



# CHEMISTRY DEPARTMENT NEWSLETTER

August 1987

No. 12

## Dr. John H. Stern 1928-1987



*Dr. John H. Stern.*

With the death in February of Professor John H. Stern, the Department of Chemistry lost a distinguished scholar and respected friend.

Modest but not shy, John Stern advocated and practiced quality in all that he did. A typical motto of his was "do it small but do it well." He was equally eager with faculty as with students to start a discussion on a problem in current research or a critique of the latest imported art film at the Bay or the Art Theatre. His life was never uneventful. Born in Brno, Czechoslovakia, as a young boy he fled with his family just ahead of the Nazi Panzer divisions pushing from the west. He crossed the Asian continent on the Trans-Siberian Railway and settled in Shanghai for the

duration of World War II. His tales of this hegira could fill a fascinating evening. In later years he was at home with a half dozen languages as well as in places ranging from the streets of Rome to the Cascade Mountains of Washington state.

A statement of his professional accomplishments (BS with honors from UC Berkeley; Ph.D. from the University of Washington; awards for excellence in teaching; research grants; visiting lectureships in Florence, Jerusalem and London) is impressive. But, perhaps, a listing of his publications would most effectively show his association with many of our alumni and tell what kind of a chemist he was. Thirty four of the thirty seven manuscripts were coauthored by CSULB graduate or undergraduate students.

### Publications:

1. J. H. Stern and N. W. Gregory, "The Condensation Coefficient of Iodine," *J. Phys. Chem.*, **61**, 1226 (1957).
2. J. H. Stern and N. W. Gregory, "Vaporization Characteristics of *p*-Dibromobenzene," *J. Phys. Chem.*, **63**, 556 (1959).
3. J. H. Stern and A. A. Passchier, "Heat of Reaction Between Hydrogen Peroxide and Hydroiodic Acid in Aqueous Solution," *J. Chem. and Eng. Data*, **7**, 73 (1962).
4. J. H. Stern and F. H. Dorer, "Standard Heats of Formation of 2,2-Dimethoxypropane (I), and 2,2-Diethoxypropane (I). Group Additivity Theory and Calculated Heats of Formation of Five Ketals," *J. Phys. Chem.*, **66**, 97 (1962).
5. J. H. Stern and A. A. Passchier, "Standard Heats of Formation of Triiodide and Iodate Ions," *J. Phys. Chem.*, **66**, 752, (1962).
6. J. H. Stern and A. A. Passchier, "Thermodynamic Properties of Aqueous Solutions of Mixed Electrolytes: The HCl-NaCl System from 40 to 0°," *J. Phys. Chem.*, **67**, 2420 (1963).
7. J. H. Stern, R. Parker, L. S. Peak and W. V. Voland, "Heats of Formation of Four Sparingly Soluble Iodates," *J. Chem. & Eng. Data*, **8**, 40 (1963).

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## Dr. Robert O. Hutchins: Outstanding Alumnus, 1987

Dr. Robert Owen Hutchins (MS 1962) was honored as the Distinguished Alumnus of the Year for the School of Natural Sciences at Commencement this May. Dr. Hutchins is head of the Chemistry Department at Drexel University in Philadelphia. He is author of 76 publications to date in major journals or as chapters in books. His research has been amply supported by major agencies, and his classroom work at Drexel was recog-



*Dr. Robert O. Hutchins.*

nized by an award for Outstanding Undergraduate Teaching. He also received the Philadelphia ACS Sectional Award for his work in organic chemistry. He is an industrial consultant, journal referee and is much in demand as a seminar speaker. His PhD degree was awarded by Purdue University.

Bob Hutchins came to CSULB in the summer of 1961 with a BS degree from UC Berkeley. A research-based MS degree in Chemistry had been authorized just the year before, and he did his work

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## Chairman's Report

Although University funding of the Chemistry program has deteriorated somewhat over the last year as resources have been diverted to new programs and projects within the University, we have managed to maintain excellence through grant funding (\$630,517 in continuing grant funds), support from companies represented on the Chemistry Advisory Council and other corporations (\$116,450 in equipment and funds), and from contributions from alumni and other friends of the department (\$3,790).

The number of students in Chemistry courses has drifted downward slightly as enrollments in some academic areas serviced by the Department of Chemistry have declined. However, the degree programs in Chemistry are as strong as ever. Seventy seven candidates were listed as degree recipients for the 1986-87 academic year, a record number. Presently, there are about two hundred undergraduate majors and fifty graduate students stating chemistry or biochemistry as their majors. This year, for the first time, we were unable to offer support in the form of teaching and graduate assistantships to all qualified applicants to the MS programs in Chemistry and Biochemistry, because there were so many applications.

Another healthy development is the increasing numbers of our undergraduates who are electing to become involved in research projects. Last semester there were more undergraduates participating in research in the Department of Chemistry (35) than in all the other departments in the School of Natural Sciences combined (20)! Research experience is important for undergraduates who are planning to enter graduate programs or for those hoping to qualify for laboratory employment upon receipt of the bachelors degree. One of the important components of the undergraduate curriculum is the extensive laboratory experiences which our students have, and employers of our students often remark on how quickly they adjust to laboratory work. Consequently, our graduates are sought after by employers in the area.

Appearing elsewhere in this Newsletter is a description of our new BS degree in Biochemistry. It is proving to be attractive to premedical and pre dental students and others interested in careers in the biomedical sciences. Of the eighty one new students entering our degree programs in the fall of 1987 (as of June 23, 1987), thirty one have elected the BS degree in Biochemistry. At the time I write this editorial, the American Chemical Society does not certify undergraduate programs in Biochemistry. However, the Committee on Professional Training of the ACS is studying this matter, and a core curriculum has been developed which is being proposed for certification. The program which our department has authored is consonant with the ACS draft proposal, and we expect no difficulty with certification when it becomes available.

Last year I reported that we expected to begin an extensive renovation program in the Department of Chemistry during the 1986-87 academic year. Unfortunately, the \$7,000,000 budgeted for this project was insufficient to fund the proposed plans. So we're back at the drawing board again and hope that by May, 1988, construction will begin. The new plan will emphasize relocation of most of the fume hood-dependent laboratories into Peterson Hall Three (Science Three), modernize some of our research laboratories and expand our presently overcrowded department office. I hope to report further progress in next year's Newsletter.

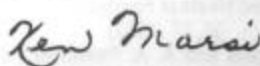
The two tenure track organic chemists who will join our department this fall bring to ten the number of new faculty hired in the last eleven years. I think it is noteworthy that everyone of these persons was the first choice of the department; that is, not one invitation was declined by a person to whom a position was offered! The result is that the Department of Chemistry is an exciting place to be, a place where there is an excellent balance between outstanding teaching and significant and well funded research programs.

And finally, we will miss our colleague and member of this department for twenty-nine years, Dr. John Stern. His work as a teacher and scientist was performed quietly but well, and his standards were always the highest and a model for his colleagues. His enthusiasm for science was contagious and attracted many of our students to careers in chemistry; the number of his students continuing on to the doctorate is impressive. His publication record is one of the most outstanding in the State University System and is reproduced elsewhere in this Newsletter as a fitting testimonial to his productivity as a scientist and his successful involvement of students in research activities. He has left an indelible mark on our department and in the lives of those with whom he worked, both faculty and students.

You have a standing invitation to return for a visit, and maybe your favorite professor will even take you to lunch. Or even better, maybe you could take your old professor to lunch! At the very least, please let us know about yourself by filling out the questionnaire at the back of this Newsletter. Your responses are posted on the Alumni Bulletin Board for faculty to read and will be summarized for incorporation into next year's Newsletter so your classmates may be informed of your activities.

The faculty and staff of this department join with me in wishing you well.

Sincerely yours,



Kenneth L. Marsi  
Professor and Chairman



Susan Boggs, President SAACS.

## STUDENT AFFILIATES OF THE AMERICAN CHEMICAL SOCIETY

By Susan Boggs, President

The purpose for this organization is to provide the means for a family-like atmosphere among the students and the faculty of the Chemistry Department and to stimulate interest in various chemical-related fields. This year's social activities included the Welcome Back Bash, Annual Taco Feast, Winter Holiday Party, International Potluck, Pizza & Awards Luncheon and the very popular weekly coffee and donut hour where the students and faculty ate over 1500 donuts! On all of these occasions students, faculty and staff gather in an informal atmosphere for good food and excellent company. Special thanks to Dr. and Mrs. Marsi for their gracious hospitality in hosting the Winter Holiday Party in their home.

Free tutoring for General Chemistry students was offered again this year by advanced chemistry majors under the direction of Jerry Middleton, and we hope it will continue next year.

To promote lab safety and raise funds for the year's activities we sold lab aprons, safety goggles, gloves, ACS Safety Manuals and CRC handbooks.

The Outstanding Lecturer awardees were selected by the students with the well-deserving recipients this year being Dr. Peggy Kline, for her outstanding work in Chem. 200, and Dr. Robert Loeschen for his significant work in Chem. IIIA.

A faculty Research Seminar was initiated at the end of the spring semester.

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● The Chemistry Department has granted a total of 1,038 degrees since the first degree was conferred in 1958: 806 bachelors and 232 masters.

● Approximately one third of the Chemistry Alumni hold doctoral degrees in Chemistry, Medicine, Dentistry or Pharmacy.

A total of \$630,537 in external grant funding is held by members of the Chemistry faculty, supporting graduate and undergraduate research projects and instructional programs. Faculty currently holding grants include:

**Dr. Roger Acey:** Department of Health and Human Services, Public Health Service, \$49,653; Memorial Hospital, \$18,780; Chevron Oil Field Research, \$15,000.

**Dr. Mark Anjo:** National Institutes of Health, \$67,000; Research Corporation, \$13,000; Petroleum Research Fund, \$18,000.

**Dr. Jeffrey Cohlberg:** National Science Foundation, \$215,000.

**Dr. James Jensen:** National Science Foundation, \$66,000.

**Dr. Van Lieu:** City of Long Beach, \$20,000.

**Dr. Margaret Merryfield:** National Institutes of Health, \$50,000.

**Dr. Henry Po:** Petroleum Research Fund, \$20,000.

**Dr. Nail Senozan:** American Heart Association, \$38,884.

In addition, a joint proposal written by Drs. Acey, Cohlberg and Merryfield to support the undergraduate laboratory program in biochemistry, was funded by the National Science Foundation for \$39,000.

## CSULB Chemistry Department Newsletter

August 1987, Number 12

Annual publication of the Department of Chemistry for past and present students and friends of the department. News items, photos and comments are welcomed and may be sent to:

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Kenneth Marsi, Darwin Mayfield,  
Margaret Merryfield, Henry Po
- Research: Kenneth Marsi

### Dr. Stern: from Page 1.

8. J. H. Stern and J. J. Jasnosz, "Standard Heats of Formation of Paraperiodic Acid at 25°," J. Chem. & Eng. Data, **9**, 534(1964).

9. J. H. Stern and C. W. Anderson, "Thermodynamic Properties of Aqueous Solutions of Mixed Electrolytes: The KCl-NaCl and LiCl Systems at 25°," J. Phys. Chem., **68**, 2528 (1964).

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12. P. Paoletti, J. H. Stern and A. Vacca, "Thermodynamics of Protonation of Triethylenediamine, Trimethylamine, and Ammonia in Aqueous Solutions at 25°," J. Phys. Chem., **69**, 3759 (1965).

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19. J. H. Stern and J. M. Nobilione, "Thermodynamics of Aqueous Mixtures of Electrolytes and Nonelectrolytes. VI. Transfer of HCl from Water to Aqueous Ethylene Glycol at 25°," J. Phys. Chem., **72**, 3937 (1968).

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24. J. H. Stern and S. L. Hansen, "Thermodynamics of Transfer of HCl from Water to Aqueous Alcohols at 25°C.," J. Chem. Eng. Data, **16**, 360 (1971).

25. J. H. Stern, Orhan Javuz and T. Swearingen, "Heat Capacities of Acetic Acid in Water-Rich Electrolytes and Alcohols," J. Chem. Eng. Data, **17**, 183 (1972).

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34. J. H. Stern and D. R. Oliver, "Thermodynamics of Nucleoside Solvent Interactions: Inosine and Adenosine in Water and 1 m Ethanol between 25 and 35°," ibid., **25**, 221 (1980).

35. J. H. Stern, S. J. Stoner and G. L. Doyle, "Enthalpies of Transfer of Amino Acids and Sodium Chloride from Water to Aqueous Fructose at 25°," J. Solution Chem., **10**, 263 (1981).

36. J. H. Stern and S. L. Hansen, "Thermodynamics of Transfer of Hydrochloric Acid and Perchloric Acid from Pure Water to Aqueous Glycerol at 25°," J. Phys. Chem., **85**, 371 (1981).

37. J. H. Stern and P. M. Hubler, "Hydrogen Bonding in Aqueous Solutions of D-Ribose and 2-Deoxy-D-Ribose," ibid., **88**, 1680 (1984).

38. J. H. Stern and L. P. Swanson, "Thermodynamics of Nucleoside Solvent Interactions. Uridine and Cytidine in Pure Water and in 3m Ethanol between 17 and 37°," J. Chem. Eng. Data, **30**, 61 (1985).

### Dr. Hutchins: From Page 1

toward this degree under the direction of Darwin Mayfield in a laboratory where the present PH2-217 organic teaching lab is now located. He met his wife, Gail, who also holds the PhD degree,

while a student in chemistry classes at CSULB. In 1962, Bob became the second student to be awarded the MS degree in Chemistry from our university and was the first MS recipient from the Chemistry Department to proceed on to the PhD degree.





**Chemistry Faculty.** Kneeling, left to right: Dr. Tom Maricich, Professor, Organic Chemistry; Dr. Edwin Harris, Professor, Organic Chemistry; Thomas Goynes, Lecturer, Organic Chemistry; Dr. Shelly Kumar, Lecturer, Organic Chemistry; Dr. Jeffrey Cohlberg, Associate Professor, Biochemistry; Dr. Kenneth Marsi, Professor, Organic Chemistry and Department Chair; Dr. Louis Perigut, Emeritus Professor, Biochemistry and Part-time Faculty. Standing, left to right: Dr. Thomas Duffy, Lecturer, Biochemistry; Dr. Mark Anjo, Assistant Professor, Analytical Chemistry; Dr. Roger Acey, Associate Professor, Biochemistry; Dr. Van Lieu, Professor, Analytical Chemistry; Dr. James Jensen, Professor, Organic Chemistry and Associate Dean; Dr. Darwin Mayfield, Professor, Organic Chemistry; Dr. Robert Loeschen, Professor, Organic Chemistry; Dr. Dorothy Goldish, Professor, Organic Chemistry; Dr. Steven McDowell, Assistant Professor, Inorganic Chemistry; Dr. Margaret Merryfield, Assistant Professor, Biochemistry; Dr. Margaret Kline, Lecturer, Organic Chemistry; Dr. Henry Po, Professor, Inorganic Chemistry; Dr. Leslie Wynston, Professor, Biochemistry; Dr. Nail Senozan, Professor, Physical Chemistry; Thomas Baine, Part-time Lecturer (and Angels fan!); Luda Kuprenas, Part-time Lecturer. **Full-time-faculty not shown:** Dr. Peter Baine, Professor, Physical Chemistry; Dr. Roger Bauer, Professor, Biochemistry and Dean; Dr. Stuart Berryhill, Associate Professor, Organic Chemistry (sabbatical leave); Dr. Jerald Devore, Professor, Physical Chemistry; Dr. Gene Kalbus, Professor, Analytical Chemistry; Dr. Michael Monahan, Lecturer, Organic Chemistry; Dr. A.G. Tharp, Professor, Inorganic Chemistry.

## Faculty News

**Dr. Roger Acey** has received tenure. He has new research support from the National Institutes of Health, Chevron Oil and the Memorial Arthritis Foundation. He has acquired two new graduate students, Denis Guttridge (BS UC San Diego) and Dana Gilchrist (Occidental College). Former research students Chris Smith and Tom Unger began PhD programs at the University of Nebraska and UC Irvine, respectively. Graduate student, David Tomlinson, received his MS. Two papers on the detection of human brain parasites were presented, and two papers were published, one on

the effects of phthalate esters on algal growth and another on developmental regulation of metal binding proteins in developing *Artemia*.

**Dr. Mark Anjo** and students, Beth Simmons, Coleman Smith and Michael Kahr, have been studying the epidermis using photo acoustic spectroscopy employing a fully automated and computer-controlled photoacoustic instrument. Studies of singlet oxygen kinetics in the presence of sensitizer are being conducted by Angela Daniels, Chinh Tran, Tracey Wheeler, Keith Hupke and Anthony Scotty and results are promising. Graduate student, Stuart Nowinski, is writing his MS thesis after completing

experimental work on the mechanism of oxidation of catecholamines at a carbon film electrode.

**Dr. Peter Baine** was promoted to Professor of Chemistry.

**Dr. Stuart Berryhill** is completing a sabbatical at the Institute Chimie Fine, Universite des Sciences et techniques du Languedoc, Montpellier, France. He is involved in organometallic research.

**Dr. Jeffrey Cohlberg** reports that his laboratory group currently includes two graduate students and three undergraduates. The main thrust of his work is the characterization of some solu-

(Continued on Page 5)



ble hybrid oligomers of neurofilament polypeptides which he and his students discovered last summer. Hamid Hajarian, Suzanne Sainte Marie, and Dr. Cohlberg recently submitted a manuscript to *J. Biol. Chem.*, and he will be giving a poster at the Cell Biology meeting in November. Roger Acey, Margaret Merryfield and he recently received an NSF equipment grant to buy a centrifuge, HPLC, fraction collectors, pumps and spectrophotometers for the Chemistry 443 laboratory, which will also be equipped with a cold room in the planned renovation.

**Dr. James L. Jensen** continues as Associate Dean for the School of Natural Sciences. Research activities are still supported by the National Science Foundation and focus on the hydrolyses of thioacetals promoted by Hg(II) and Ag(I). These projects follow up the work completed by Ty Smith (MS 1986) and Greg Shaw (MS 1988). Greg Shaw and David Maynard report their results at the 1987 Pacific Conference on Chemistry and Spectroscopy.

**Dr. Gene Kalbus** presented a paper with Dr. Van Lieu at the 192nd ACS National Meeting entitled, "Incorporation of consumer products in the teaching of analytical chemistry," in Anaheim, CA. He is also coauthor of a paper with Dr. Van Lieu entitled, "Potentiometric titration of acidic and basic compounds in household cleaners," appearing in *J. Chem. Educ.*

**Dr. Van Lieu**, in addition to cooperating with Dr. Kalbus on the work cited above, presented a paper, "Pyrolysis/microcoulombic determination of total organic halides in solids and oily waste," at the EPA 3rd Annual Symposium on Solid Waste Testing and Quality Assurance. He was also coauthor of a paper, "Evaluation of slime-producing bacteria in oil field core flood experiments," in *Applied and Environmental Microbiology*.

**Dr. Robert Loeschen** is the hardworking coordinator of the laboratory renovation project for the Chemistry Department. Approximately seven million dollars is available to renovate the student and research laboratories. The present

plan is to move most of the student laboratories into Peterson Hall Three so that all the hoods can be connected to a central set of stacks on the roof above PH3. Plans for the research space involve the creation of several smaller student laboratories with adjoining instrument rooms and faculty offices. It is projected that renovation will be completed in three years.

**Dr. Tom Maricich** reports that "Chemical safety has been foremost on the minds of most of us for the past few years. I have produced a videotape on chemical safety for safety orientation of new faculty and graduate students in the Chemistry Department. I have also become involved as a chemical consultant on cases involving litigation related to chemical safety and other matters. I have testified in both county and federal district courts."

**Dr. Kenneth Marsi** continues as department chair and as a member of the Executive Committee and Board of Directors of the Southern California Section of the ACS. During the past year he has acted as a consultant to the Board of Regents of the University of Florida in helping to develop masters programs in Chemistry at Florida International University and Florida A&M University.

**Dr. Darwin L. Mayfield** spent part of his time during the past year working on a teacher retraining project funded by the Los Angeles County Board of Education. His work was with a group of 20 experienced junior high level teachers who had been chosen to introduce selected topics in chemistry into 7th and 9th grade classrooms. A major need was to develop experiments which illustrated significant chemical principles but which required only easily available equipment and processes safe for young students.

**Dr. Steven McDowell** presented a seminar at UC San Diego entitled, "Oxygen activation in aprotic media. The role of metal ions," in May 1987. His research involves syntheses of new organometallic compounds, the modelling of the chemistry of various metalloproteins and the reactions of super-

oxide ion with organometallics. His undergraduate research student, Carter White, presented a poster entitled, "Reactions of tetraamminecopper(II) complexes with active oxygen donors," at the undergraduate symposium at the Denver ACS meeting. He also presented the same paper before the Southern California Section ACS Undergraduate Research Conference held at Loyola Marymount in April.

**Dr. Margaret Merryfield.** "This year the regular cast of characters included graduate students Joyce Setsuda and Ed Louie, and the student assistants Chris Stinson, and Caryl Acuna. In addition, Gayanne Mooradian and Melanie Milner completed undergraduate research projects. Benny Dickens, who came to CSULB from New Mexico State, joined the lab in the spring as a graduate student. The main research interest of the group continued to be the regulation of phosphorylation of the branched-chain *alpha*-keto acid dehydrogenase complex, an enzyme of mammalian mitochondria. This work has been supported by the NIH. In December, I presented a seminar to the Anatomy Physiology department, relating some of our results to date. Caryl Acuna presented a paper at the annual ACS Undergraduate Research Conference in April, concerning the effects of the polyamines on phosphorylation of the enzyme. Joyce Setsuda is planning to finish her thesis this summer, in time to enter the PhD program in molecular biology at Northwestern University this fall. We will be joined in the fall by a student from the nutrition master's program, Dianne Meacher, who will begin working on some aspects of insulin action on the enzyme. In a different area, this spring, along with Carol Itatani of Microbiology, I presented a workshop entitled, "Women in Science: Ms. Wizard" as part of a program, "Women Studying Women" sponsored by the Women's Resource Center and Women's Studies."

**Dr. Henry Po** reports that his graduate students, Elizabeth Brinkman, Jane Kiang and Monica Keindl are completing their MS degrees in August 1987, and all three will be continuing for PhD degrees in chemistry. His former

## Faculty News: from Page 5

graduate student, Roswita Trismitro, returned to Jakarta, Indonesia last December after receiving her MS degree, and is a vice president with PT Mugi Company. "The work which I started several years ago on the hyper-valent silver (II) complexes of tetraaza macrocyclic ligands has been quite interesting. We are presently studying the electrochemistry and redox properties of these complexes and have used them extensively as oxidizing agents in kinetics studies. During the summer of 1987 I took some time off to visit Manila and Taipei and had a wonderful time."

Dr. Leslie Wynston has been reelected to the executive committee of the Western Association of Advisors to the Health Professions. At the end of the spring semester he led a wine class study tour to Switzerland, Germany and France. He was an invited guest of the Chinese government during the fall semester where he discussed a CSULB-PRC exchange program with the president of Zhongshau University in Guangzhou (Canton), PRC.

## Student Affiliates: from Page 3

This was meant to establish an interest in undergraduate research. Speakers for this year included Dr. Roger Acey (Biochemistry) and Dr. Tom Goyne (Organic). We hope that it will develop into a strong, continuing program next year.

To promote interest in undergraduate research in the Chemistry Department, the Student Affiliates awarded two \$300 Undergraduate Summer Research Scholarships from their own funds. The recipients were selected by the Undergraduate Summer Research Committee consisting of faculty members. The winners of the Scholarships were Jon Lohwasser, who will work with Dr. Tom Goyne, and Darin Hayton, who will do research under the direction of Dr. M. Steven McDowell. Both of the recipients will give a seminar to students and faculty in the fall on their respective research topics. We hope this will initiate more interest in the science of chemistry and become an annual activity. These scholarships were dedicated to the memory of Dr. John Stern, who was a great promoter of undergraduate research.

Two of our undergraduates, Carter White and Caryl Acuna, presented

## Honors to 1987 Graduates and Current Students

Elizabeth A. Brinkman

Fermin A. Chavez  
Kimberly Clark  
Carroll B. Dickens  
Dwayne D. Gergens

Raymond D. Grifton

Darin R. Hayton  
Patricia Ann Healy  
Ronald M. Kagan  
Brett S. Kislin  
Gail P. Konishi

John J. Lohwasser  
Jeff Masse

David F. Maynard  
Mark McLain

Diane Meacher

Jerry Middleton

Kevin R. Miller  
Farshad Mogadam  
Stuart A. Nowinski  
Bharat Patel

Viet Quach  
Annette E. Reid  
Joyce E. Setsuda

Gregory R. Shaw  
Deborah M. Simon  
Coleman A. Smith

Rodney Solgonick  
Jennifer A. Szeet  
David W. Tomlinson  
Roswita Trismitro  
David A. White

Louie Wollenberger  
Marco D. Wong

Rachelle Medal  
Outstanding Graduate Student in Chemistry  
Chemistry Alumni Scholarship  
Alumni Graduate Summer Research Fellowship  
Election to Phi Lambda Upsilon  
Election to Sigma Xi  
American Heart Association Fellow  
Honors for Service in Chemistry  
Chemistry Advisory Council Tuition Scholarship  
Award in Inorganic Chemistry  
Chemistry Alumni Scholarship  
David L. Scoggins Memorial Award  
Graduation with Great Distinction  
Election to Phi Lambda Upsilon  
Student Affiliates ACS Undergraduate Summer Research Fellowship  
Election to Phi Lambda Upsilon  
Undergraduate Summer Research Participation Program  
Election to Phi Lambda Upsilon  
Merck Award in Organic Chemistry  
Associated Students Golden Nugget Award  
Chemistry Alumni Scholarship  
American Heart Association Fellow  
Election to Phi Lambda Upsilon  
Student Affiliates ACS Undergraduate Summer Research Fellowship  
Freshman Chemistry Award (CRC Handbook)  
Chemistry Alumni Scholarship  
Election to Phi Lambda Upsilon  
Merck Award in Organic Chemistry  
Chemistry Alumni Scholarship  
Award in Biochemistry  
Chemistry Alumni Scholarship  
Toni Horalek Award for Service to the Chemistry Department  
Chemistry Alumni Scholarship  
Graduation with Great Distinction  
Election to Phi Lambda Upsilon  
Election to Phi Lambda Upsilon  
Award in Analytical Chemistry  
Graduation with Distinction  
Chemistry Alumni Scholarship  
Election to Phi Lambda Upsilon  
Freshman Chemistry Award (CRC Handbook)  
Graduation with Distinction  
California Foundation for Biochemical Research  
Graduate Summer Research Fellowship  
Election to Sigma Xi  
Election to Phi Lambda Upsilon  
Dean Rhodes Award  
Honors for Service in Chemistry  
American Institute of Chemists Award  
Chemistry Alumni Scholarship  
Award in Inorganic Chemistry  
American Heart Association Fellow  
Graduation with Distinction  
Election to Sigma Xi  
Johnson M.S. Thesis Award  
Alumni Graduate Summer Research Fellowship  
Election to Phi Lambda Upsilon  
Election to Phi Lambda Upsilon  
American Heart Association Fellowship

papers at the Undergraduate Research Conference at Loyola Marymount. The CSULB Chapter of SAACS contributed financially to the support of this program. We would like to thank our advisor, Dr. Ken Marsi, for his support and guidance throughout this past year and to all of those who contributed to the organization. We would also like to congratulate the new officers for the 1987-88 year and wish them luck. The officers for the 1987-88 year are: Susan Boggs, President; Angel Kallah, Vice President; Gail Konishi, Secretary; Darin Hayton, Activities Director; and Cathy Bedolla and September Rivera, Publicity Directors.

- Employed in the Chemistry Department during the Spring Semester of 1987 were 29 full-time faculty, 7 part-time faculty, 9 staff members, 16 teaching assistants, 7 graduate assistants, 2 student assistants, 4 work study students and 8 research assistants.
- Two thirds of the masters students presently in the Chemistry Department have obtained bachelors degrees elsewhere.
- Numbered among our alumni are at least 58 college professors and 16 high school teachers of chemistry.

## Two New Organic Chemists Join Faculty

At the beginning of the 1986-87 academic year the Department of Chemistry initiated a search for a tenure-track organic chemist to add to our faculty. The search produced two outstanding candidates, so the faculty requested permission of the administration to hire both candidates. Much to our satisfaction our request was granted, and Dr. Marco Lopez and Dr. Kensaku Nakayama were hired. Dr. Nakayama will begin his teaching duties in August, 1987. Dr. Lopez was granted a leave of absence without pay to accept a postdoctoral appointment at UC San Francisco with Dr. Peter Coleman in the Department of Pharmaceutical Chemistry for 1987-88. He will begin his teaching duties at CSULB the fall semester of 1988.



*Dr. Marco Lopez, Assistant Professor, Organic Chemistry; son, Jason Michael, and wife Carmen.*

### Dr. Marco Lopez

Dr. Lopez is a product of the California State University System, having received his BS degree in Chemistry from California State University, Los Angeles in 1982. He has a Masters in Physical Organic Chemistry and a PhD in Bioorganic Chemistry, both from UC San Diego. His thesis director for the PhD was Dr. Teddy G. Taylor, and his research addressed the problem of polarity effects on the binding of dioxygen and carbon monoxide to model heme compounds. As an undergraduate he was involved in a research project under the direction of Dr. Douglas Currell. His undergraduate

thesis was entitled, "The Effects of Acetylating Agents on the Oxygen-linked Functional Properties of Human Hemoglobin." As an undergraduate and graduate student he was the recipient of several research fellowships and training grants. Dr. Lopez' wife, Carmen, is a teacher and has served in the Los Angeles and San Diego school districts as a bilingual junior high school mathematics teacher. Dr. and Mrs. Lopez have a son, Jason Michael, born March 11, 1987.



*Dr. Kensaku Nakayama, Assistant Professor, Organic Chemistry.*

### Dr. Kensaku Nakayama

Dr. Nakayama received his BS degree *cum laude* at UCLA in 1979 and his PhD, also from UCLA, in 1986. His PhD supervisor was Dr. Wayne J. Thompson, now with Merck, Sharp and Dohme. His graduate research dealt with the development of a highly enantioselective methodology for the synthesis of trialkyl and aryl dialkylphosphates, and also the synthesis and evaluation of chiral auxiliary reagents in asymmetric organometallic reactions. Following receipt of the PhD, Dr. Nakayama spent one and one-half years as a postdoctoral associate with Dr. Satoru Masamune at Massachusetts Institute of Technology where he was involved in natural product synthesis; specifically, the total synthesis of optically active bryostatin 1, a rare marine macrolide possessing anticancer properties. He is fluent in Japanese and is able to read technical publications in that language.

- Only 5.6% of CSULB students live on campus.



*Dr. Gwendolyn Raine, Lecturer Physical Chemistry.*

### Dr. Gwendolyn Raine: Lecturer in Physical Chemistry

We are pleased to announce the appointment of Dr. Gwendolyn Raine as Lecturer in Physical Chemistry for the 1987-88 academic year. Dr. Raine obtained her BS degree at UC Irvine in 1979 and performed undergraduate research in ion cyclotron resonance spectroscopy under the direction of Dr. Warren Hehre. In recognition of the excellence of her undergraduate research she was presented with the Donald L. Bunker Memorial Award. Her PhD is in theoretical chemistry and work was carried out in collaboration with Dr. Henry Schaefer III at UC Berkeley. Doctoral research was centered around the study of molecular structure and properties using *ab initio* molecular orbital theory, predicting vibrational spectra of small molecules. Following receipt of the PhD, Dr. Raine continued postdoctoral studies with Dr. Schaefer. Prior to coming to our department she was on the faculty at California State University, Sacramento.

- The enrollment at CSULB in the Spring Semester of 1987 was 32,767 students: 26,329 undergraduates and 6,438 graduate and post graduate students. Represented among the student body are 4,381 students from 114 countries other than the USA.
- Females constitute 52.7% of the student body at CSULB.





*Chemistry Advisory Council Members. Left to right: Dr. Joan Valentine, Unocal Visiting Lecturer and Council guest; Dr. Dennis Stack, Unocal; Ted Naegel, Monsanto; Dr. Kenneth Marsi, Chairman, Chemistry Department.*



*Chemistry Advisory Council Members. Left to right: Dennis Dingle, Hewlett Packard; Dr. Robert Carlson, Chevron Oil Field Research; Dr. Harry Walter, Veterans Administration Medical Center; Dr. Norman Hester, Truesdail Laboratories; Joseph Buckley, Texaco.*



*Chemistry Advisory Council Members. Left to right: LaMar Hill, Cahn Instruments; Edward Wilson, Brown & Caldwell; Dr. Norman Byrd, Douglas Aircraft; Danute Basiulis, Hughes Aircraft; Dr. Richard Jenkins, Envirosphere; Richard Stegemeier, President, Unocal.*

## Chemistry Advisory Council Assists Department

The Chemistry Advisory Council consists of persons in industrial and government employment related to chemistry who meet twice annually for a two-hour breakfast meeting with the Chemistry faculty, student representatives, the Dean of the School of Natural Sciences, the Vice President and President of the University. The Council offers helpful suggestions concerning preparation of our students for careers in Chemistry, and suggestions have brought about changes in the Chemistry curriculum. Members of the Council have also supported the department with gifts of equipment and funds to assist us to up-grade the quality of our programs in Chemistry.

During the past year the value of gifts of equipment, research support and funds amounted to \$116,450. For example, Dow Chemical USA met all seminar expenses; Unocal provided funds for sponsorship of the Eighth Annual Distinguished Visiting Lectureship; Hewlett Packard supplied the department with a research grade UV-visible spectrophotometer; Douglas Aircraft, Texaco and Nichols Institute gave us an assortment of useful equipment; Chevron Oil Field Research granted Dr. Roger Acey funds to pursue a research project related to petroleum chemistry; discretionary funds have been received from the Monsanto Fund, Aerospace Corporation and TRW. In ad-

dition, about a dozen of our students have been placed in full-time or part-time positions with companies represented on the Advisory Council.

Present membership on the Council includes: Danute Basiulis, *Section Head, Composite & Structures, Hughes Aircraft Company*; Mr. Joseph J. Buckley, *Texaco, Inc.*; Dr. Norman Byrd, *Staff Manager, Chemical Research, Douglas Aircraft Company*; Mr. Ray Calloway, *Aerospace Corporation*; Dr. Robert M. Carlson, *Chevron Oil Field Research Co.*; Mr. Robert H. Collins, III, *President, GSF Energy Inc.*; Mr. Terry Cox, *Dow Chemical USA*; Mr. Dennis Dingle, *Hewlett Packard*; Dr. Michael P. Gardner, *TRW*; Dr. Norman Hester, *Technical Director, Truesdail Labs., Inc.*; Mr. LaMar Hill, *Product Manager, Cahn Instruments, Inc.*; Mr. Stephen L. Holst, *Hyland Laboratories*; Dr. Richard Jenkins, *Manager, Hazardous Waste Management, Envirosphere*; Dr. Steve Jones, *Technical Director, IT Analytical Service*; Mr. Kenneth Kennedy, *Plant Manager, Monsanto Chemical Company*; Dr. John Kuebrich, *Manager, Quality Administration and Analytical Services, ARCO Corporation*; Mr. John Kulnane, *Technical Manager, Ameritone Paint Corporation*; Ms. Roxann Pettis, *Administrator, Nichols Institute*; Mr. Richard Stegemeier, *President & Chief Operating Officer, Unocal Corporation*; Dr. Harry Walter, *Chief, Laboratory of Chemical Biology, Veterans Administration Medical Center*; Mr. Edward Wilson, *Laboratory Director, Brown & Caldwell*; Mr. Rodney W. Wirtz, *Plant Engineer, Kaiser Aluminum & Chemical Corporation.*

Without the dedicated assistance of the Advisory Council it would be difficult for the Chemistry Department to realize its aspirations for excellence.



*8451 A Diode Array Spectrophotometer, a gift of Hewlett Packard.*

## Corporate Contributions to the Department of Chemistry

During the 1986-87 academic year the Department of Chemistry received generous support from a number of companies. The value of all gifts approximates \$116,000 and includes \$95,000 in gifts of equipment, a \$15,000 research grant and \$6,000 in cash donations. This does not include funds from granting agencies such as the NSF, NIH, PRF, etc. or gifts from alumni, reported else where in the *Newslettér*. Companies offering assistance with our programs are:

Aerospace Corporation  
Brown & Caldwell  
Chevron Oil Field Research Company  
Douglas Aircraft Company  
Dow Chemical USA  
Hewlett Packard

Monsanto Foundation  
Nichols Institute of Endocrinology  
Photon Ventures Corporation  
Stauffer Chemical Company  
Texaco, Inc.  
TRW  
Unocal

## Gifts by Individuals to the Chemistry Department

The chemistry faculty, staff and students are very grateful to those of you who have contributed to the support of the department during the past year. The number of gifts increased by 46% over the previous year and the value of gifts 35%! During the 1986-87 academic year 57 individuals gave \$3790.

Most of the funds received were used in the following way: seminar program, \$1,000; graduate summer research fellowships (2), \$1500; *Newsletter* expenses, \$481; undergraduate and graduate awards for excellence (10), \$532. Each gift is acknowledged by a personal letter from the Department Chairman, and the Alumni Office is informed about your gift so that your name will appear as that of a contributor in alumni publications.

If you are solicited by telephone by a University representative in connection with the Phonathon program, we would request that you designate your gift for the Chemistry Department.

If you wish to send contributions directly to the Chemistry Department you may make any checks payable to: *CSULB Foundation/Chemistry Fund* and send them to *Department of Chemistry, California State University, Long Beach, Long Beach, CA 90840*. You may wish to investigate the possibility that your employer will match your contribution.

Contributors for 1986-87 are:

Courtney W. Anderson  
Thomas D. Augimerl  
Reid H. Bowman  
Allyson B. Boyle  
Walter A. Boyle  
Joe Bramblett  
James P. Brophy

A. R. Calloway  
Terry S. Cox  
Donald Erlandson  
Tim Erwin  
Stephen M. Fritch  
Rick T. Goyt  
Stephen E. Headrick  
Douglas Infiesto  
Richard L. Jacobs  
Raymond Johnson  
Paul M. Jordan  
David Kanne  
Tina M. Kishishita  
Robert E. Kienck  
Yut Chuan Lan  
Lily A. Lim  
Tom J. Marlicich  
Kenneth L. Marsi  
George Mast  
Patrick A. McKay  
Anthony McLaughlin  
Joseph Molina  
David Y. Moromisato  
Thanh Ha Thi Nghiem  
John S. Nelson  
Michael W. Niemeyer  
David R. Oliver  
Raymond E. Ouellette  
Richard Parker  
Gary Allen Plett  
Christopher Ritland  
Wendy H. Robbins  
Karen M. Rogers  
Theresa M. R. Rohr  
Robert J. Rona  
Alan J. Senzel  
Dean Sequera  
Kent W. Showman  
Duane R. Smith  
Vivian L. Smith  
Teresa S. Speakman  
Robert Uyehara  
Gary Weihe  
Dan Woo  
Gerald E. Wuenschell



Dr. Joan Valentine, Unocal Lecturer

## Professor Valentine:

*Eighth Annual Distinguished Lecturer*

Continuing the Department's tradition of recognizing outstanding chemists in its annual series of Distinguished Lectureships, and under the sponsorship of Unocal, Dr. Joan Valentine, Professor of Chemistry, UCLA, was this year's honored lecturer. Dr. Valentine received her AB in Chemistry from Smith College and PhD from Princeton University. She was a research associate at Stanford University and an NIH postdoctoral fellow at Princeton. She taught at Rutgers University before joining the UCLA faculty in 1980.

Professor Valentine is an inorganic chemist with broad research interests in bioinorganic chemistry, dioxygen and superoxide chemistry, metalloproteins, the synthesis of models of metal-containing biologically important materials, and the role of metal ions in biological functions. During her April 7-8 visit at CSULB, Dr. Valentine not only presented seminars on her most recent research but also shared with the science students and faculty her views on the importance of science education and undergraduate teaching and research in universities. She spent much of her mornings and afternoons meeting with students and faculty who were delighted to have the opportunity to share ideas, knowledge, and the excitement of research with a warm and friendly colleague from a nearby university.

Dr. Valentine's first lecture, for an undergraduate audience, was "Oxygenation of Organic Substrates Mediated by Metal Ions and Complexes: Model for Monooxygenase Enzymes." The second day of her visit, the seminar topics were "Copper-Zinc Superoxide Dismutase: A Unique Binucleating Ligand" and "Studies of the Relationship Between Structure and Function in Cu/Zn Superoxide Dismutase."

The visit culminated with a reception and dinner in her honor.

## Former Faculty: Where Are They Now?

**Dr. Michael Cohen** (Lecturer 1984-85) has received his PhD in organic chemistry at Brandeis University.

**Robin (Ritter) DeRoo** (Part-time faculty 1983-86) and Robert DeRoo (BS Chemical Engineering 1985) were married in 1986. Robin teaches in a community college at present. The DeRoos proudly announce the arrival of twins, Stephanie Kristina and Kristopher Phillip, born on June 8, 1987.

**Dr. Isadore Goodman** (Lecturer 1981-84) is an Assistant Professor at Pierce College, Woodland Hills, CA.

**Dr. Linda McGowan** (Assistant Professor 1979-82) will be leaving Oklahoma A&M University this summer for an Associate Professorship at Duke University in Durham, NC. Her husband, Steve (MS 1983), will be employed in the Research Triangle with the National Institute of Environmental Health Sciences. Steve and Linda have two children, Jenna (5) and Michael (2 1/2).

**Dr. Poly Ping** (Part-time Lecturer 1982-83) is working on the development of new fermentation products for animal health applications. Her son, Timmy, is now two. Polly lives in New Haven, CT.

**Dr. Richard Paselk** (Lecturer 1974-76) is Chairman of the Chemistry Department at Humboldt State University.

**Dr. Judith (Gee-Clough) Plesset** (Lecturer 1976-78) is Assistant Program Director at the National Science Foundation in Washington, DC.

**Dr. Terri Shaw Speakman** (Lecturer 1980-83) continues as Senior Market Analyst for U.S. Borax Research in Anaheim, CA. She and husband, Dave, have moved aboard their sailboat.

**Dr. Philip Stepanik** (Lecturer 1984-86) is a postdoctoral associate at St. Jude Hospital in Memphis, TN. He is currently trying to induce rabbits to produce polyclonal antibodies against the UMP synthase protein, the protein having the last two activities for the *de novo* pyrimidine biosynthetic pathway.

**Dr. C. Grant Willson** (Lecturer 1973-74) has received IBM's highest technical honor, appointment as an IBM Fellow. His interests lie in the area of the role of chemistry in microelectronics.

## BS in Biochemistry, A New Program

Chemistry degree options at CSULB expanded this year with the final approval of the long-anticipated BS program in biochemistry. The new degree, officially in existence since fall of 1986, is already proving popular. In addition to a steady stream of inquiries and major changes by students already enrolled at CSULB, University records, as of the end of June, indicate that 31 students new to the University, most of them freshmen or junior transfers, have declared their intent to pursue a degree in biochemistry.

The degree program combines a solid foundation in general, quantitative, organic, and physical chemistry with courses in biochemistry (including experimental biochemistry), physiology, genetics, and microbiology. The program differs from other life science majors in its mathematical rigor, requiring both a full year of calculus and physics along with year of physical chemistry.

Compared to the BA in Chemistry, it requires much more comprehensive training in the biological sciences. The program should easily satisfy the requirements of professional schools, and is ideally suited to those students interested in graduate work in biochemistry, and those planning careers in fields such as bio-technology.

The biochemistry laboratory course, once an elective taken by a handful of students, will be a central part of the new major. In preparation for a greatly increased student enrollment, the course has been substantially revised, and a matching grant from the NSF College Science Instrumentation Program will permit the purchase of equipment for student use, worth approximately \$77,000.

## Masters Degrees Awarded in Chemistry and Biochemistry

All MS degrees awarded through the Department of Chemistry require original laboratory research, which must ter-

minate in an acceptably written MS thesis. There are two MS programs in the department, MS in Chemistry and MS in Biochemistry. During the past year, six MS degrees were awarded, four in Chemistry and two in Biochemistry. MS recipients, their undergraduate institutions, thesis titles and thesis sponsors are given:

### Chemistry

**Yucel Fatma Burdurlu**, BS, Hacettepe University, Turkey. "Synthesis of Ring Substituted Derivatives of Dicarboxyl-cyclopentadienyl Iron Alkyl Complexes" (Berryhill).

**David W. Tomlinson**, BA, Earlham College. "The Mechanism of Embryotoxicity of Phthalate Esters in Brine Shrimp *Artemia Salina*" (Acey).

**Roswita Trismitro**, BA, CSULB. "Oxidation of 2-Mercaptopyrimidine by Macrocyclic Complexes of Silver (II) Cyclams" (Po).

**Van Hoy Woo**, BS, UC Irvine. "Pyrolysis/Microcoulometric Determination of Total Organic Halides in Solid and Oily Wastes" (Lieu).

### Biochemistry

**Kelly G. Carrol**, BS, UC Davis. "Total and Multimeric Analysis of von Willebrand's Factor" (Berry).

**Rita G. Reggio**, BA, Concordia Teacher's College. "Characterization of Thyrotropin-Induced Increase in Iodothyronine Monodeiodinating Activity in Dog and Mouse" (Cohlberg).

## Dr. Leroy Hood

Dr. Leroy Hood, the distinguished biochemist and chair of the Division of Biology at Caltech, gave a pair of seminars at CSULB on March 11. Hood's visit was in



Dr. Leroy Hood.

recognition of the new BS degree in Biochemistry and was sponsored by the Natural Science Spring Symposium

(Continued on Page 12)



## Faculty/Graduate Student Seminar Series

During the 1986-87 academic year, the Chemistry Department Seminar Series, under the able direction of Dr. Mike Monahan, maintained its reputation as a forum for challenging discussions of current research. In addition to seminar speakers mentioned separately, the series featured the following scientists: Fred Esch, The Salk Institute for Biological Studies, *Current Advances in Microsequencing*; Robert C. Fahey, UC San Diego, *Mechanism of Action of a*

*Radio-protective Drug (WR2721)*; George Olah, USC, *Studies on Carbocations, Onium Ions and Ylides in Hydrocarbon Synthesis*;

Wesley Elliott, Fiske University, *Synthesis of Isoquinoline Alkaloids by Design and Serendipity*; Roger Acey, CSULB, *Metal-Binding Proteins in Developing Artemia salina*; Jack Richards, California Institute of Technology, *Mutagenesis in the Study of Structure/Function in Proteins*; Hung Fan, UC

Irvine, *A Recombinant DNA Approach to Gene Expression in Retroviruses*; Warren Hehre, UC Irvine, *Modeling Chemical Reactions*; Anthony Fink, UC Santa Cruz, *The Protein Folding Problem*;

Sunny Chan, California Institute of Technology, *Cytochrome C Oxidase: Nature's Elegantly Designed Proton Pump*; Thomas Goynes, CSULB, *How Neutrophilic White Blood Cells Kill Bacteria: Oxygen and Peptide Mediated* (Continued on Page 12)



Dr. Seyhan Ege, U of Michigan.

### Dr. Seyhan Ege

Dr. Seyhan Ege visited the Department most of the day on February 11th. Dr. Ege is author of the organic chemistry textbook currently used in our Chemistry 321AB sequence. She is Professor of Chemistry at the University of Michigan. A native of Turkey, Dr. Ege came to this country for her MA degree at Smith College, Northampton, MA, and her PhD degree at Michigan. During her stay at CSULB, she found time for conversation with students who were presently studying from her text, visited a couple of 321A lab sessions and attended a reception in her honor. Her seminar on current research at Ann Arbor was titled "Photo-chemical Generation of Heterocyclic Reactive Intermediates." She is interested particularly in photolytic reactions involving nitrogen heterocycles.



Dr. Stanley Miller, UCSD.

### Dr. Stanley Miller

Dr. Stanley Miller addressed a capacity audience in one of the large science lecture halls on April 22. His subject was the "Origins of Life on Earth" and, although scheduled as a regular Chemistry Seminar, the talk attracted students and faculty from all departments in Natural Sciences. Dr. Miller is internationally recognized for the classic "Miller-Urey Experiment," a synthesis of amino acids under conditions simulating those in a distant geological past. The experiment, done in University of Chicago chemistry laboratories in 1953, involved an electric discharge in a mixture of methane, hydrogen, water and ammonia. Dr. Miller has been on the biochemistry faculty at UC San Diego for many years and has continued his research into prebiotic syntheses and the chemical basis for the genesis of life.



Dr. F.S. Rowland, UCI.

### Dr. F. S. Rowland

A seminar speaker whose work is cited often and widely was Dr. Frank Sherwood Rowland of UC Irvine who spoke on April 1st. His timely topic, much in the news during the Spring Semester, was "Chlorofluorocarbon Compounds and the Antarctic Ozone Hole." In 1974 Dr. Rowland published an article proposing a mechanism for the depletion of the ozone layer which absorbs much of the sun's ultraviolet radiation before it reaches human bodies at the earth's surface. A complex of free radical chain reactions, originating from homolytic cleavage of chlorine-carbon bonds in aerosol propellants, was the reported cause. The seminar outlined recent research in atmospheric chemistry with emphasis on current knowledge and speculation concerning impact on the ozone layer.

**Dr. Leroy Hood: From Page 10**

(translation: this is one of the places where your lottery money goes). The noon talk entitled, "Immunity and the Immunoglobulin Gene Superfamily," described the work done in Hood's lab on elucidating the molecular basis of immunoglobulin diversity. In an afternoon lecture entitled, "Biotechnology and the Medicine of the Future," Hood described the automatic DNA sequencer and the other microanalytical instruments developed in his laboratory and described the potential of the new techniques in recombinant DNA technology and protein chemistry for work on problems related to human diseases. Both talks were well attended by people from different departments, and listeners were unanimous in their praise of these unusually exciting lectures.

**Seminar Series: From Page 11**

*Mechanism*; Marco Lopez, UC San Diego, *Heme Model Systems*; Neil Schore, UC Davis, *Application of Cobalt Complexes to Organic Synthesis Problems*; Randall Moss, UC Los Angeles, *Based Induced 1,4-Eliminations*; M. Steven McDowell, CSULB, *Oxygen Activation: The Role of Metal Ions and Protons in Aprotic Media*; Thomas Flood, USC, *Reactions of Hydrocarbons in the Coordination Sphere of Soluble Complexes of Iridium and Osmium*; Peter Griffiths, UC Riverside, *Supercritical Fluid Chromatography: Theory, Instrumentation, and Peak Identification*; Thomas Bruce, UC Santa Barbara, *Fundamental Studies of Porphyrin Chemistry Which Contribute to our Understanding of Catalase Peroxidases in Cytochrome P450*; Harry Morrison, Purdue University, *Bioorganic Chemistry: The Urocanic Acid Story*.

Special thanks are extended to Terry Cox and Dow Chemical USA for financial support of this important academic endeavor.

- CSULB employs 4,181 persons, among whom are 1,025 full-time faculty and 864 part-time faculty.

**Current Activities of Some of Our 1987 Graduates**

David H. Benton, BS  
 Timothy P. Brady, BA  
 James G. Breitenbucher, BS  
 Elizabeth A. Brinkman, MS  
 Rosli B. Bujang, BA  
 Yucel F. Burdurlu, MS  
 Robert T. Chetwood, BS  
 Katherine L. Christopherson, BS  
 Angela C. Daniels, BS  
 Victor M. De La Loza, BA  
 Paul D. Fortaleza, BA  
 Dwayne D. Gergens, BS  
 Christopher G. Hendrix, BA  
 Michael Hook  
 Randall M. Jensen, BA  
 Monica C. Keindl, MS  
 Janet C. Kiang, MS  
 Teresa R. F. Knapp, BA  
 Ario W. Koentjoro, BA

Kyung Hee Lee, BA  
 Timothy MacAndrew, BS  
 Patricia M. Markovich, BA  
 Larry C. Matsumoto, BA  
 Kevin R. Miller, BA  
 Thomas P. Murphy, BS  
 Richard Nighswonger, BA  
 Stuart Nowinski, MS  
 James T. Pappas, BA  
 Andrew Rozenstraten, BS  
 Annette E. Reid, BA  
 Brian D. Schmidt, BS  
 Coleman A. Smith, BS  
 Amani A. Tadros, BA  
 David S. Thomas, MS  
 Chinh T. Tran, BS  
 Roswita Trismitro, MS  
 Gerald Y. Uyesato, BA  
 Tracey L. Wheeler, BA  
 Van H. Woo, MS

McDonnell Douglas Corporation, Long Beach  
 MS program, CSULB  
 MS program, CSULB  
 PhD program, Stanford University  
 Returning to Malaysia to teach  
 Ameritone Paint Corporation, Long Beach  
 MBA program, CSULB  
 Allergan Laboratories, Irvine, CA  
 Michelson Laboratories, Inc., Los Angeles  
 Science teacher, Los Angeles School District  
 Science teacher, Los Angeles School District  
 PhD program, UC Irvine  
 McDonnell Douglas Corporation, Long Beach  
 Curtis & Tompkins, Long Beach  
 Science teacher training program, CSULB  
 PhD program, UC Irvine  
 ARCO Corporation, Carson, CA  
 Pharmacy School, UC San Francisco  
 Returning to Indonesia to work in tanning Industry  
 Pharmacy school, USC  
 PhD program, Brown University  
 Science teacher training program, CSULB  
 BCL Associates, Long Beach  
 MS program, CSULB  
 McDonnell Douglas Corporation, Long Beach  
 Champion Chemical Company, Whittier  
 Instructor, Pasadena City College  
 GAF Corporation, Costa Mesa, CA  
 Medical school, UC Los Angeles  
 MS program, CSULB  
 Engelhard Corporation, Anaheim, CA  
 PhD program, UC Davis  
 Angus Biotech, Wilmington, CA  
 PhD program, UC Davis  
 Chemistry Department Stockroom, CSULB  
 Pharmaceutical Company, Indonesia  
 Pharmacy school, UC San Francisco  
 Science teacher training program, CSULB  
 PhD program, UC Irvine

**Alumni News**

1960

The news appearing in this section is extracted from alumni responses to the *Newsletter* mailing.

Please use the inside of the back page of this *Newsletter*, together with the enclosed, post-paid envelope, to tell us something about yourself for the 1988 *Newsletter*. If you enclose a photo, preferably black and white, we will attempt to print it, space providing. Please let us hear from you!

**Dr. Robert A. Flath, BS; PhD UC Berkeley**; is a research chemist for the U. S. Department of Agriculture in Albany, CA, working on attractants for tropical fruit fly pests.

1961

**Dr. Fred H. Dorer, BS; PhD U of Washington**; is Vice President for Academic Affairs at California State College, Bakersfield. "It is a nice campus and an enjoyable community."

1962

**Dr. G. David Homer, BA, MS 1966; PhD UC Davis**; is Associate Scientist at Aerojet Technical Systems in Sacramento, CA. "My work is in the area of ad-

1959

**Arne Nielsen, BS**, recently retired from Beckman Instruments, is presently in the teacher training program at CSULB, preparing to become a high school science teacher. He was a charter member of the CSULB chapter of Kappa Sigma.

(Continued on Page 13)

## Alumni News: From Page 12

vanced propulsion systems for aerospace applications; i.e., space shuttle, orbital transfer vehicles, National Aerospace Plane (second-generation space shuttle) and expendable launch vehicles. Specifically, I'm concerned with advanced fuels and material science (carbon-carbon composites, ceramics, and refractory materials). Close coordination of my work with several other disciplines is required."

**Dr. Robert O. Hutchins**, MS; PhD Purdue U; is Chairman of the Department of Chemistry at Drexel University in Philadelphia, PA. He was the recipient of two recent honors. He was named Outstanding Alumnus of the School of Natural Sciences at CSULB and was presented with an award at the 1987 commencement of the School. He also received the Philadelphia Section of the ACS award in organic chemistry in 1987.

**John Jasnosz**, BS, is a chemist for Hill Brothers Chemical Company in City of Industry, CA.

**Dr. Richard Parker**, BS; PhD U of Washington; is Professor of Chemistry at New Jersey Institute of Technology in Newark. "My time is split between teaching, research and administrative duties. Presently, I am teaching undergraduate physical chemistry to a class of 27 students (spring 1987), doing research on enhancement of degradation of trace organic pollutants in water and administering the Department and Institute Safety Programs."

## 1963

**Dr. Dana G. Marsh**, BS; PhD UC Riverside; is Associate Professor at Rochester Institute of Technology. His appointment followed 18 years at Xerox Corporation in research and engineering. He is presently teaching in the Center for Imaging Science and the Chemistry Department where he is coordinator for the Industrial Associate Program.

## 1964

**Neil R. Benham**, BS, is Chief Chemist with The Monarch Rubber Company, Inc. in Baltimore, MD, and is a member of the Rubber Division of the ACS.

**Per B. Christiansen**, BS, is general manager of the Utility Chemicals Group for Nalco Chemical Company, based in Oakbrook, IL. Nalco, a Fortune 500 company, is an international producer of specialty chemicals and services for water and waste treatment, pollution control, petroleum production and refining, papermaking, mining, steelmaking, metalworking and other industrial processes.

**Dr. Evord F. Knights**, BS; PhD Purdue U, MBA CSU Fullerton; is Vice President of Planning and Development for Unocal. He and Mrs. Knights announce the birth of a son, Karl, in November 1986.

**William Timberlake**, BS; MS UCLA; teaches chemistry at Los Angeles Harbor College and is Treasurer of the UCLA Chemists' Association.

## 1965

**Judy Adams**, BS; MS Indiana U; is a chemistry and mathematics teacher at North Idaho College in Coeur d'Alene, ID.

## 1966

**Dr. Oliver M. Brown**, BS; PhD Kansas State U; is Associate Professor of Pharmacology, State U of New York Science Center, Syracuse, teaches medical students and does research in neurophysiology. He and his wife, Joanna Guglielmino, spend as much time as possible in Maine. Joanna is a veterinarian.

**Dr. Dennis L. Fost**, BS; PhD Purdue U; is Vice President for Research for Mona Industries, Inc. in Paterson, NJ.

**Dr. Hyun Chai Jung**, MS; PhD U of Southern California; is Professor of Chemistry at Kyung Hee University in Seoul, Korea.

## 1967

**Dr. John I. Crowley**, MS; PhD UC Berkeley; passed away suddenly and unexpectedly in July, 1986. Dr. Crowley was Research Scientist at IBM in San Jose since receiving his PhD in 1971. His master's thesis was conducted under the direction of the late Dr. Robert B. Henderson at CSULB and was entitled, "Reactions of Tetramethylcyclobutane-1,3-diol."

**Dr. Alan J. Senzel**, BS; MS, PhD UC Los Angeles; is a consultant for Integrated Laboratory Systems; Research Triangle Institute; Combustion-Engineering, Environmental Monitoring and Services Inc; Merck, Sharp and Dohme; and Engineering-Science, all located in North Carolina. His consultancies are in the area of environmental chemistry and chemical safety. His wife, Phyllis, is Wake County Child Support Supervisor in North Carolina.

**Dr. Trina Valencich**, Student, BS; PhD UC Irvine; is Assistant Professor of Chemistry at California State University, Los Angeles. She and her husband, Dr. Edward Rosenberg, Professor of Chemistry at CSU Northridge, announce the birth of their child, Jennifer Alexis.

## 1968

**Alan A. Distefano**, BS, is Vice President for Sales and Marketing for Hamilton Company in Reno, NV.

**Donald Ferm**, BS, is Senior Research Chemist in the Consumer Products Research Department at U. S. Borax Research Corporation in Anaheim, CA.

**Timothy J. McGauley**, BS, received his MS in Chemistry from California State University, Northridge, and now lives in Pine Bluff, AR.

**Raymond E. Ouellette**, BS, is Staff Environmental Engineer for Shell Western E&P in Bakersfield, CA.

## 1969

**Dr. Reid H. Bowman**, BS; MS Princeton U, PhD UC Santa Barbara; is a group leader at Dow Chemical in Pittsburg, CA.

**Bernard L. Goeders**, BA, MS 1976, is a systems analyst for the City of Costa Mesa, CA.

**Dr. John E. Leonard**, BS, MS 1973; PhD UC Riverside; is a research biochemist at the Cancer Center at UC San Diego. He received a \$303,000 award to continue studying the processes by which cells internalize and process antibody-toxin conjugates. He submitted four manuscripts for publication recently and



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has presented various aspects of his work before the American Association of Immunologists and the Tissue Culture Association and at the International Congress of Immunology. He was selected for membership in the American Association for Cancer Research and the American Association of Immunologists. He and his wife, Elizabeth, announce the birth of their first child, Matthew John, on May 7, 1986.

**Dr. William R. Moody**, Student; BA Music CSULB, MD Guadalajara; opened his practice of pediatrics in Fallbrook, CA, together with his wife, Ana Nowak, MD. "I am enjoying my private practice of pediatrics; we are learning about things that medical school ignores--the basics of surviving in the medical practice these days!"

**Dr. John S. Nelson**, BS; JD Loyola Law School. "My practice (as an attorney) continues to grow, and I am currently involved in litigation relating to exposure to formaldehyde, beryllium oxide and lead as a component of ceramic glaze. I added an associate on April 1, 1987. In view of the continued explosion in 'toxic tort' litigation and the mass of legislation dealing with toxic substances currently pending at both the state and federal level, I continue to see tremendous opportunity for chemists who decide to enter the legal field."

**Gary W. Valentine**, MS; MBA Loyola Marymount U; is Marketing Manager of Microwave Technology for Hughes Aircraft Company. Gary has just completed his ninth year at Hughes and his fourth year of service on the CSULB Chemistry Advisory Council. In June of this year he became President of the International Society for the Advancement of Material and Process Engineering.

1971

**James Merrill**, BS, is a chemist at Nutrilite Products Company, Buena Park, CA, testing raw materials, vitamins, minerals and pharmaceuticals by instrumental and wet methods.

**Darrell A. Nolta**, Student; BS Zoology CSULB, BS Electrical Engineering U of Southern California; is a computer sys-

tems engineer at TRW in Redondo Beach, CA.

1972

**William Buchanan**, BS; MS UC Los Angeles, M Md Sc Harvard School of Dental Medicine; is Assistant Professor of Periodontics at the University of Mississippi Dental School.

**Richard L. Jacobs**, MS, is President of Polymer Engineering Corporation, Oxnard, CA. "I recall my experience at CSULB as one of the most important of my education. Your department made it possible for me to obtain my graduate degree in chemistry by taking evening courses until I could fit the graduate research into my daytime working schedule. I have straddled the two worlds of academia and industry for so long. I managed to take an evening course in chemistry or other subjects every semester from the time I entered industry at 23 until I was 40."

1973

**Kerwin C. Bennett**, Student, received his law degree at Gonzaga University in Spokane, WA, and is now Attorney at Law with the firm of Howard and Owens, P.A. in Coeur d'Alene, ID.

**Elliott Berkihiser**, BS, is an environmental chemist for Boeing Aircraft in Seattle, WA.

**Dr. Walter Alan Boyle III**, Student; MD UC San Francisco; is a critical care anesthesiologist at the UC Davis Medical Center in Sacramento, CA.

**Larry Clarke**, BS, is employed in chemical sales for the Tennessee Chemical Company, Atlanta, GA.

**Dr. Robert Rona**, MS; PhD Rutgers U; is Research Specialist for Sedlow, Inc. in Garden Grove, CA. "Acrylic plastics used for aircraft transparencies takes up much of my research efforts. I have now been with Swedlow, Inc. for four years and find it more challenging than ever. At home, our family is growing. I have two daughters, 8 and 10, and a stepson, 12. Not only that, but my wife, Rebecca, is expecting another one in July!"

1974

**William E. Campbell**, BA; BA Economics Stanford U; is Hospital Data Processor for AMI-Tarzana Regional Medical Center in Tarzana, CA. "I have migrated to Data Processing where many of the analytical skills gained from my chemistry studies are brought to bear in order to 'debug' and evaluate applications. I have been married to Carol Orell since 1981, and we have a daughter, Gwendolyn, 2 1/2."

**Dr. Debra Marr-Leicy**, BS; PhD UC San Diego; is Senior Scientist with Molecular Electronics Corporation, Torrance, CA, where she is responsible for the chemical/materials aspect of the business. "I have very positive memories of my years in the Chemistry Department and the knowledge that I gained there, and I feel that the students graduating from the department have a solid fundamental grasp of the subject, both in the textbook sense and in the laboratory."

1975

**Chester Callaway**, BA, is an analytical chemist for National Testing Standards in Anaheim, CA.

**Peter Harney**, Student; MS U of Hawaii; is in the PhD program in the Microbiology Department at USC.

**Dr. John Landrum**, BS, MS 1978; PhD U of Southern California; is Associate Professor of Chemistry at Florida International University in Miami. He has just received \$70,000 in grant funds from the National Institutes of Health in addition to his MBRS grant, also funded from the NIH. He and Mrs. Landrum report the birth of their second child, Elizabeth Christine, July 2, 1986.

**Dr. Tony McLaughlin**, BA; DDS U of Washington; is in his fourth year of private dental practice in Redmond, WA.

**Stuart Nowinski**, BS, MS 1987, has accepted a position as an instructor in chemistry at Pasadena City College.

**Maria Erlinda C. Sarno**, MS, is Manager, Immunoglobulin Research and Development for Hyland Laboratories, Division of Travenol, in Duarte, CA.

## 1976

**Dr. David Kanne**, MS; PhD UC Berkeley; is a research chemist with Stauffer Chemical Company in the San Francisco Bay area. "Over the last two years I've been working on the synthesis of a bridged nicotinoid which possesses high activity at the nicotinic receptor. In September of last year I went to Berlin to present the work at the IX International Symposium on Medicinal Chemistry. On the home front Patricia (5) and Melissa (8) are enjoying kindergarten and third grade, respectively. Louise is busy with her assistant teaching job in Tiburon." [Editor's Note: The work David mentioned is described in *JACS* 1986, 108, 7864.].

**Michael Yuen**, BS, is a member of the Technical Staff, Physical Scientist I, at Hughes Aircraft Company in El Segundo, CA.

## 1977

**Ray Calloway**, BA, continues as a chemist at Aerospace Corporation and as a member of the CSULB Chemistry Advisory Council.

**Sister Linda Cunningham**, MS, Order of the Sisters of St. Joseph of Orange, Orange, CA, works at the free clinic recently opened by the order in a poor area of Santa Ana. The sisters operate seven hospitals, among which are St. Joseph's in Orange and St. Jude's in Fullerton.

**Kitty Marie (Taylor) McNey**, BS; BS Business CSULB; is Senior Information Specialist for Allergan Pharmaceuticals in Irvine, CA.

**David Oliver**, BS, MS 1979, has been a chemistry and physics instructor at Oxnard Community College, Oxnard, CA, for seven years. He and Karen have two children, Michael (5 1/2) and Janine (3), a cat and an 8' boa constrictor. His present hobby is building a four-seater airplane to enable him to visit friends across the country.

## 1978

**Dr. Betty Jane Burri**, MS; PhD UC San Diego; is a research chemist with Western Human Nutrition Research Cen-

ter (Agricultural Research Service, USDA) on the Presidio in San Francisco. She is working on vitamin A metabolism. Betty and Kurt Annweiler were married in December, 1984.

**Dr. Raymond E. Lyons**, BA; MD U of Minnesota; is a neurology resident physician at the St. Louis University Medical Center. He is in his second year of a four-year residency program, having finished his first year in Sioux Falls, SD.

**Dr. Marianne Marsi**, BS; PhD UC Los Angeles; is a research chemist at duPont's Experimental Station in Wilmington, DE.

**Dr. Kurt A. MacLean**, BA; JD UC Los Angeles; is practicing patent law with the firm of Poms, Smith, Lande & Rose in Los Angeles. "Patent law is a growth market because there is an overall shortage of qualified patent attorneys. Accordingly, I feel safe in saying that any of your graduates who are willing to put up with the rigors of a legal education will have little or no difficulty finding employment offering significant compensation."

**Daniel Peek**, BA, is a PhD candidate in the Crop Science Department at Oregon State University, Corvallis. He and his wife, Becky, announce the birth of their son, James.

**Dr. Robert C. Sween**, BA; DDS Northwestern U; is practicing dentistry at the Village Dental Center Building in Long Beach.

**Gary Tietavainen**, BS, MS 1980; MBA Pepperdine U; is an environmental engineer for the ARCO-Watson Refinery in Carson, CA.

**Gerald E. Wuenschell**, BS, is completing his work for the PhD in organic chemistry at USC.

## 1979

**Tom Augimeri**, Student; BA Psychology, BS Business Administration CSULB; is a computer programmer/analyst for Hughes Aircraft Company in El Segundo, CA.

**Stephen Fritch**, MS, continues as a criminalist with the Long Beach Police Department.

**Dr. Jeffrey Hagenah**, BS; PhD UC Los Angeles; is a research chemist in the Inventive Research Program at the Ortho Research Center, Ortho Agricultural Chemicals Division of Chevron Chemical Company in Richmond, CA. Ortho Research occupies a new \$38 million, 137,000 square foot facility overlooking San Pablo Bay.

**Tom Johnson**, BS; MS, U of Washington; lives in the Le Marais section of Paris, France, where he works in fashion modeling for French and German fashion magazines.

**Dr. Stephen Jones**, MS; PhD UC, Riverside; left IT Analytical Services and is now with BCL Associates in Long Beach, CA.

**Patrick McKay**, MS, is a biochemist at Genentech. "I'm involved in protein purification on products related to animal health care, as well as starting on tissue culture work in our group's new research area, Developmental Biology. The tissue culture is a new interest for me. On the home front, Brian is rapidly approaching the "terrible two's"!

**Christopher L. Ritland**, BA, is the Pesticides Chemist for the Nevada State Department of Agriculture. "Considering our budget constraints, we have a fairly nice lab, making extensive use of GLC, HPLC, Ion Chromatography, UV-VIS, IR and AA Spectroscopy. The job is very rewarding, and my training from the CSULB Chemistry Department is invaluable."

**Wendy Robbins**, BA, is an analytical chemist for Ceramics Process Systems in Natick, MA.

**Duane R. Smith**, BS, MS 1982, is a graduate student in the PhD program at Cornell University, Ithaca, NY, and has completed his second year. His research is in the area of high-resolution, secondary ion mass spectrometry. His wife, **Vivian**, BS 1985, is working as an analytical chemist in the Department of Food Sciences.

**Dr. Curtis Winters**, BS; MD U of Southern California; completed a residency in anesthesiology at UCLA Medical School and is presently a cardiac anesthesiology fellow at Methodist Hospital, Houston, Texas, working under

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the direction of Dr. Michael DeBakey. He and Jane Vollstadt announce their engagement and their forthcoming marriage on March 19, 1988. Jane, a nurse, and Curtis met at the UCLA Medical Center.

**Dan H. Woo**, MS, is Senior Engineering Technician with Shell California Production, Inc., in Huntington Beach, CA. Dan and Joyce happily announce the birth of a girl, Brianna May. Dan reports that his sister, **Martha**, MS 1978, and her husband, Henry, became parents six months earlier. Future recruits for the CSULB Chemistry Department?

1980

**Dr. Mark W. Brisley**, BA; DDS U of Southern California; has his own dental practice in Laguna Beach, CA.

**Dr. Thomas R. Eldridge**, BA; DC Los Angeles College of Chiropractic; "lives, works and skis in Denver, CO."

**Tina Kishishita**, BA; PharmD UC San Francisco; is a staff pharmacist at the Veterans Administration Hospital in Long Beach, CA. Since graduating from pharmacy school in 1980, Tina has travelled extensively in Western Europe.

**Dr. Robert E. Klenck**, BA; MS U of Arizona, MD U of Southern California; began his second year of a five-year orthopaedic surgery residency. Susan, his wife of seven years, is continuing as a supervisor at IBM.

**K. Scott Marsi**, BA; MS San Diego State U; his wife Linda and their daughter, Aiko, (1 1/2), moved to Towaco, NJ, where Scott is employed by GAF Corporation as Supervisor of Commercial Development in the Surfactant Chemicals Division. His work involves advisement to Applications Research and market research and development.

**Dr. Joseph M. Molina**, BA; MD U of Southern California; completed his residency in internal medicine at the Johns Hopkins Hospital and moved to San Diego, CA, where he is now a post-doctoral fellow in endocrinology at the UCSD School of Medicine in the Metabolic Research Unit of the San Diego VA Hospi-

tal. "I am investigating the mechanism of insulin action and the pathogenesis of the insulin resistance seen in non-insulin dependent diabetes." He is author of a forthcoming article in the *American Journal of Clinical Pathology*.

**Dr. Kirk M. Morgan**, BA; MD Case Western Reserve; is starting his last year of ophthalmology at Case Western Reserve and plans to do a fellowship in retinal diseases and surgery. "I have been actively involved in research on the biochemistry of ocular neovascularization and last year published a paper called 'Beta-N-Acetylglucosaminidase: possible role in ocular neovascularization.' So, as you can see my chemistry background has been a big help."

**Karen M. Rogers**, BA; BS Criminalistics 1979; is Senior Quality Assurance Technologist with Taco Bell, Inc. in Santa Ana, CA.

**Dean E. Sequera**, BA, MBA 1984, is Spectroscopy Product Manager for Shimadzu Scientific Instruments in Columbia, MD. "I am attending lots of seminars at the Smithsonian and am learning Japanese. In my current role in a Japanese company, it comes in handy!"

**Stephen Staphanos**, BA, is Principal Applications Engineer in the Process Instruments Division of Beckman Industrial. He recently authored an article, "Applications of capillary columns in on-line process gas chromatography," appearing in *Analysis Instrumentation*.

**Ed Wilson**, Student, is Laboratory Director for Brown and Caldwell Laboratories in Pasadena, CA. He reports that he is reviewing designs for the new 25,000 square-foot facility which should be ready for occupancy in March, 1988. He was recently appointed Vice President of the company.

**Dr. Kenneth Yamaguchi**, BS, MS 1981; PhD UC Riverside; is working on oxygen-activated complexes for L' Air Liquide located in Les Loges-en-Josas, France. "I am learning French very rapidly, skiing in the Alps and touring Europe."

1981

**Dr. David Cooper**, BS; PhD UC Irvine;

received his PhD in organic chemistry and is now a postdoctoral associate at UC Davis.

**James R. Denman**, BS, is Technical Supervisor in Materials Process Engineering at Hughes Aircraft, El Segundo, CA. He recently published an article, "A protective coating for the KU-Band reflector," with L. C. Maldoon, for the 31st International SAMPE Symposium, April, 1986. "I am currently working with fellow CSULB Chemistry grads, **Steve Bigus** and **Suzi (Dusablon) Smith**."

**Dr. Tim Erwin**, BA; PharmD U of Southern California; is a staff pharmacist with a major Orange County hospital facility and lives in Corona, CA.

**Dr. Thomas Harmon**, BA; MD U of Pittsburg; received his MD this year and is an intern at Kaiser Hospital in Los Angeles in general surgery.

**Kanella V. Huscroft**, BA, recently moved to a new home in La Habra, CA.

**Dr. Jack Long**, BA; MD U of Cincinnati; is in his second year as a resident at Wadsworth Veterans Administration Medical Center in Los Angeles, specializing in internal medicine. He and his wife are parents of their first child, Minna Rebecca, who was born December 15, 1986.

**Dr. Larry Manes**, BA; PhD UC Santa Cruz; received his PhD in 1986. Thesis title: "Structure elucidation of marine sponge natural products: development and application of NMR strategies." "I'm really enjoying my work here at Syntex and especially extra-curricular activities such as skiing, which I can now afford! I haven't done too much surfing lately, though."

**Dr. Paul Manos**, BA; DDS UC Los Angeles. "I'm in my third year of private practice and love being self-employed. My wife works in my office also."

1982

**John R. Berg**, BS, is a chemist with the Los Angeles County Sanitation Districts in Whittier, CA, doing quality control work.

**Dr. Mario Fernandez**, MS; PhD UC Ir-

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vine; completed requirements for his PhD in organic chemistry under the direction of Dr. Harold Moore on June 19, 1987. He will be a postdoctoral associate of Professor Sartorelli in Pharmaceutical Chemistry at Yale University.

**Pamela Hubler, BS, and Jeffrey Jetter, BS,** announce their engagement. Their marriage will occur early in 1988. Pamela is a chemist with IT Analytical Services and Jeff is a chemist with Unocal. (They met in an organic chemistry class in 1979!)

**Kevin Lucey, BA,** is Senior Chemist with Minirem Environmental Corporation in Los Alamitos, CA, and deals with emergency response to chemical, biological and radiological accidents.

**Dr. David Moromisato, BA; MD** Loyola Stritch U; is pediatric resident at Los Angeles County-USC Medical Center.

**Douglas Schoon, BA; MS** UC Irvine; is a chemist with Bacon Industries in Irvine, CA.

**Diana Talpos, BA,** is a medical student at UC Irvine. She recently coauthored a chapter in a book as a result of her research with Dr. Carl Cotman. The chapter is entitled, "The neuro-immuno endocrine connection." She plans to do a residency in neurology, and perhaps a research fellowship following her residency.

## 1983

**Dr. Marc Barajas, BA; PharmD** UC San Francisco; is the author of two recently published articles entitled, "The clinical pharmacokinetics of the new fluoroquinolone antibacterial agent ciprofloxacin," and "Enoxacin knocks 'em dead," both appearing in *CSHP Voice*. Marc is a resident in the Department of Pharmacy Services, U of Michigan Medical Center.

**Dr. Bradley G. Davis, BA,** received the degree of Doctor of Osteopathy on June 14, 1987, from the College of Osteopathic Medicine of the Pacific, Pomona, CA. He will be interning at Pacific Hospital in Long Beach, CA, and plans to specialize in family practice medicine.

**Dr. Donald Dillon, Student 1983,** received his DDS from USC School of Dentistry in May. He plans to work with his father and brother Tom, Student 1977. He reports that his brother, John, BS 1979, still lives in Salt Lake City, UT, practicing pharmacy.

**Brian Glaudini, Student; BS** Biology; continues as a student at the Los Angeles College of Chiropractic.

**Anna Martinez, MS** works at IT Analytical Services in Cerritos, CA.

**Thanh-Ha Nghiem, BA,** is a laboratory assistant at Rancho Los Amigos Hospital in Downey, CA.

**Ralf V. Reuland, BA; MS** Biochemistry Miami U; is a medical student at Wright State University in Dayton, OH. He and his wife, Mary, recently became parents of a baby boy, Konrad.

**Armando Samaniego, BA,** has finished his first year at the John F. Kennedy School of Government. He will graduate in 1988 with a joint degree MD/MPP (Medicine and Masters in Public Policy). He is currently working as the clinical coordinator for the Harvard Health Professions Program and during the summer of 1987 will be teaching a Health Policy course for this program.

## 1984

**Ihab Bishay, BS,** continues as a graduate student in chemistry at UC Irvine.

**Lori Childres, BA,** is a third-year student at the Washington University School of Dental Medicine and is seeing patients daily.

**Dwight W. Gergens, BS; MS** UC Irvine; is continuing in the MBA program at UCI and is a teaching assistant in the Chemistry Department.

**Ellen Greenman, BS,** is teaching mathematics at Hollywood High School.

**Yut Chuan Lan, MS,** is an analytical chemist with Shankman Laboratories in Los Angeles, CA.

**E. Michael Mosig, BA,** is in his fourth year of dental school at Georgetown

University. Mike is engaged to be married to Mary Lynn Lukasik, who is also a fourth-year dental student at Georgetown.

**Craig Owens, BA.** "I am continuing my medical education at Tufts University School of Medicine in Boston and loving it!"

**Theresa M. B. Rohr, BA,** continues medical school at Cornell University in New York City. "I'm trying to figure out what field of medicine to enter, and it is a very confusing decision. I am enjoying medical school and being in New York City and invite any of your students who may be in the area to come by or call."

**Susan Sheets, Student,** is a dental student at USC.

**Nancy Tuler Wildman, BA,** completed her second year as a high school chemistry and physical science teacher at Gahr High School in the Artesia-Bellflower-Cerritos Unified School District. "Teaching science has been interesting and rewarding. I appreciate the opportunity to play a role in the preparation of our youth for the future."

## 1985

**James Bonander, BS,** is a research chemist and lives in Port Angeles, WA. "I still use organic chemistry every day when dealing with polymers we use. My present responsibilities are the selling of our products and designing some of them. I've just completed my first defense bid."

**James P. Brophy, BS,** is in chemical sales with Mogul Division of Dexter Corporation. He and Paula are buying "fixer-upper" homes in their spare time to repair and put back on the market for rental.

**Joy Condon, BS,** is currently attending USC School of Pharmacy and has just completed her first year. During the summer of 1987 Joy was a research assistant with Dr. Roger Acey in the Chemistry Department at CSULB.

**Jocelyn Honda, Student,** is currently a second-year student at UC San Francisco.

**Hung Dwan Lee, MS,** is Chemist II with

1986

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IT Analytical Services in Cerritos, CA.

**Lily Anne Lim, BS**, reports "I'm working in the chemistry division at Ultrasystems, Inc., in Irvine, CA. My work involves the synthesis and characterization of B-N polymers. I use all of the techniques and tricks I learned from CSULB laboratory classes and independent research. I still have aspirations of becoming a lawyer and hope to enter law school in 1989."

**Kent W. Showman, BS**, is a chemist with TRW in Redondo Beach, CA. "My duties include both wet chemical and instrumental analyses involving routine and research-oriented work. Instrumentation includes AA, GC and HPLC. My present work deals with the characterization of sulfur-containing compounds in jet fuels for the Navy."

**Vivian Lassiter Smith, BS**, is a laboratory technician in the Department of Food Sciences at Cornell University while her husband, **Duane, BS 1979**, completes his PhD in Chemistry. She reports that Duane will be taking his oral examinations sometime during the summer of 1987. The Chemistry faculty awarded him a DuPont Teaching Prize for 1986-87 in recognition of his performance as a teaching assistant.

**Erin Besner, BA**, is an engineer with Northrop Aircraft in Hawthorne, CA.

**Kathy Christopherson, BS**, is a formulator with Allergan, Inc. "I work as a formulator of eye care products for contact lens wearers. It takes a lot of various kinds of chemistry to bring a product from its conceptual stage to the market."

**Paz Eilat, BA**, is a medical student in Hungary. He reports that "Life in Hungary is really nice. Everything is very cheap here; I eat a full meal in a restaurant for under a dollar, and a monthly unlimited pass for all public transportation is about one dollar. Hungary is a very western-like country. The city I live in is Sleged, population 200,000. Because of my background I was exempted from studying chemistry and physics, so I had only anatomy, histology, cytomorphology, Latin and Hungarian. The testing is by oral examination, the scores are announced in class, and everyone is welcome to sit in on the oral. This puts a lot of pressure on the student!"

**Peter Ferrera, Student**, began his first year of medical school at the University of Munich in May, 1987.

**Daniel Fields, BA**, has been accepted to Hahnemann University School of Medicine.

**Michael G. Peters, BA**, has completed his first year of medical school at UC Irvine.

**Annette Reid, BA**, will begin the MS program in Chemistry at CSULB this fall.

**Arthur Rojo, BS**, is research and development technician for Swedlow, Inc., in Garden Grove, CA. His second daughter was born May 9, 1987, and his work with Dr. Mark Anjo was published in the December, 1986, issue of *Analytical Chemistry*.

**Brian D. Schmidt, BS**, is a laboratory technician with Engelhard in Anaheim, CA.

**Deborah Simon, BA**, is a graduate student in the MS program in Chemistry at CSULB, working under the direction of Dr. Thomas Goyne. She hopes eventually to teach in a community college. On July 5, 1987, she and John Allison were married. John is a brother of **Mike Allison, BA, 1986**.

**Robert P. Sewell, BA**, is MTS Physical Scientist I with Hughes Aircraft in Fullerton, CA.

**Robin Underwood, BA**, is an Associate Engineer with McDonnell Douglas in Long Beach, CA.



**From the Chemistry Archives**

*Pictured above is one of our more remarkable graduating classes. Of the fourteen students shown, ten earned their PhD degrees in Chemistry. Six are now college and university professors. They are BS and MS candidates of the class of 1966. Left to right, front row: Dr. Hyun Chai Jung, Dr. Carolyn J. Tanksley, Dennis J. Allen, Dr. David M. Reuben, Richard A. Ebner. Row 2: Dr. Timothy G. Geiser, Dr. Alan W. Messing, Dr. Michael A. Cyr, Dr. John I. Crowley, Dr. Don W. Hayden. Row 3: Dr. James F. Myrtle, Dennis Van Westerhuyzen, Roy A. Johanson, Dr. Oliver M. Brown.*