# CALTECH NFWS

PUBLISHED FOR ALUMNI AND FRIENDS OF THE CALIFORNIA INSTITUTE OF TECHNOLOGY

### **First Kenan Professor:** Harry B. Gray

Dr. Harry B. Gray, 39, Caltech chemistry professor for the past ten years, has been named the first William R. Kenan, Jr. Professor.

"The selection of Harry Gray as the first occupant of this chair is a tribute to both his charismatic qualities as a teacher and to his leadership in scientific research," said President Harold Brown in announcing the appointment.

"I really feel great about this appointment," Gray remarked. "The fact that the professorship honors both research and teaching makes it especially meaningful to me, for I've always made it a point to get to know my students. And of course it's a special honor to have been chosen as the first person to receive the professorship.'

The irrepressible Gray, who is noted for his use of lively classroom presentations to keep his students interested, including one memorable appearance dressed as a horse, added, "I think I'll have some new costumes made up in honor of the occasion.'

The energetic chemist is widely respected for his research, which currently emphasizes studies of the chemistry of excited states of metallo-organic compounds and the role of metal ions in living organisms. He has published more than 200 scientific papers and ten books. In recognition of his work, he was elected to the National Academy of Sciences when he was only 35.

Internationally known for his innovative teaching methods, he was named in 1972 as one of four notable college chemistry teachers in the U.S. by the Manufacturing Chemists Association.

His rapport with people and sense of humor are appreciated by students and faculty alike. The articulate scien-



Harry B. Gray

tist gave the Caltech commencement address last June.

A native of Kentucky, he received a BS degree from Western Kentucky University in 1957. He obtained his PhD degree from Northwestern University.

He was NSF Postdoctoral Fellow at the University of Copenhagen in 1960-61. In 1961 he joined the chemistry faculty at Columbia University, becoming the youngest full professor in the history of that institution in 1965. The Columbia student newspaper appeared with a black border the day it announced his departure for Caltech in 1966.

The winner of several awards - including the American Chemical Society Award in Pure Chemistry - and member of numerous professional and honorary societies, Gray is working toward understanding the mechanisms by which energy is stored to run biological systems. He and his group are trying to understand the reactions of metals with oxygen in these systems.

A grant from the William R. Kenan, Jr.-Charitable Trust made the new chair possible. Mr. Kenan, who died in 1965, was a chemist, engineer, industrialist, businessman, farmer, and philanthropist.

# Judge Shirley Hufstedler named to Caltech Board

woman judge, U. S. Circuit Judge Shirley Hufstedler of the Ninth Circuit Court of Appeals, has been elected to the Caltech Board of Trustees, according to an announcement by R. Stanton Avery, chairman.

The second woman in U.S. history to reach that level in the judiciary, Judge Hufstedler has served in her present position since 1968. Prior to that, she was a justice of California's Second District Court of Appeals. She was named a Superior Court judge at 35, and seven years later was named to the U. S. Court of Appeals.

The Ninth Circuit covers thousands of miles, and includes California, Washington, Oregon, Idaho, Montana, Nevada, Arizona, Alaska,



Shirley Hufstedler

Hawaii, and Guam. Judge Hufstedler presides at regular intervals over the courts in all of these locations.

In the field of education, she serves as a trustee at Occidental College and for the Aspen Institute of Humanistic Studies. She is a member of the Board of Councilors of the University of Southern California Law Center and of the Visiting Committee of the Harvard Law School. She has been awarded honorary degrees by the Universities of Gonzaga, New Mexico, and Wyoming, and by Tufts and Occidental Colleges.

Judge Hufstedler termed her apointment to the Caltech Board of Trustees an expression of her lifelong interest in the quality of education and its contribution to human life. She looks forward to her role on the Board as a means of keeping abreast of new scientific developments of importance to people throughout the world. "I have long been interested in Caltech and its scientific work," she said. "Its faculty and students are outstanding. Technological developments have done much to change the world, and Caltech has played a major role in making these changes happen."

The nation's highest ranking as in education, Judge Hufstedler has often affirmed her belief that there is nothing in the daily lives of individuals that is not touched by the law and the processes of justice.

> Describing herself as independent-minded, she has said, "I've participated in the women's rights renaissance all my life. I have always believed that all human beings, including women, should have opportunities to make the best of their abilities."

> Judge Hufstedler spends time each year teaching a seminar for appellate judges at New York University, and working with an advisory council to find ways of sharpening up procedures in the appellate courts. She is chairwoman of a national commission that deals with improvements in the criminal justice system, and serves on various committees of the federal judicial system and the American Bar Association.

> Born in Denver, she graduated from the University of New Mexico and Stanford Law School. She and her husband, attorney Seth M. Hufstedler, live in Pasadena with their son, Stephen.

## Four quasars discovered in sky survey

Four relatively nearby quasarsonly 2.7 billion light years away from earth-have been discovered by Caltech graduate student Richard F. Green. Green has surveyed onefourth of the night sky over a period of three to five nights per month for a year in a search for these cosmic objects which are the most energetic in the universe.

The newly discovered quasars are among the nearest to the earth that astronomers have yet detected, and their discovery will help scientists understand how quasars are distributed in the universe, and to judge more accurately the distance of those that are farther away. They also may help scientists unravel the mystery of what quasars are and how they produce their tremendous amounts of energy. The discoveries were made as part of a survey in which some 300 fields of the sky, or one-fourth of its total area, were photographed with the 18-inch Schmidt telescope at Palomar Observatory. Green's survey is part of a larger study on the distribution of quasars that is being done by his research adviser, Maarten Schmidt, professor of astronomy and chairman of Caltech's Division of Physics, Mathematics and Astronomy. Each piece of Green's film includes an average of 20,000 stars down to the 17th magnitude.



An 80-million-year-old shell may help us to understand the evolution of a protein. Stephen Weiner, graduate student in geology, has extracted fossilized protein from the shell he is holding. Weiner is comparing this protein with that of the creature's modern cousin to see whether there are any differences between the ancient and modern proteins.

She said that she is particularly eager to learn about the role of women at Caltech, and about contributions that women are making in science.

Known for her interest in prison conditions and in criminal law, as well

#### NOVEMBER 1975

#### **CALTECH NEWS**

## Inquisitiveness at peak among entering freshmen

"My goal in life is to find something that was not known before about what goes on in the universe. A Caltech education would help me find the area that is most promising for my search, whether it is 10,000 light years away, in living organisms upon the earth, or within my own mind."

The high school student who gave this reason for wanting to enroll at Caltech is getting the opportunity that he hoped for. He's one of 224 men and women in this year's freshman class, the second largest in the school's history. Last year, entering freshmen numbered 212.

The 206 men and 18 women in the class of 1979 surely can match any previous group of Caltech freshmen in terms of their technological inquisitiveness. Typical was the enthusiasm of the high school student who wrote on his request for admission, "I have quite a few interests that were not being fulfilled by my school; consequently I pursued them on my own. Small rocket designs and ballistics intrigued me.

"I did some studying into these and was fascinated by the design problems involved. I would have built a couple of the rockets described but my parents put their foot down."

But this parental roadblock didn't deter him for long; naval research met with less resistance in his household. He proceeded to design a small twofoot working model submarine with functioning ballast tanks, rudder and diving tanks, a small centrifuge pump, and a gravity switch.

The designer had graduated first in a class of 500. No doubt he was the kind of student who inspired a member of his high school faculty to respond when asked, "Is he ever a problem?" by saying, "Only when he challenges his teachers with difficult questions."

One student gave a painfully honest reply on his application as he described an oil drop experiment that he initiated.

"While it was not successful, it was educational in terms of insight into the lives and problems of research scientists," he commented candidly. "The experiment, which took considerable time to assemble, suffered from a miscalibrated power supply, inability to control the time drop for more than one voltage setting, a curious lack of charge in the latex spheres, a poor microscopic system for viewing particles, and blatant operator inexperience."

Despite the limited success of his experiments, the Admissions Committee gave him its blessing, and he's already on his way to learning more effective research techniques.

Stirling L. Huntley, associate dean of graduate studies and director of admissions and financial aid, said that the quality of the incoming class is consistent with that of previous years. The average scores of this year's freshmen on College Board Scholastic Aptitude Tests again fell within the upper 2 percent in the nation. Sixtytwo members of the class, or 27 percent, had been valedictorians—the same percentage as last year.

Huntley said Caltech has more sophomore and junior transfers this year than last; 36 transfers are entering Caltech this fall, compared with 32 last year and 14 the year before.

Huntley also noted that a larger percentage of this year's class than last year's comes from California; 48 percent of the entering freshmen live within the state, compared with 40 percent last year and 47 percent the previous year.

This past spring, the Admissions Committee resumed its practice of sending faculty members to interview prospective students at their high schools. Huntley believes that these interviews—halted the previous year because of the energy crisis —contributed to a 5 percent increase in the volume of applications over 1974. There were 951 applicants this year, compared with 901 the previous year.

He believes that another factor contributing to the increase may have been a change in the formula used by colleges throughout the country to determine the amount of aid offered to families in relation to their income. Recent revisions in the tables give a better break than previously to middle-income families and thus may have encouraged applications to the Institute.





Haywood Robinson, center, leads discussion group at Freshman Camp.

## Frosh Camp: different when you're an alumnus

As a Caltech undergraduate, Haywood J. Robinson starred in both student activities and in athletics. As president of the Caltech Y, he led that organization in a fast-paced year. As one of the finest runners in Caltech's history, he broke or tied two school records, the 100-yard dash and the 200. Undefeated in the 100 in the SCIAC Conference his senior year, he advanced to the semifinal in that event in the Nationals of the NCAA College Division. He also lettered in football for four years. Now a medical student at UC Irvine, Robinson describes his emotions on returning, for the first time as an alumnus, to Freshman Camp.

#### by Haywood J. Robinson, BS '74

In September of 1970, I embarked on the most important endeavor of my life: the beginning of my Caltech career. That endeavor began with what we have all come to love and enjoy — Freshman Camp.

As I sat on the grass at Frosh Camp, legs and arms folded, gazing at all those administrators as they welcomed us, I was filled with immeasurable anxiety. I was convinced that I was the one mistake the Admissions Committee had ever made, and that I was at Caltech because of some administrative error. But soon I learned that 200 other people in my class had the same feelings — and this tech than when I was a freshman, my apprehensions lingered because my task was still unfinished.

In June 1974, I graduated from Caltech — the greatest moment of my life, for me and for my family. But there was sadness mixed with my joy, because I was leaving behind all the people who had become such a close part of my life.

This past September, I attended Freshman Camp again. The fear and anxiety that I had felt five years earlier was evident on the faces of the new students.

I had believed that my experiences at this Camp would be similar to those of previous years, but I was wrong. Because I was now an alumnus, I didn't stay with students. I stayed with faculty and members of the administration, and with all the other alumni in our own little house called "The Lodge."

Immediately I felt a rapport with my housemates that was quite different from the warmth I had felt for them as an undergraduate. Within a few hours, I had become a real alumnus of Caltech, and had grown into a colleague of my former teachers. This fantastic experience was one of the benefits of being an alumnus that came as a pleasant surprise.

Looking back at that weekend at Catalina and attempting to summarize my feelings there, I'm really at a loss for words. All I can say is that I'm only starting to scratch the surface of understanding the ideals conveyed when someone says, "This is what Caltech is all about."

ATeflon bag used to collect morning air atop Keck Laboratory is inflated at dedication ceremonies for a new research-oriented Air Quality Laboratory. Equipment in the laboratory is being used by Sheldon K. Friedlander, professor of chemical and environmental health engineering, and other Caltech engineers and scientists, to study the origin, composition, and movement of atmospheric pollutants in the Los Angeles basin. Studying the photochemical processes which take place inside the bag is one of the many ways the Air Quality Laboratory is working toward improved methods of smog control.

insight was comforting.

Freshman Camp is generally perceived in one of two ways. Either a freshman sees it as the one last precious interlude before the Caltech routine begins, and one that he wants to savor, or he falls into an overanxious, hyperactive state of mind. This state induces thoughts such as: "This is a waste of time and I want to get on with my work in physics, mathematics, and chemistry." Needless to say, after a few weeks the student who had the second reaction comes to sympathize with the one who had the first.

Attending Frosh Camp as a sophomore and then as a senior generated feelings similar to those I experienced in my freshman year, except that now I could see the light at the end of the tunnel. Although I had come to know a lot more about Cal-

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Meetings: For information contact Caltech Alumni de France, France-Amerique, 9 Ave. Franklin Roosevelt, 75008, Paris, France

**Death claims four close** to Caltech community

The Caltech community has been saddened by the deaths of four individuals who made rich and varying contributions to the Institute during their lifetimes.

PAUL C. EATON, professor of English, emeritus, and dean of students for 17 years, died on September 18 at his home in Kennebunkport, Maine. The 69-year-old English scholar came to Caltech as a visiting lecturer in English in 1946 and stayed to be named associate professor and associate dean of students.

Although he gave up his duties as dean in 1969, he continued to teach English until 1971. He is survived by his widow, Katherine, a son, James, and a daughter, Rebecca.

#### PETER R. KYROPOULOS, MS '38,

PhD '48, a member of the mechanical engineering faculty for many years, died on May 21 at his home in Bloomfield Hills, Michigan. He was 60. Highly popular with his students, Kyropoulos joined the faculty as instructor in 1943 and later became an associate professor. He left Caltech in 1957 to join the executive engineering staff of General Motors in Detroit and continued in that capacity until his death. He is survived by his widow, Betty, and a daughter, Susan.

HUNT LEWIS, whose art so eloquently captured the mood of the Caltech campus, died on September 22 in Sierra Madre, California. He was 75. Lewis's watercolors of Caltech attracted many admirers at the Institute and were selected on occasion by President and Mrs. Harold Brown for use on their Christmas cards. A retired industrial designer, Lewis tutored Caltech foreign students in English from 1967 to 1971. His widow, Rosemary, survives.

Funeral services were held on October 5 for EDITH MILLIKAN. Mrs. Millikan was the widow of Clark Millikan — former head of the Caltech aeronautics department - and the daughter-in-law of Robert Millikan, who was administrative head of Caltech for almost 35 years.

A Pasadena resident, Mrs. Millikan had been president of the Pasadena Mental Health Association for six years and was founder of the association's clinic. She had also served on the board of directors of the Southern California Choral Music Association and was a member of the Caltech Women's Club. She is survived by four children, Lynn, David, Gwilym, and Virginia Parry; a brother, and two sisters.

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BALANCE SHEET	
June 30, 1975	
ASSETS	
Cash on Hand and in Bank	\$ 14,771.01
Investments.	
C.I.T. Consolidated Portfolio	
Short-term Promissory Notes	
Deposits in Savings Accounts	
Investment Income Receivable	
Other Receivables	
Postage Deposit	
Furniture and Fixtures, at nominal value	1.00
Total Assets	\$327,331.76
LIABILITIES, RESERVES AND SURF	PLUS
Accounts Payable	
Deferred Income:	
Annual Membership Dues paid in advance Investment Income from C.I.T.	
Consolidated Portfolio	
Life Membership Reserve	
Reserve for Directory	-0-
Surplus	
Total Liabilities, Reserves and Surplus	

#### STATEMENT OF INCOME, EXPENSES AND SURPLUS FOR THE YEAR ENDED JUNE 30, 1975

#### INCOME

Dues of Annual Members	\$ 52,374.80
Investment Income:	
C.I.T. Consolidated Portfolio	. 12,475.00
Short-term Promissory Notes	2,151.11
Deposits in Savings Accounts	452.57
Annual Seminar	9,112.00
Program and Social Functions	. 12,630.90
Area and Chapter Meetings	2,377.00
Total Income	\$ 91,573.38

## Meeting topic: air pollution control efforts

Anne L. Bacon joined the Caltech staff in 1951 and

held demanding research and editorial responsibilities over the next 24 years in the Office of the

Assistant to the President, under President

Emeritus Lee A. DuBridge; and in the Develop-

ment Office. At her retirement party, more than 200 members of the Caltech community filled the

Hall of the Associates to wish her well. One of the

well-wishers was DuBridge himself, with Miss

Bacon in the picture above

Progress in air pollution control in California's South Coast Air Basin, and opportunities for additional abatement, will be assessed at a conference December 2-3 in Ramo Auditorium. Sponsored by the Industrial Associates and EQL, the program is open to alumni.

Four half-day sessions will include: "Air Quality Standards and Policy," chairman, Arie J. Haagen-Smit, professor of bio-organic chemistry, emeritus, Caltech; "Status of Air Pollution Control," chairman, Sheldon K. Friedlander, professor of chemical and environmental health engineering, Caltech.

"Air Quality Projections for the South Coast Air Basin," chairman, George M. Hidy, visiting associate in engineering science, Caltech, and general manager, Western Technical Center, Environmental Research and Technology, Inc., Westlake Village, California; and "The State of California's Role in Los Angeles Air Pollution Abatement," chairman, Norman H. Brooks, the director of EQL, and professor of environmental science and civil engineering, Caltech.

Among those on the program will be George E. Brown, Jr., U. S. Congressman and chairman of the Subcommittee on the Environment and the Atmosphere, the Committee on Science and Technology; and Paul De Falco, Jr., regional administrator of Region IX, the Environmental Protection Agency, San Francisco.

Publications Annual Seminar	
Program and Social Functions	19,591.18
Area and Chapter Meetings	
Student Programs	7,998.29
Institute Secondary School Relations	
Administration	
Membership Committee	5,646.22
Directory	5,797.82
Total Expenses	\$ 88,824.18
Excess of Income over Expenses	
Surplus (Deficit), July 1, 1974	
Surplus, June 30, 1975	<u>\$ 1,002.49</u>

#### AUDITOR'S REPORT

Board of Directors Alumni Association California Institute of Technology

I have examined the Balance Sheet of the Alumni Association, California Institute of Technology, as of June 30, 1975, and the related Statement of Income, Expenses and Surplus for the year then ended. My examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as I considered necessary in the circumstances.

In my opinion, the accompanying Balance Sheet and Statement of Income, Expenses and Surplus present fairly the financial position of the Alumni Association, California Institute of Technology, at June 30, 1975, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year

Calvin A. Ames Certified Public Accountant

September 23, 1975

#### ALUMNI ACTIVITIES

#### January 1

Rose Parade Special. 7:30-9 a.m. - Continental breakfast in the Athenaeum. 9-11:15 a.m.- Walk to Colorado Boulevard to watch the 87th Annual Tournament of Roses from reserved grandstand seats. 12 noon- Buffet lunch in the Athenaeum. For those with tickets to the game, a box lunch and bus transportation to the Rose Bowl will be provided.

#### May 14

Twenty-fifth reunion, class of 1951. Festivities will include a dinner dance on the evening before Alumni Seminar Day. "We fully anticipate that the event will rival the Bicentennial Celebration in July," said John R. Fee, BS '51, class secretary.

#### **Placement Assistance To Caltech Alumni**

The Caltech Placement Service may be of assistance to you in one of the following ways:

Help you when you become unemployed or need to change (1)

(2) Inform you of possible opportunities from time to time This service is provided to alumni by the Institute. A fee or charge is not involved

you wish to avail yourself of this service, fill in and mail th following form to

> Caltech Placement Service California Institute of Technology Pasadena, California 91125

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#### CALTECH NEWS

## PERSONALS

#### 1925

Nobel laureate LINUS PAULING, PhD, professor of chemistry, emeritus, and professor of chemistry at Stanford University, received the United States' highest scientific award, the National Medal of Science, from President Ford at ceremonies in Washington, D. C. Pauling was honored "for the extraordinary scope and power of his imagination, which has led to basic contributions in such diverse fields as structural chemistry and the nature of chemical bonding, immunology, and the nature of genetic diseases."

#### 1930

ROLAND C. HAWES retired from Cary Instruments, Varian Associates, three years ago and is a consultant in analytical instrumentation. He is currently developing a laser doppler blood velocity monitor for use on the retina of the eye at the City of Hope.

#### 1936

WILLIAM C. COOPER, MS, PhD '38, retired in June after 46 years with the U. S. Department of Agriculture, but is continuing to work as a collaborator with the federal government in connection with the citrus industry. Cooper hopes to travel to China to seek out new varieties of oranges.

#### 1938

JOHN L. MERRIAM has returned to his professorship in the agricultural engineering department at California Polytechnic State University, San Luis Obispo, California, after spending his sabbatical leave studying the automation of irrigation systems in the western Mediterranean countries. Just before his departure for Europe, he was selected as the Cal Poly nominee for the Outstanding Professor Award in the California State University and College System.

#### 1946

EDWARD B. MONTEATH, MS, AE '47, has been promoted to vice president-advanced programs, with Rockwell International's Rocketdyne Division. His new responsibilities will involve the division's work on environmental programs, energy systems, and advanced liquid and solid rocket engine technology programs. Before his new assignment, Monteath was director-liquid rocket programs for Rocketdyne.

#### 1948

JUSTIN L. BLOOM, formerly acting director of the Office of Nuclear and Energy Affairs, Department of State, has been transferred to the U. S. Embassy in Tokyo, where he is embassy counselor for scientific and technological affairs.

DOUGLAS C. STRAIN, president and general manager of Electro Scientific Industries, Portland, Oregon, received the first annual Howard Vollum Award for Science and Technology from Reed College. A member of The Associates, Strain is area chairman for the 1975-76 Alumni Fund in Oregon. The award was established as a tribute to one of the college's most distinguished alumni, C. Howard Vollum, cofounder and chairman of the board of Tektronix, Inc. The award is presented for significant contributions to the technological and scientific activities of the Pacific Northwest, especially those in Oregon.

#### 1951

NIGEL PRIDMORE-BROWN, MS, has been named manager of advanced design at Northrop Corporation's Ventura Division in Newbury Park, California. He will be in charge of new product development. This win qualifies us to represent the United States in the World Championship to be held in Nova Scotia in August 1976."

LAWRENCE S. GRIFFITH is moving to Denver, Colorado, as exploration manager for Westburne Exploration. He had been a geologist with Ojala Resources, Calgary, Canada.

C. ALLEN WORTLEY, MS, is assistant professor with the University of Wisconsin, working in continuing education for engineers. He also has been named president of the Wisconsin Section of the American Society of Civil Engineers.

#### 1961

HERBERT RICE is directing a training program for Peace Corps volunteers who have come to Nepal to build suspension bridges.

#### 1964

WILLIAM C. STWALLEY was promoted to professor of chemistry at the University of Iowa and will spend the next year on leave in the Chemistry Section of the National Science Foundation.

#### 1965

GERALD R. ASH, MS, PhD '69, is a member of the technical staff in the Network Planning Division of Bell Laboratories in Holmdel, New Jersey.

SATISH V. DESAI, MS, PhD '69, is manager of process control at Redken Labs, Van Nuys, California.

DEWITT A. PAYNE and his wife, Alice, are the parents of a second child, Anne Harrell, born on June 1.

JOHN C. SIMPSON, JR., has been promoted to manager of planning and financial analysis in the Middle East department of Mobil Oil Corporation.

#### 1966

ALAN HARRIS completed his doctorate at UCLA in March and is now working at JPL in the tracking and orbit determination section. JEFFREY L. PRESSING is an assistant professor of music at La Trobe University, Melbourne, Australia.

DONALD S. REMER, MS, PhD '70, has left the Exxon Chemical Company in Baton Rouge, Louisiana, to accept a position as associate professor of engineering at Harvey Mudd College in Claremont, California. He writes, "My wife and I are happy to return to southern California. I still play a lot of tennis and we took up square dancing while we were in Louisiana."

#### 1967

GERARD E. BLOCH, MS, has joined his father's office, Cabinet Bloch, Paris, as a patent attorney.

JOHN R. EYLER is an assistant professor in the department of chemistry at the University of Florida. He and Mrs. Eyler became the parents of a second child, Jason, in June.

GREGORY R. SHUPTRINE has been promoted to superintendent of the Technical Service Division of Australian Oil Refining Pty. Ltd., New South Wales.

#### 1968

ROLAND C. BINST, MS, is manager of the First National City Bank in Brussels, Belgium.

#### 1969

WILLIAM A. COTY received his PhD degree from Johns Hopkins University in June and is a research fellow at the Baylor College of BYUNG-KOO KIM, MS, PhD '72, is working for the Korea Atomic Energy Research Institute in Seoul.

JOSEPH RHODES, JR., is serving his second term in the Pennsylvania House of Representatives.

JOHN B. WILGEN, MS, PhD '75, is a research associate at Oak Ridge National Laboratory, Tennessee.

#### 1970

RICHARD B. LOHMAN received the degree of master of international management from the American Graduate School of International Management at the school's Glendale, Arizona, campus.

THOMAS A. NAGYLAKI, PhD, is assistant professor in the department of biophysics and theoretical biology at the University of Chicago. DAVID P. SCHOR received his degree of doctor of medicine from Case Western Reserve University School of Medicine and will be doing graduate training in pediatrics at the University of Rochester's Associated Hospital program.

#### 1971

LEONARD C. BERMAN is a graduate student in computer science at Cornell University.

STEPHEN K. DECKER, MS, is an engineer with the IBM Corporation in San Jose, California.

WILLIAM K. DELANEY, PhD '75, has entered the Jesuit novitiate to begin studies for the priesthood.

KNUT S. SKATTUM, PhD, is a senior project engineer for Norsk Hydro A.S., of Oslo, Norway.

GORDON P. TREWEEK, MS, is a senior engineer with James M. Montgomery Engineers of Pasadena, California.

#### 1973

DANIEL C. HARRIS, PhD, is an assistant professor in the department of chemistry at UC Davis.

JONATHAN V. POST received his Master of Science degree in computer science from the University of Massachusetts, Amherst. He is working on a PhD in artificial intelligence and a master of fine arts in poetry, and writes, "I'm more and more convinced that the universe is an artichoke."

J. RANDOLPH STONESIFER, PhD, is assistant professor of mathematics at Lafayette College, Easton, Pennsylvania. Prior to his appointment, he was visiting assistant professor at Kenyon College in Gambier, Ohio.

LANGHORNE P. WITHERS, JR., is a member of the technical staff of Mechanics Research, Inc., Westpark Drive, Virginia, after completing two years of graduate work at the University of Chicago.

#### 1974

KAREN S. EATON and JOHN M. GARTH were married on July 12. She is a medical student at the University of Kansas and he is working as a programmer-analyst for the Data Services Administration of Johnson County, Kansas.

### OBITUARIES

sons, two brothers, a sister, and four grand-children.

W. STUART JOHNSON on July 22. He was retired.

GEORGE L. PAULUS on March 24. He was retired.

WALLACE C. PENFIELD on May 1. He was president of the firm of Penfield & Smith Engineers in Santa Barbara. Surviving are his wife, Mary Jean, a daughter, and a son.

#### 1927

DONALD S. STONE on June 5. He was a retired patent attorney for the Du Pont Company. He is survived by a son and a daughter.

#### 1929

BOLIVAR ROBERTS on August 19. He was retired.

#### 1930

RALPH B. ATKINSON, MS, in June following an automobile accident. He was former president of the Monterey Peninsula College board of trustees and the founder of the Atkinson Color Laboratories and the Ferroprint Corporation, both in Los Angeles. Surviving are his wife, Dorothy, and a son.

#### 1931

BENJAMIN HOLZMAN, MS '33, a retired Air Force brigadier general, on July 29 in Florida from complications following a stroke. He is survived by his wife, Katherine, and a daughter.

LAWRENCE E. KINSLER, PhD '34, on May 18. He retired in 1970 after 29 years as a physics professor at the U.S. Navy Postgraduate School. Surviving are his wife, Kathleen, and two sisters.

#### 1932

JAMES C. MOUZON, PhD, on August 13 following a lengthy illness. He was professor emeritus in electrical engineering at the University of Michigan. He is survived by his wife, Elizabeth, and two daughters.

#### 1934

PAUL L. KARTZKE, MS '35, on September 7. He was a retired vice president of Shell Oil Company and president and chief executive officer of Shell Canada, Ltd.

#### 1937

WILLIAM DICKINSON YALE, MS '38, on July 9 after a long illness. He was a retired Texaco executive. Surviving are his wife, Ara Treadwell, two daughters, and a son.

#### 1939

JOHN de P. T. HILLS, MS, retired Air Force colonel, on August 17 at the Bethesda Naval Medical Center after a long illness. He is survived by his wife, Eleanor, a son, and three daughters.

#### 1940

WALTER HOFMANN on June 7 of a heart attack. He was an internationally known water resources specialist with the U.S. Geological Survey. Surviving are his wife, Joan, a son, and two daughters.

#### 1962

J. STUART KEITH, MS, of a heart attack in January. He was a manager in structural systems with McDonnell Douglas in Houston, Texas.

#### 1963

H. HUNTER HILL, MS, in an automobile acci-

CORNELIUS J. PINGS, MS '52, PhD '55, vice provost, dean of graduate studies, and professor of chemical engineering and chemical physics, Caltech, was chosen as the first annual Bicentennial Commemoration Lecturer in Chemical Engineering at Louisiana State University. He delivered the lecture on October 28; it was entitled: "Critical State Anomalies: a Singular Tale of Two Phases."

#### 1956

ROBERT L. SHACKLETT, PhD, professor of physics at California State University, Fresno, has been named acting dean of the School of Graduate Studies.

#### 1957

EDWIN X. BERRY writes, "In June my wife Valerie and I won the U.S. National Championship for the International Fireball 16 foot, onedesign, high-performance sail boat. Placing first in three of the five races of the regatta gave us an overall score of 10 points to easily beat the second-place boat which earned 21 points. Medicine in Houston, Texas.

JOSEPH E. DAVIS, MS, PhD '72, is a selfemployed engineering consultant.

WALTER M. DENEKAS is a project administrator with Gould, Inc.

ROBERT A. DUKELOW, MS '70, PhD '74, is an electronic engineer with the Naval Undersea Center.

NANCY RATHJEN HAYLES, MS, is an instructor in English at Dartmouth College. She received an M.A. degree from Michigan State University and is a doctoral candidate at the University of Rochester.

SCOTT W. JENNINGS received his JD degree from the University of Wisconsin Law School in August and has been admitted to the Wisconsin Bar. He is doing graduate work at the University of Pennsylvania Law School, where he expects to receive his LLM. degree in June. LARRY L. KESMODEL received his PhD degree from the University of Texas in 1974, completed his postdoctoral fellowship in research physics at UC Berkeley, and is now senior staff scientist at the Lawrence Berkeley Laboratory, Inorganic Materials Research Division, UC Berkeley.

#### 1922

JIRO MORITA on August 10. He is survived by his wife, Reiko, two sons, and two daughters. W. FARRAND WILSON on June 23 following a heart attack. He was retired and had served in an advisory capacity with the I. T. E. Imperial Company of Houston. Surviving is his wife, Cecile.

#### 1924

ALFRED B. BONNETT on August 8. He was a citrus grower in Riverside, California. PAUL L. MAGILL on February 25.

#### 1925

HUGH J. P. BYRNE on April 21. He was retired.

ALBERT CHAPMAN on May 6. He was a selfemployed consultant in plant engineering and maintenance.

#### 1926

CARL G. ERICSSON at his home in August. He was a retired civil service project engineer at the Naval Facilities Engineer Command in San Diego. Surviving are his wife, Delight, two dent on June 12. He was a staff member at Los Alamos Scientific Laboratory, New Mexico. His wife, Belle, survives.

Plesset given advisory role on U.S. panel

Milton S. Plesset, professor of engineering science, has been appointed by the U. S. Nuclear Regulatory Commission to its Advisory Committee on Reactor Safeguards. The advisory committee, established by federal law, is composed of independent specialists in various aspects of nuclear power plant design and expertise.