

California State University, Long Beach

CHEMISTRY DEPARTMENT NEWSLETTER

THE FACULTY - (We thought you would like to see what they look like today.)

No. 1

May, 1976



Front Row Left to Right: Po, Jensen, Lieu, Tharp, Goldish, Henderson, Perlgut, Gee-Clough, Berry, Paselk. Back Row Left to Right: Maricich, Legg, Loeschen, Wikholm, Marsi, Bauer, Cohlberg, Mayfield, Baine, Devore, Senozan, Hutchins, Stern. Not Shown: Becker, Harris (Sabb.), Hunt, Kalbus, Kierbow, Liao, Osborne (Leave), Schaleger (Visiting Professor, Univ. of Hawaii), Simonsen (Sabb.), Wynston (Taiwan, Exchange Prof.)

THE FIRST TWENTY YEARS

In the beginning there was Ken Bartlett, with a fresh Ph.D. from Stanford, teaching all the chemistry courses then offered at Long Beach State. There was in 1954 one small lab in a temporary wooden building and an oversize closet of a storeroom, presided over by Arnold Gandred. And there were four students who in 1958 became the first to receive Bachelor's of Science in Chemistry from LBSC: Philip Anthony, Robert Barrett, Lloyd Peak, and William Rogers.

Then in the Fall of 1955 there came two more faculty, Becker and Henderson. In Summer, 1956, we moved into the first permanent building (now a part of SC-2) and that Fall Mayfield and Simonsen joined this faculty. Bartlett left in 1957 to teach in Oregon, and Parker (now Kierbow), Osborne, and Kalbus arrived. The next Fall Bowman (now Goldish) and Stern began their teaching careers here.

And the students came in ever-increasing numbers; these were the years when the department was doubling in size every four years. The second unit of the Science complex was occupied in 1959 and SC-3 was finished in 1962, but no major additions are expected now to the chemistry facilities.

The Master's Degree program in Chemistry began in 1959; the first graduate was Alan Bike, who completed his degree in 1961. Later, in 1967, we began a Master's Degree in Biochemistry, and in 1969 Donald Byers and Chung Har became its first graduates. In 1973 a Bachelor of Arts in Chemistry program was established.

By 1975 the Department had graduated 356 persons with degrees in Chemistry or Biochemistry. Now there are 164 undergraduate chemistry majors, and 45 master's students. The faculty consists of 26 full-time persons and additionally there are 7+ positions filled by part-time or graduate student teachers.



ATTENTION ALUMNI!

You are invited to attend the graduation exercises May 26, Wednesday, in the Inner Quadrangle - i.e. the upper campus. Prof. Max Delbruck, Nobel Laureate from Cal Tech will speak at about 6:00 pm.

There will be a reception honoring the graduates after the ceremony in the Student Union. Refreshments will be served. Please stop by.



DISTINGUISHED VISITORS:

DR. CARL DJERASSI

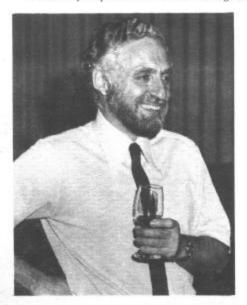
Dr. Carl Djerassi, an individual who balances the responsibilities of a Stanford chemistry professor, an internationally known research scientist, and a major business executive, all in a typical work-week, spent what he called a day of leisure at CSULB last May 9th. Sponsored by the School of Natural Sciences, in cooperation with the Office of Graduate Studies and Research and the University Research Committee, Professor Djerassi was booked for a full day of public appearances. He obviously enjoyed every minute of what some might regard as a gruelling schedule.

Highlight was a standing-room-only noon lecture in LH-150. The topic, "What Will Human Birth Control Look Like in 1985", was based both on Professor Djerassi's major research on steroid-related oral contraceptives and on a recent trip to the People's Republic of China where he learned of current Chinese production methods for the "pill" and discussed public policies in the area of population control. The presentation contrasted the reasonably optimistic view that the "hardware" for prevention of a population disaster is adequate with the pessimistic forecast that the "software" in the form of national and international policies is greatly lacking. A question period of more than an hour followed the sixty-minute lecture.

Another highlight was a meeting with students and faculty of the chemistry department. Here Professor Djerassi elaborated on his research philosophy and spoke in depth on one of this current loves, optical rotatory dispersion. He particularly enjoyed speaking with students.

Born in Vienna in 1923, Professor Dierassi came to the United States in 1939. He took his bachelor's degree summa cum laude from Kenyon College at age 19 and completed the Ph.D. degree at the University of Wisconsin before his 22nd birthday. It was at this young age that he embarked on his major research in steroid chemistry which culminated in synthesis of the first oral contraceptive pill. A long association as a top executive and research administrator with Syntex Corporation and its research division ended in 1972 when Professor Dierassi formed his own company, Zoecon Corporation. Zoecon develops hormonal insecticides.

The journal Science in an article in May, 1975, showed that Professor Djerassi is the 17th most cited author in the world of science. He has personally written six books and 850 articles for research journals. While serving as



research supervisor for a group of about 20 pre and post doctoral students, he also teaches both graduate and undergraduate courses. In his spare time he enjoys skiing, hiking and ranching. His ranch is noted for prize cattle and prize wine grapes.

This "chemist for all seasons" was brought to CSULB under the Distinguished Lecturer Series assisted by a grant from the CSULB Foundation.

DR. CALVIN VANDERWERF

Dr. Calvin A. VanderWerf, former Professor and Chemistry Department Chairman at the University of Kansas, past president of Hope College, and currently Dean of the College of Arts and Sciences at the University of Florida spent two days in our Department during the Fall Semester as a consultant in the NSF-sponsored College Chemistry Consultant Service. After interviewing faculty and students and meeting with the President and Dean, Dr. VanderWerf compiled a fourteen-page report describing the state and quality of the Department as he observed it. The substance of his remarks are contained in the following excerpts:

- "The work of the faculty...is truly an outstanding -- a remarkable -one."
- "The faculty has prepared a highly heterogeneous group of students with notable success for careers in Chemistry and related fields..."
- "The Department has maintained a steady level of significant published scholarship."

- "All this (the above) was achieved with heavy teaching schedules, minimal dollar support, and limited space and facilities...they appear to have done it with mirrors."
- "They (the students interviewed) were almost uniformly eager, interested, and responsive and displayed sincere appreciation and respect for the Department and faculty."
- "The curriculum is sound and has served well in the preparation of students."

The report contained many suggestions for improvement of our program and acknowledged uniformly heavy teaching loads, the need to up-date equipment and the necessity for additional secretarial service as problems requiring correction.

Copies of the report were sent to the Chancellor's Office, and to the President and Dean and were made available to faculty for study.



NEW SCHOOL OF SCIENCE

Beginning July 1, 1975, the new School of Natural Sciences was formed from the Departments of Biology, Chemistry, Geology, Microbiology, and Physics/Astronomy. These five icpartments had been part of the School of Letters and Science since 1967, when that School was formed by merging the then Divisions of Humanities, Social Sciences, and Natural Sciences. Prof. Roger Bauer was named Interim Dean to head the new unit.

Dr. Bauer came to this campus in 1959 after receiving his doctorate at Kansas State University in biochemistry. He had been chairman of the Chemistry Department from 1966 to 1975, but is better known to our students as a diligent and devoted teacher and researcher in biochemistry.

DEPARTMENT ELECTS MARSI

The Department elected Prof. Kenneth L. Marsi to a three year term as Chairman beginning September, 1975, following the appointment of Prof. Bauer as Interim Dean of the new School of Natural Sciences.

Since joining this faculty in 1961, Ken Marsi has been an outstanding teacher of organic chemistry and has achieved recognition as a researcher in the field of organophosphorus chemistry. In April, 1975, he was an invited speaker at the Reaction Mechanisms Conference at Pocono Manor, Pennsylvania, the research of his group at Long Beach is discussed in Dynamic Stereochemistry of Pentaco-ordinated Phosphorus and Related Elements, R. Luckenback and three papers are reprinted in Benchmark Papers in Organic Chemistry -Organophosphorus Stereochemistry, Part 1: McEwen and Berlin. Citations to work by him and his students also appear in Part II of the latter book.

NEW SCIENCE BUILDING UNDERWAY

Construction began last Fall on the \$3.5 million Microbiology Building, which is expected to be the last major addition to the Science complex on this campus. The four-story building is oriented north-south at the east end of the existing structures and ties in to SC-2 and SC-3. Completion is expected in Fall, 1977.

Although no classrooms are included, laboratories, offices and service areas for microbiological instruction and research are provided in the 47,500 square foot structure. Safety was the key idea in the design. Dust-free and sterile air is delivered to the laboratories after passage through dust filters, through activated charcoal to remove smog and chemicals, and through HEPA filters to stop organisms. A small negative air pressure is maintained in the labs to eliminate hazard of escape of air-borne organisms, and the air exhausted from the building is HEPA-filtered before discharge to the outside. The HEPA filters are 99.9% effective at removing organisms down to the smallest viruses. Modern facilities are provided for sterilization of glassware, media preparation, animal quarters, etc.

CURRENT RESEARCH GRANTS:

A. J. Berry, Long Beach Heart Association, \$7,800 for 1975-76.

J. H. Stern, LBHA \$7,900 for 1975-1976.

Tom Maricich, National Institutes of Health, \$20,000 for 1975-76 and \$31,000 per year for the next three years.

K. L. Marsi, National Science Foundation, \$80,000 for the period 1973-76.

Van T. Lieu, Petrolane Lomita Gas Company, \$12,000 for 1972-1976.

H. N. Po, CSULB Foundation, \$300 for 1975-76.

To: Chemistry Alumni

From: Ken Marsi, Chairman Department of Chemistry

Subject: Alumni Newsletter

This, our first Alumni Newsletter, begins an effort to promote better communication between our Department and its alumni and to relay news about you to other alums and to our faculty.

You are among 356 bachelor's and master's students receiving degrees since our University began granting degrees in Chemistry in 1958. Former graduates are successful chemists, physicians, dentists, businessmen, high school and college teachers. We are justifiably proud of the achievements of our alumni!

Whether this Newsletter continues is up to you. Please send information about your current position and other tidbits about you and your family. If you know the whereabouts of any alums on the enclosed list, please inform us.

Please let us hear from you!

LETTER FROM THE STUDENTS

by Neal Dixon

Each year, the Student Affiliates of the American Chemical Society sponsors a pizza party for the faculty, staff and students of the chemistry department. At this party, special awards are presented to students in recognition of their high achievement in five specified areas. These awards and the students to whom they were presented last year are as follows: (1) Outstanding Freshman Award; Paul Loh, (2) Analytical Chemistry Award; Mike Nishina, (3) Merck Award for Organic Chemistry; co-winners Rick Fujii and Neal Dixon, (4) Outstanding Senior Award; Paul VanCamp, (5) American Institute of Chemists Award: John Gradishar. This year the pizza party will be held in the month of May; the award winners are yet to be announced.

Funding for the pizza party is derived from the Student Affiliates safety glasses sale which is held at the beginning of each semester. With a great deal of help from the stockroom personnel, this year's safety glasses sale was a tremendous success. We were able to sell our entire stock both semesters, making a total sale for the year of over four hundred pair of safety glasses.

This year, in addition to the pizza party and safety glasses sale, the Student affiliates have participated in or sponsored a number of activities. Some of our most successful events have been the presentation of speakers from the USC School of Pharmacy on "Careers in Pharmacy", the CRC handbook sale, and the operation of a game booth in the Associated Students Bicentennial Fun

Elections for next year's officers will be held in April. The outgoing officers for this year are, Neal Dixon, President; Chris Machara, Vice President; Bill Starrman, Treasurer; and Rob Moss, Secretary. It is our hope that in the years ahead, the Student Affiliates organization will continue to grow and to be an integral part of the Chemistry Department and will continue in its function of providing service to the students, and acting as a medium of interaction between faculty and students.

VISITING PROFESSOR

Dr. Larry Schaleger from the University of Hawaii is visiting the Department during the academic year, 1975-76. He is teaching freshman chemistry, Chemistry 111A, and preparing videotapes for use in laboratory sections of this course.

FACULTY ON LEAVES:

- E. R. Harris; University of Canterbury, Christchurch, New Zealand. (Year sabbatical)
 - C. E. Osborne; (Year research leave)
- H. N. Po; Stanford University, Stanford (Semester sabbatical)
- D. H. Simonsen; (Year sabbatical in residence) continuing to serve as a CSULB representative to the State-wide Academic Senate.
- L. K. Wynston; Exchange Professor in Taiwan

OSBORNE RETIRES

This year sees the first retirement of a faculty member from the Chemistry Department. Professor Clyde E. Osborne will retire as of September, 1976. He came to the Department in 1957 after completing Master's Degrees at the University of California and the University of Wisconsin, spending some time in industry, and pursued further graduate work at USC. He has taught organic chemistry and quantitative analysis in his years at CSULB. In 1972–73 Prof. Osborne spent a sabbatical leave working at the University of Heidelberg. He plans to devote his time to research and writing.

WHAT DO YOU THINK?

We need a title for this newsletter. Among those suggested are:

Beach Chemist Chem Kurzschrift Chemistry Chatter Chemistry Newsletter Periodic Function Test Tubes The Alum Tablet The 19er Chemist The 49er Chromatogram The Retort

What is your preference?

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