in Santa Monica in family medicine.

Chinh Tran, BS, is an Instructional Technician in the Chemistry Issue Room at CSULB. She and her husband, Vincent Nguyen, announced the birth of a son, Kevin, on December 13, 1988.

Thao Thuy Tran, BS, is Professional Chemist in the Department of Pharmaceutical Research at Allergan, Inc. She has two children, Tony (8) and Joey (6). Her husband, Thomas Ta is an undergraduate at CSULB, majoring in electrical engineering.



Lisa Thompson

Lisa D. (Calloway) Thompson, BS, is a criminalist with the Orange County Sheriff's Department in Santa Ana, CA.

1986

Elizabeth Brinkman, BS, MS 1987, is completing her second year as a graduate student at Stanford University. "This past year I was a coordinator for the graduate student apartment complex. Next year I will have a similar position." Liz works with Professor John Brauman in ion cyclotron resonance spectroscopy. Liz' sister, Katrina, although a Home Economics major, is a student assistant in the Chemistry and Biochemistry Department office at CSULB.

Paz Ellat, BA, will begin his fourth year of medical school at SZOTE School of Medicine in Szeged, Hungary. He spent the summer of 1989 assisting at the Kaiser Hospital in Lomita, CA. During his fourth year he will receive clinical training in internal medicine, gynecology, pediatrics and surgery. The MD degree will be awarded at the end of his fifth year.

Peter Ferrera, Student, is in his third year of medical school at Ludwig Maximilians University in Munich. "Munich is a wonderful city, and I feel privileged to be attending a university with such a rich scientific history."

Christopher Hendrix, BA, after working with the Huntington Beach Police Department as a Crime Scene Investigator/Criminalist, has rejoined McDonnell Douglas as an Engineer, performing data analysis. He plans to pursue coursework on a part-time basis at UC Irvine.

James Papas, BA, was transferred from the Irvine office to the Corporate Headquarters of GAF Corporation in Wayne, NJ, where he is involved with his company's overseas sales activities.

Kenny Pimanmus, Student (BS UC Los Angeles 1987), has returned to Bangkok, Thailand, and is teaching English conversation at the Police Cadet Academy.

Robert Richardson, BA, is Laboratory Director of 18 chemists for Smith-Emory Co. in Los Angeles. "I built and got certification for a mobil lab facility. I am in the field, constantly solving chemically-related problems. I oversee all paperwork and procure all equipment."

Ty Smith, MS, continues with his graduate work at UC Irvine on air quality research.

Thuminh Tran, Student, has completed requirements for the PharmD at the USC School of Pharmacy.

1987

Dwayne Gergens, BS, continues in the PhD program at UC Irvine. Dwayne was named as an Outstanding Teaching Assistant last year.

Ray Gritton, BA, completed his second year of medical school at Hahnemann University in Philadelphia, PA.

Randall Jensen, BA, has completed his MS in the Department of Philosophy at CSULB, and will enter the PhD program in the Philosophy Department at UCLA this fall. Randy has been awarded a fellowship.

Larry Matsumoto, BA, and his wife, Susan, have moved to Omaha, NE, where Larry will begin medical school this fall at Creighton University. He was formerly a Sales Engineer for GAF Chemical Corp. in Irvine, CA.

Gayane Mooradlan, BS Biochem., is a dental student at UCLA. "UCLA Dental School is great, and I especially like living here in Westwood."

Tom Murphy, BS, works with Coating/Composites in Inglewood, CA. His firm specializes in epoxy flooring materials

Richard Nighswonger, BA, has just joined GAF Chemicals Corp. in Irvine, CA, as Sales Engineer.

Beth Simmons, BS, works in Materials and Process Engineering at McDonnell Douglas, where she was promoted to Engineer recently. She is currently working on a master's degree in Computer Science at CSULB. Beth's sister, Joyce Simmons Harpt, is an undergraduate chemistry major at CSULB.

Coleman A. Smith, BS, is a PhD student, working with Dr. August Maki on zero-field optically detected magnetic resonance studies of biological molecules. "The molecules of interest must have the ability to phosphoresce at low temperatures. Thus, this phos-

phorescent triplet state can be populated through UV excitation, and the small splitting of the triplet sub-levels can be observed by sweeping through an appropriate region of the microwave spectrum."

Jennifer Sweet-Kingsbury, BA, is a seventh-grade science teacher in the San Juan Unified School District in Sacramento, CA, and lives in Carmichael.

Lisa M. Smith, BA, is a pharmaceutical sales representative for Miles Pharmaceuticals in Irvine, CA.

1988

Andrea Baxter, BS Biochem., works for Baxter Healthcare Corp. in Santa Ana, CA, where she is involved in immunological research.

Jim Cirillo, BS, is employed at BCL Associates, an environmental consulting firm in Huntington Beach, CA. His picture, showing him working in the laboratory, was featured in the Orange County Business Section of the *Los Angeles Times* in an article entitled, "Toxic Waste Pockets Make Property Buyers Step Carefully."

Kerry W. DeGroot, BS Biochem., has completed his first year of medical school at Georgetown University in Washington, DC. He was elected Georgetown student representative to the American Medical Student Association.

Patty Healy, MS Biochem., BS Marine Biol. 1985, works at the La Jolla Cancer Research Foundation in La Jolla, CA.

Michael Kahr, BS, is a graduate student in Chemistry at UC Riverside, working with Dr. Charles Wilkins' group in the area of Fourier transform mass spectrometry and hyphenated analytical techniques.

Monica Kelndl, MS, is continuing as a PhD candidate in Chemistry at UC Irvine. She was named as an Outstanding Teaching Assistant.

E. Ken Lesniewski, MS, is Sales Engineer in Surfactant Chemicals at GAF Chemicals Corporation in Irvine, CA.

Joel McPherson, BS, works part-time in polymer research with McDonnell Douglas while he completes his MS in Design and Materials Engineering at CSULB.

Farshad Mogadam, MS Student, is in the PhD program in biochemistry at the University of Southern California.

John Olson, BS, works as an analytical chemist with BCL Associates in Huntington Beach, CA. BCL is involved with environmental testing.

Paul Serra, MS Biochem., continues with his medical studies at UC Davis. He and his wife, Amanda (a CSULB Microbiology alumnus), have two children, Elizabeth and Victoria.

Joyce Setsuda, MS Biochem., is presently working as a staff research associate with Dr. Robert Cohen in the Department of Chemistry and Biochemistry at UCLA. Her work involves ubiquitin-targeted protein degradation.

Rodney Solgonick, BS Biochem., has completed his first year of medical school at UC Davis.

Excerpts from Letters to the Editor

• The thirteenth issue of your Chemistry Department Newsletter just reached our office, and I think it's just wonderful! **Rosemary Taylor Schmidt, Director, Office of Alumni Relations**

• I continue to be exceedingly impressed with your beautiful Chemistry Department Newsletter and the progress of your Department. **William P. Weber, Professor and Chairman, Department of Chemistry, University of Southern California**

• Thanks for the Newsletter--very impressive! **Curtis L. McCray, President, CSULB**

• The format is great and the information very interesting. **Ray Glenne, Chair, Physical Sciences, Glendale Community College**

• Thank you for sending your Newsletter. As usual, it looks great. **Gene Hiegel, Professor of Chemistry, CSU Fullerton**

Some Facts About CSULB (Fall 1988)

• The University consists of nine schools and centers offering 133 baccalaureate programs through 67 degrees and 76 master's programs through 55 degrees.

• Degrees awarded since 1949 and until May 1988: 107,950 undergraduate and 21,042 graduate.

• The campus consists of 322 acres and 60 building complexes.

• The Library holds 1,013,513 volumes; 1,161,192 microforms and 5,625 periodicals.

• Students came from 51 counties in California, 48 states besides California, and 113 foreign countries.

• The median age of students is 22 years.

• 1,874 students live on campus.

• 35,363 students were enrolled.

Student Research Involvement High In Chemistry/Biochemistry

At CSULB the BS degree in Chemistry and the MS Degrees in Chemistry and Biochemistry all require a research component. Although the BA in Chemistry and the BS in Biochemistry do not require research, many candidates for those degrees elect to become involved in laboratory research with faculty. Employers of our students remark that those who have had undergraduate research experience very quickly adjust to laboratory situations and become productive laboratory workers in a short time. Students choosing to continue on for the PhD find that research experiences in the undergraduate or master's programs are also helpful to them in becoming meaningfully involved in research early in their doctoral studies.

In the School of Natural Sciences enrollments in chemistry and biochemistry courses during the 1988-89 academic year constituted 23.7% of the total enrollment, and the faculty in the Department of Chemistry and Biochemistry comprised 31.5% of the total Natural Sciences faculty. However, 60.5% of all students involved in undergraduate research in the School were in the Department of Chemistry and Biochemistry and 41.9% of graduate students in the sciences were enrolled in graduate research in our department.

Grants from a variety of funding sources help support these research activities: the National Science Foundation, the National Institutes of Health, the Petroleum Research Fund, Research Corporation, Minority Access to Research Careers (NSF), Minority Biomedical Research Support (NIH), Chevron Oil Field Research, and the Citrus Research Board.

CSULB Chemistry Department Newsletter

August 1989, Number 14

An annual publication of the Department of Chemistry and Biochemistry for past and present students and friends of the department.

News items, photos, and comments are eagerly invited.

Ken Marsl, Editor.

Biochemistry Skater Brings Honor to CSULB

Editor's Note: *The following article was written by Barbara Parks, Editor and writer for University Publications, and appeared during the fall of 1988 in Network, a campus publication for faculty and staff.*

After bringing honors to himself and CSULB with a win in the 1988 National Collegiate Figure Skating Championships, freshman Troy Goldstein will return to the ice November 19 and 20 for more competition. This time he will compete in Burbank for the regionals of the United States Figure Skating Championships with the eventual goal of reaching the finals in Baltimore and a chance for the gold medal.



Troy Goldstein with CSULB President Curtis McCray

The 17-year-old biochemistry major represented CSULB August 18-20 at the championships in Colorado Springs where he took first place in the senior men's compulsories. Skating with his 15-year-old sister, Dawn, he also came in third place in the pairs event in Colorado.

"My mom is a professional ice skating coach and she started my interest in skating," says Goldstein, who set foot on the ice at the age of 5. By age 11 he had earned a United States gold medal in figures and freestyle, becoming one of the youngest skaters in the world to accomplish this achievement. In 1987 and 1988 he was one of four skaters selected from the West Coast for the United States national team.

Reaching this level in skating, notes Goldstein, requires considerable hours of training. He leaves his Culver City home early in the morning for skating rinks in Costa Mesa and Paramount where he trains from 5 a.m. until almost noon five days a week. From there he drives to CSULB for his classes which are scheduled in the afternoons. "And I work out at Gold's Gym in Venice for two hours about three times per week," adds the graduate of Culver City High School.

His choice of CSULB was made "when I came to Kaleidoscope and was very impressed with the campus--the friendliness of people and the wide variety of classes available." After completing his bachelor's degree, he plans to attend medical school, but until then he will continue his studies at CSULB and his training "to reach my ultimate goal of representing the United States in international competition."

1989 Commencement



Grand Marshal, Dr. Roger D. Bauer

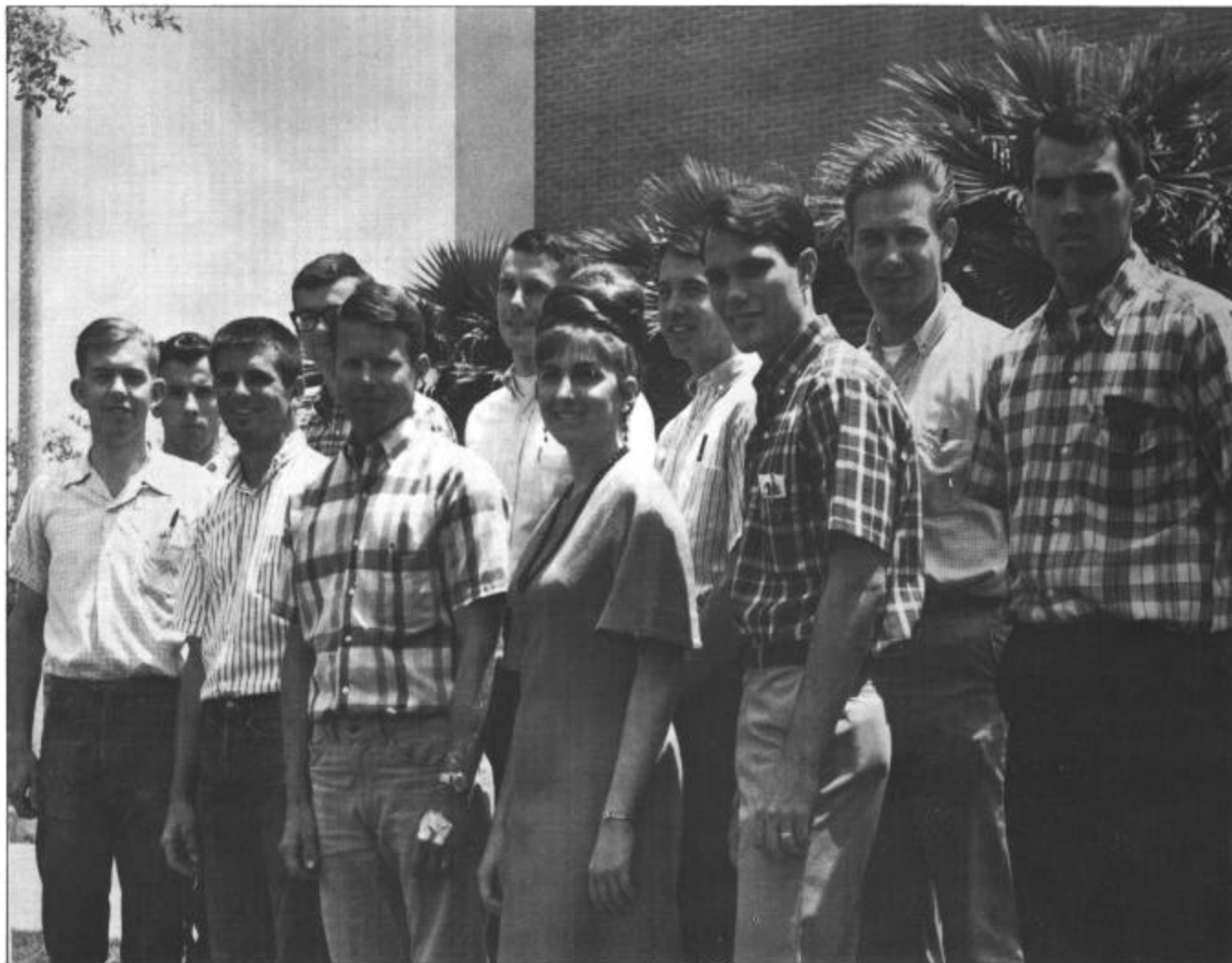


Acting Associate Dean, Dr. Tom Maricich

SNAPU By Bruce Beattie



"We're running short. Make the organic chemistry final as tough as you can."



From the Chemistry Archives: Chemistry BS Candidates, Spring 1967. *Left to right:* David R. Fagerburg, Larry G. Copeland, Charles T. West, Thomas G. McLaughlin, Robert L. Jordan, Jay E. Brant, Margaret A. Hohly, Ralph J. Knights, Lawrence S. Lenon, John D. Kulluk, Robert L. Walker