Alumni laud Beckman at class reunion

Every year when the time has come to choose candidates for Distinguished Alumni Awards, one name has kept cropping up. But that person — distinguished though he is — can’t be given this particular award. He is ineligible under the rules of the selection committee because he is a Life Trustee.

So this year, on the 50th anniversary of the year Arnold Beckman received his PhD from the Institute, the Caltech Alumni Association Board of Directors paid special tribute to this outstanding alumnus and former faculty member, trustee, and chairman of the Board of Trustees. At the 1928 class reunion, Beckman, now chairman emeritus of the Board of Trustees, was presented with a plaque acknowledging his long years of service and devotion.

John R. Fee, BS ’51, 1978-79 president of the Alumni Association, read aloud the tribute to the man who has played such an essential role in Caltech’s history over the past 50 years:

WHEREAS, Arnold O. Beckman has won an enduring place in the annals of the Institute as a graduate student, as a faculty member, as a trustee, as chairman of the Board of Trustees, and as chairman emeritus of the Board of Trustees, and

WHEREAS, his charitable spirit as benefactor, as shown by the campus buildings bearing his name and that of his wife, Mabel, has earned the grateful recognition of the Institute; and

WHEREAS, he has distinguished himself in the business world as

Continued on second page

Marvin Goldberger

Caltech’s new president moves into Millikan

Dr. and Mrs. Marvin L. Goldberger, Caltech’s new president and his lady, moved into the Millikan house on June 28. Subsequently Goldberger settled in third-floor Millikan, taking up his duties in the presidential office with its view overlooking Pasadena, Altadena, and the foothills.

The Goldbergers have visited the Institute several times since his March appointment as president. The big kitchen in the presidential house has been of special interest to them because they both enjoy cooking. They attended parties in their honor in May — a faculty reception and a dinner party at the home of R. Stanton Avery, chairman of the Board of Trustees, and Mrs. Avery.

As part of his duties at the Institute, Goldberger hopes to be able to teach undergraduates. He says, "The first year I wouldn’t even try it, but I haven’t given up the idea if it’s technically possible. Whether I can meet a class regularly or whether it will have to be something rather specialized, I still want to do it.”

All Caltech alumni and members of The Associates will receive personal invitations to Goldberger’s inauguration on October 27. Members of the Faculty Convocations Committee are planning the event, scheduled for 10:30 a.m. in the Court of Man. Marching in the inaugural procession will be trustees, faculty members, distinguished alumni, and representatives from learned societies and universities throughout the country.

Hinrichs Award

Albert L. (Bert) Wells, Jr., BS, MS ’78, was awarded the 1978 Frederic W. Hinrichs, Jr., Memorial Award for outstanding service to the Institute. The award, including a certificate and $500, was announced at graduation ceremonies. Wells was selected by the undergraduate deans on the basis of leadership in student government, musical ability, and academic excellence.

Wells was president of ASCIT in 1977, and before that was director for academic affairs. In the latter position he was instrumental in establishing ASCIT’s Awards for Excellence in Teaching.

He graduated with a 4.0 average and won several mathematics awards, including the Eric Temple Bell Undergraduate Mathematics Research Prize in 1976 and the Morgan Ward Prize in 1975. He was president of the Caltech Mathematics Club.

New endowed chair honors Simon Ramo

Caltech has received gifts and pledges of $1 million to endow the Simon Ramo Professorship of Engineering. President Marvin L. Goldberger and Dr. R. F. Metlker, chairman of TRW Inc., have jointly announced.

The new professorship will honor Professor Simon Ramo, PhD ’36, who retired in June as vice chairman of the Board of Directors and chairman of the Executive Committee of TRW Inc. He continues as a member of TRW’s Board of Directors and chairman of TRW’s Science and Technology Committee.

Ramo, who received his PhD magna cum laude from Caltech at age 23, is a member of the Institute’s Board of Trustees, chairman of the Visiting Committee of the Division of Engineering and Applied Science, and a Life Member of The Associates.
At commencement:

Delbrück on time and the limits of science

Time and its various meanings, now and in the past — for the scientist, the historian, and the average human being — were the themes of Max Delbrück’s commencement address, “The Arrow of Time — Beginning and End.” Nobel Laureate Delbrück is Caltech’s Board of Trustees Professor of Biology, Emeritus, and has been a member of its faculty for 41 years.

Science is limited in the way it deals with time and thus in its ability to satisfy all human needs and values, Delbrück said as he stressed the importance of a balance between the sciences and the liberal arts.

He noted that science deals with time “simply as a fourth dimension along which you move forward or backward at will.” This view leaves no room for poetry and myth, for paradox and ambiguity, and for qualitative human experience — for tolerance of spiritual beliefs from earlier ages that have constituted powerful forces in human history.

“Science says what science can do for us,” said Delbrück, “because it can do a lot. But the more important question is, ‘What can science not do for us?’

“Science orders our external world in a marvelously coherent way. But by the nature of its methods, the aims of science are always partial methods. For example, if science can’t extrapolate the state of the universe backward beyond the Big Bang, then it refuses to extrapolate backward, or it does so in only the most tentative way.

Cognition filters reality

“Moreover, science has recognized that the objective world isn’t that objective. The observer and the observed cohere in a bizarre way that limits the clean separation between actor and observer. And biology has taught us that we the observers are products of our evolution and that our cognition filters reality in a massive way.

“From this acknowledgement of the limits of science is relatively new, Delbrück said. He noted that “many intellectuals of Robert A. Millikan’s generation believed that science would outpace and largely displace all other intellectual and spiritual endeavors, as it has done.

“They also believed it would lead us to a better world, and most of them believed that it would displace religion by the end of the century. But we know that our age is not a golden age and that scientific culture has in no way eliminated the strength and intensity of religious needs. Indeed, we can take it for granted that science is intrinsically incapable of coping with the current questions of death, love, moral decision, greed, anger, and aggression. These are the forces that determine man’s values and shape man’s destiny.

“The essence of Caltech has been to be excellent and small — small enough to avoid in large measure a schism between the two cultures [humanistic and scientific] upon which education was based when universities first came into being in the Middle Ages. The great Court of Man, where we hold this ceremony, flanked by buildings of behavioral biology on one side and the humanities and social sciences on the other, is the symbol for the direction in which Caltech ought to continue its greatest thrust. Let us hope,” he concluded, “that the momentum will not get lost.”

As he finished his talk, several members of the Caltech faculty, seated on the podium behind him, hoisted a huge sign bearing the words “MAXIMUS EST,” Latin for “He is the greatest.

Chairman of the Board of Trustees R. Stanton Avery welcomed the guests to Caltech’s 84th Commencement and introduced Delbrück. Acting President Robert F. Christy conferred a total of 426 degrees: 168 BS, 138 MS, 4 Engineer, and 116 PhD degrees. Of these students, 53 had received previous degrees from the Institute. Eleven seniors received both BS and MS degrees. Christy noted that 81, or 48 percent, of the seniors were graduating with honors (B+ or better).

Among the undergraduates, 83 majored in engineering, 81 in science, 3 in the humanities, and 10 in independent studies. Two of those receiving degrees in engineering or science had a second major in the humanities or social sciences and 9 majored in two fields of science or engineering.

Of those receiving degrees, 42 were women — the same number as last year. These included 18 BS, 12 MS, and 12 PhD degree recipients.

PHD’s in the social sciences

Among the master’s degrees awarded, 102 were for options in engineering, 33 in science, and 3 in social science. Of the PhD degree candidates, 31 were in engineering and 82 in science, Christy said. This year marked a first at Caltech, as the Institute awarded 3 PhD’s to students in the social sciences.

Noting that he would relinquish his duties as acting president of Caltech in July, Christy said, “I’ve enjoyed serving the entire Caltech community. There have been some important changes during my 18 months as acting president, including substantial progress in the planning and funding of the Braun Building of Cell Biology and the Watson Building of Applied Physics.” He then emphasized ground-breaking for one or both of the new buildings in the next year.

Meanwhile, he said that Caltech will be inviting all of its graduates, including those who just received their degrees, to Caltech’s next big celebration, the inauguration of Marvin L. Goldberger as president on October 27.

Beckman honored

Continued from first page

founder and presiding genius of Beckman Instruments and has also served as international and national business leader; and JPL/BEAS, in the year of retirement from his official duties as chairman of the Board of Trustees of the California Institute of Technology, in which capacity he gave faithful and exemplary service from 1964 until 1974, he has continued in many constructive activities for that Institution, which he regards as a place of scientific adventure, and judgment are of inestimable value; and WHEREAS, he will celebrate the fiftieth anniversary of his graduation in June 1978.

NOW THEREFORE, Be it resolved that the campus community in expressing praise and appreciation on this happy occasion, as Fee read the firm words, the audience of classmates, friends, and colleagues gave the recipient a standing ovation.

Beckman responded with pleasure and appreciation to the presentation — one that came as a surprise to him.

“I feel very fortunate in having spent the bulk of my life — more than 50 years — associated with Caltech in one way or another,” he said. “I hope the relationship will continue for many years.”

Beckman first came to Caltech in 1923 to work on his doctorate in physical chemistry. He served on the Caltech chemistry faculty until 1940 when he left the teaching profession to devote full time to the development and manufacture of scientific instruments.

Beckman was the first alumni to be named to Caltech’s Board of Trustees (1933), and he served as board chairman from 1964 until 1974 when he was elected chairman emeritus. In 1963, the Beckman Foundation awarded fellowships to the campus married in part by buildings bearing their names: Beckman Auditorium (1964) and Beckman Laboratory for Behavioral Biology (1974).

Chairman of the Board of Directors of Beckman Instruments, Inc., Beckman is recognized nationally for his contributions to science, education, industry, and environmental technology.

Beckman is a member of the National Academy of Engineering, an honorary member of the American Institute of Chemists, a Fellow in the American Association for the Advancement of Science, and a Benjamin Franklin Fellow of Great Britain’s Royal Society of Arts.
Dick Smyth

His business life is a family affair

by Phyllis Brewster

Dick Smyth's business life — as well as his private life — is definitely a family affair.

Smyth, who has just been named national chairman of the Caltech Alumni Fund for 1978-79, is also founder and president of two manufacturing companies in Huntington Beach and, along with his wife, Emille, the co-head of a family of five adult children. If the amount of family involvement in those businesses and in joint leisure activities is any indication, the Caltech Alumni Fund may benefit from the energies of more than one Smyth.

For a starter, in the Smyth companies — Milco International, Inc., which designs avionics systems for NASA and other aeronautical weapons systems for aerospace industries, and Computerm Corporation, which develops accounting and word-processing computer packages for small businesses — Emille Smyth is receptionist, secretary, and security officer. (She also teaches elementary school, as she has for 17 years. But her after-school hours, vacations, and some weekends are spent with Milco and Computerm.)

The eldest of the Smyth children, Gretl, 25, does the company accounting, Randy, 23, a catamaranist with the second best Olympic tryout racing record in the country, makes sails in the back half of the company building. Their daughter-in-law, Helen (married to David, 22), helps design the computer programs, and 17-year-old Dawn wraps wires on a computer board after school. (Ernie, 19, a Spanish major at USC, hasn’t a niche yet.)

The Smyth’s recreational involvement have also been familial. When their 16-foot sloop, Plexides (named for the seven stars in the constellation and the seven in the family), raced to Honolulu, the crew enjoyed a good working relationship that enhanced the family ties. The Pileides placed third in its class in two out of the three years that the Smyths entered it.

All of this family activity has its roots in a chance meeting during Dick Smyth’s senior year in college. Smyth, who graduated from the Institute in 1951 with a major in physics, met Emille that year at a Ricketts House dance. A sign on a bulletin board at Occidental College, inviting young women there to attend the dance, brought long-term results.

Smyth’s regard for his education, and his commitment to helping maintain Caltech as a first-class institution, explains his role in Alumni Fund activities. He has been involved in the Fund since 1972, and has been an area chairman for four years — two years in Long Beach and two in Newport Beach. He and Mrs. Smyth are members of The Alumni Fund Council effective July 1, and are Paul L. Armstrong, BS ’51, Huntington Beach, California; Anthony Kalm, BS ’56, MS ’57, Arcadia, California; Paul A. Levin, BS ’72, Manhattan Beach, California; Ernest Wade, BS ’43, MS ’47, Rancho Palos Verdes, California; and William J. Williamson, BS ’48, MS ’49, Eng ’55, Sherman Oaks, California. Also on the Council will be Emilie S Smyth, BS ’51, Arcadia, California, 1978-79 president of the Caltech Alumni Association.

Supporting Smyth this year in his efforts, as new members of the Alumni Fund Council effective July 1, are: Paul L. Armstrong, BS ’51, Huntington Beach, California; Anthony Kalm, BS ’56, MS ’57, Arcadia, California; Paul A. Levin, BS ’72, Manhattan Beach, California; Ernest Wade, BS ’43, MS ’47, Rancho Palos Verdes, California; and William J. Williamson, BS ’48, MS ’49, Eng ’55, Sherman Oaks, California. Also on the Council will be Emilie S Smyth, BS ’51, Arcadia, California, 1978-79 president of the Caltech Alumni Association.

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Alumni Fund tops its own dollar record

Caltech’s Alumni Fund had raised more money than ever before in its history when the 1977-78 Fund year concluded on July 1, according to Ed Foss, BS ’52, national fund chairman. As the campaign wound to a conclusion, workers had raised $796,746 from 4,532 donors, compared with $703,722 from 4,369 contributors in the 1976-77 Fund.

The Fund officially closed its books on July 1. A complete report, including a list of donors who will appear in the September issue of Caltech News, will give the credit for the Fund’s steady growth to the efforts of the area chairmen and their many workers, who have relied heavily on contacts with the alumni in their areas to achieve their goals. “Our alumni body is small enough and we have enough workers to reach many of our graduates individually,” Foss said. “These personal contacts have been important in giving us a steadily growing number of donors.”

Foss said that Fund leaders have accepted goals for 1978-79 of 12 percent above this year’s total in dollars from 4,600 donors.

Seminar Day in the Bay Area

Tuesdays, by the way, are built-in fund raisers for Tech News.

A cheerleader at Caltech, Paxton is a member of the faculty-student Health Committee. She has been involved in numerous projects concerning the Health Center and its services for students. This summer she is conducting research on waste water pollution for a firm in Longview, Washington.

Ford Fund grant

Caltech is one of eight engineering schools in the country selected to receive a $100,000 grant from the Ford Motor Company Fund as part of a $1.6 million Henry Ford II Scholar Awards program.

Income from the $100,000 endowment fund established in each school is expected to provide a scholar with an annual cash award of up to $5,000 to help computer instruction program already under way or to help launch a career, according to Ray C. Koo, director of the Ford Motor Company Fund.
John R. Fee, BS '51, was installed as 1977-78 president of the Caltech Alumni Association during the Honorary Alumni Dinner in the Athenaeum. Fee received the gavel from outgoing president Richard L. Van Kirk, BS '58, who was presented with a gavel engraved with his name.

A resident of Arcadia, Fee is executive vice president of James M. Montgomery Consulting Engineers, Inc., of Pasadena. A member of the board of the association from 1956-1969, he served as treasurer for many years and was named treasurer emeritus in 1969. He was elected vice president of the association in 1977.

Other officers for the coming year include: vice president, Carol Otto, Jr., MS '50, PhD '54; secretary, Philip L. Reynolds, BS '58, MS '59; and treasurer, James W. Workman, BS '57, MS '58.

Two new honorary alumni were recognized for their contributions to the Caltech community: Robert F. Christy, vice president and provost, professor of theoretical physics, and former acting president; and Robert D. Gray, professor of economics and industrial relations and former director of the Industrial Relations Center.

Directors elected for three-year terms were: Stanley A. Christman, BS '65; Munson W. Dowd, BS '58, MS '46; Steven D. Hall, BS '65, MS '66; and Steve Sheffield, BS '72. Thomas Tisch, BS '61, president of the San Francisco chapter, was elected to a one-year term. Richard Smyth, BS '51, national chairman of the 1978-79 Alumni Fund, will also serve for one year.

Continuing as board members for the coming year will be Clarence R. Allen, MS '53, PhD '54; Cyrus M. Biddison, BS '40; James R. Davis, BS '48, MS '49; Hiroshi Kami, BS '51, MS '52; James King, Jr., MS '55, PhD '58; and Louise Kirkbride, BS '79, MS '76.

During the evening, plaques were presented to outgoing board members: Joseph A. Dobrowolski, BS '49; Oliver H. Gardner, BS '51; John D. Gee, BS '53; Rolf C. Hastrup, BS '53, MS '54, Eng '58; William L. Martin III, BS '56, MS '69, MS '70, Hendon L. Christy, vice president and provost, professor of theoretical physics, and former acting president; and Robert D. Gray, professor of economics and industrial relations and former director of the Industrial Relations Center.

Martha Wayne retires

Martha Wayne's official position is secretary in the athletics department, but her sympathetic nature and her genuine interest in young people has carried her influence well beyond her administrative duties. She's earned the affection of a generation of students because she was always willing to listen to someone who just needed a friend to talk to. In July, after 24 years in the department, Mrs. Wayne will retire. She'll continue to maintain records on all interhouse and intercollegiate competitions, prepare and distribute schedules of athletic events, and keep watch over students' athletic eligibility. She says she's never found this record-keeping a chore because to her, the grades are people.

Many students received a boost via her personal interest in their careers, because she has kept tabs on those who might qualify for NAIA or NCAA scholarship awards, usually noting their eligibility before it was apparent to the candidates. Once she spotted a potential winner, she became a strong advocate for the athlete as she prepared the nomination.
Richard Van Kirk

"A fellow alumnus equals a friend"

If someone gave a prize for receiving the most unusual wedding present, Richard Van Kirk, BS '56, might well be the winner. Van Kirk's wedding in 1959, Van Kirk, the 1977-78 president of the Alumni Association, was peculiar since it couldn't have been involved in a Gamble but he returned to campus for three years in turn. I think it's back on the board. It's the same as the drum has been the Arica-Sierra Madre area chairman. As he evaluates the Alumni Association's accomplishments this year, he stresses the continuing growth of the secondary school programs, and the impact that these programs have achieved such popularity. "Brake drum equals a friend," says Van Kirk, who is director of management services for Arthur Young & Company, a consulting firm.

"As an innovation this year, the association's Student-Faculty-Alumni Relations Committee, under the chairmanship of Clarence Allen, MS '51, PhD '54, sponsored an improvement contest in the undergraduate houses. First and second prizes of $1,500 and $1,000 were awarded to Ruddock and Ricketts Houses for re landscaping and renovation projects."

"Broadening the impact of the Alumni Scholarship Program, the association this year funded three full scholarships and four full scholarships. The alumni donors and their firms included Mihra Agha

"In other student-oriented projects, several alumni invited seniors to their houses. Alumnus equals a friend."

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1933
JOHN R. PIERCE, MS '34, PhD '36, was awarded an honorary doctor of science degree on May 28 at the 113th commencement exercises of the University of California. The professor of engineering at Caltech is best known for his work in the field of the Echo and Telstar satellites. USC cited Pierce for his "extraordinary scientific and engineering contributions, particularly in the areas of communications within immediate sight and sound for enhancing many-faceted our awareness and understanding of kindling beings everywhere."

1935
LOUIS T. RADER, MD, PhD '38, is one of 16 members of the board of trustees of President Carter's administrative services recognizes committiee.

1936
C. HAROLD DUNCAN, PhD '36, for his book "Electrical Engineering: A Textbook for the Use of Engineering Students." He was born on September 28, 1909, in Chicago, and received his PhD from the University of Chicago in 1936. He has been a faculty member at MIT since 1941 and is currently the director of the Energy Resources Program at the University of California, Berkeley. He has been a fellow of the American Academy of Arts and Sciences since 1959.

1938
The First Annual Lifetime Achievement Award was presented to A. I. Root of the Institute of Electrical and Electronics Engineers (IEEE) for his "pioneering contributions to the development of electronic communication systems." He is the manager of the Deep Space Network Programming Systems Project at JPL in Pasadena, California, and is responsible for the development of an advanced planetary mission system - the Juno Mission System - that was used on many planetary missions, the first being Mariner V in 1967.

1940
JOHN L. MERIAM spent the 20th years of his career as an engineer, and in 1956 wrote to Arabia with the Ralph M. Parsons Co. as part of the first water resources team in the Ministry of Agriculture. In 1938 he came to San Luis Obispo to begin a new career teaching at the Polytechnic Institute of California, the only other water related courses in the agricultural engineering department of California Polytechnic State University. He was named to the faculty of the University of Texas the same night as his 40th reunion.

FREDERIC H. MOORE writes that he has been with the University of California for the next four years, next year, leave Houston, and return to California, "preferring southern California."

HENRY T. NAGAMASU, BSc, MS, PhD '39, has been named the title of Research Professor at Rensselaer Polytechnic Institute at Troy, N.Y., as of February 1.

1941
FRIEDRIC ROY CHATMAN, a native of South Pasadena, has been appointed executive manager of that city's Chamber of Commerce. Astman has earned his career on the management of associations and non-profit organizations at Sciences and Technology.

FRANKLIN S. HARRIS, Jr., PhD, retired from Old Dominion University, Norfolk, Virginia, where he was Research Professor of Electrical Engineering. He was the director of the Electromagnetics Laboratory for the last seven years, during which time he served on the NASA Advisory Committee on Research in Atmospheric Optics. He plans to live in Rockville, Ohio, five miles from the Campus to Zion National Park.

1942
ROBERT N. HALL, PhD '48, a physicist at the General Electric Research and Development Center, was awarded the Charles Richter Memorial Scholarship of the Societische Physische Gesellschaft, an international society that selects its scientific mem­ bers for their accomplishments in the field of physics. The award was given in recognition of his research contributions to the development of high purity germanium for gamma ray spectrometry.

1944
Y. W. T. WILSON, PhD '44, was named on February 25 after more than 36 years of government service. He served his last 13 years as principal research scientist in the Forest Fire Laboratory, US Forest Service, Macon, Georgia. He and his wife, Maria, will continue to live at 4275 Waverly Circle, Macon, Georgia 31211.

1946
FREDERICK A. BARRIE, a member of the Institute of Electrical and Electronics Engineers (IEEE), was awarded the 1946 Richard C. Downs Award for his contributions to the development of high purity germanium for gamma ray spectrometry.

1948
JOHN W. JOHNSON, PhD '48, was recently awarded the title of Research Professor at Rensselaer Polytechnic Institute in Troy, New York, as of February 1.

1950
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1952
JOHN D. CIDLEBY writes "Since leaving Tech I have acquired a PhD (1971, University of Utah), a wife, the former Judy Kay McArthur of Martinsville, Virginia (1973), and a son, Matthew (1976)." He writes, "While at Point since 1971 in various R&D & Process Development assignments in the Rubber and Plastics Divisions, in October 1972 was transferred from Martinsville to Seaford, Delaware, to assume my current job of process supervisor in a styrofoam plant.

1954
HERBERT SCHILLER, MS, recently joined Dataplex Division of Littner Systems, Inc. as director of Marketing. He lives in Whedley Heights, N.Y.

1955
HIS T. SWAZTICK, PhD, vice president and manager of the Environmental Divi­ sion of the rubber and plastics industries, was appointed corporate vice president of the company. He serves as chairman of the board of the Rubber and Plastics Divisions.

1956
James T. WELDON, M.D., was named the recipient of the first General Motors Award for his "outstanding contributions to the field of medical research.

1957
RED A. LANDY received his MD degree in 1972 from St. Louis University, took his residency training in anatomic and clinical pathology at the University of Minnesota, and has been board certified in 1979. He is now in pri­ vate practice in St. Louis. He is married and the father of Brian, 10, and Molly, 5.

1958
ARVEL B. WITTE, PhD, was recently awarded a U.S. patent for a fluid injection type of artificial heart and pumping system. Preliminary results showed that the device, which has been called "a breakthrough" in the field of artificial hearts, can be used to treat patients with severe heart disease.

1959
DEAN A. WILKINS, PhD, was recently awarded a fellowship by the American Heart Association for his "outstanding contributions to the field of medical research.

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The year was 1928. Four saloons were raided by prohibitionists in New York City on New Year's Eve. Johnny Weissmüller was the big name in swimming, and Sonja Henie in figure skating. Couplidge gave way to Flower in the White House, and 68 countries signed the Kellogg-Briand Pact to "outlaw war."

In Pasadena a graduating class of 1928 was preparing to go out into the world — unmindful, for the most part, of prohibitionists or pacts. Their thoughts were on graduate schools, jobs, or marriages — or on the party they would attend at the Millicans' that week. (Walter Righiter took his girl, Norma. She's still with him.) Caltech was 37 years old.

A half century later, on June 2, 1978, at the Huntington-Sheraton Hotel in Pasadena, 37 members of the Caltech class of 1928 — out of 67 who are living — have gathered for their 50th reunion, to exchange memories and fill in the gaps on the years in between.

Before-lunch mingling produces many warm handshakes (Frank Noel and Edwin Templin haven’t seen each other since they graduated) and a few archival treasures — a class yearbook and a photo of the class of 1918, circulated by Earl Mendenhall, BS ’18. (Mendenhall is one of several alumni at the reunion who graduated before 1928.)

After eating and more catching up, the ceremonies begin. John Fee, BS ’51, president of the Caltech Alumni Association, presents a special award to class member Arnold O. Beckman, chairman emeritus of the Caltech Board of Trustees (see story on page 1), and Reuben Moulton, BS ’57, calls each Techer from the class of 1928 to the platform for a minute of reporting and remembering — and to receive their Half-Century Club Certificates. W. Morton Jacobs is the reunion committee chairman.

The flow of tributes to Caltech and the part it played in the lives of alumni is second only to the praise accorded wives. ("Marrying her was the best thing I ever did." — George Crane.) "I always felt Caltech was good to me. It brought my wife to campus." — Charles Lash.

Don McFaddin says that one of the most gratifying things in his life has been to be associated with Caltech. Edwin McMillan declares that, of the great institutions he’s been associated with, "Caltech holds my heart the most."

Elbert "Al" Miller, attending his first Caltech reunion, remembers "not the work I did, but all the fine fellows I met here."

Reminiscing over copies of the Big J at the class of 1943 reunion the picture at left are Daniel J. Aherners, BS ’53, and Joyce McNab, seated, and James G. Williams, BS ’53, and N. Paul Roseenthal, BS ’53, standing. Center: Recalling former classmates at the Half-Century Club Luncheon are Richard C. Folson, BS ’28, MS ’29, PhD ’32, Gay Orbison, BS ’28, MS ’29, and Mrs. Folson. Right: Robert M. France, BS ’43, with Theodore D. Buehler, BS ’43, at the class of 1943 reunion.

Class reunions: it's the season to reminisce

Donald W. Shocking, BS ’50, and his guest, Carol Covey, right, talk with a friend at the 1938 class reunion.

Gregory J. Brewer, BS ’60, and Leonard A. Erickson, Jr., BS ’60, at their class reunion.

Others reminisce in more detail. Richard Folsom recalls stroking Professor Robert Daugherty's pet snake on a visit to his mentor's house. Kenneth Robinson tells about running a pair of green shorts up the flagpole. In a noticeably heavy accent, Nicolai Senatoroff relates how he got three pink slips one year, each telling him he'd be "out" unless he improved his English. Huston Taylor says he believes he is the only person to enter Caltech with no high school chemistry.

Robinson also remembers needing help with sophomore physics. One of his professors recommended a young man who could tutor him. It was Carl Anderson, BS ’27, PhD ’30, later to receive the Nobel Prize in physics. The class of 1928 had its own Nobel Laureate — chemist Edwin McMillan — back for his first Caltech reunion.

Others tell of careers in education. Richard Folsom says he was "an academic bum for 40-odd years." (He is president emeritus of Rensselear Polytechnic Institute.) Russell Love, after a stint with three industrial companies, became vice president and dean of men of Cogswell Polytechnic College of San Francisco. Robley Evans reports 38 years at MIT, where he was professor of physics.

The engineers are on hand, too. Gunner Gramatky says he made tunnels, curbs, sidewalks, sewers, storm drains, and aqueducts, and calls it all "just plain fun." Carmine Shaffer’s last assignment involved the construction of an Air Force base in Greenland.

And so it goes with bits about careers, retirement activities, and families, along with greetings. Says Haley Shepard: "Hello to you old codgers and your good-looking friends." Then Frank Pine, BS ’24, leads the group in singing the Alma Mater, and the meeting adjourns, to reconvene later for dinner at the home of James B. Black, executive director of the Alumni Association.

Other classes also converged on the campus in June for their own five-year reunions. The Class of 1933 met on June 2 for campus tours, and a social hour and dinner in the Athenaeum, as did the classes of 1948 and 1958. The class of 1938 held its reunion at the Ammandale Golf Club. The classes of 1943, 1963, and 1968 held their reunions on the campus June 10, with tours, a social hour, and dinner. The vigorous members of the class of 1937 held their reunion in Tournament Park, where they picnicked, swam, and enjoyed athletic contests.
Gray, Vogt to head divisions

Two Caltech faculty members — Harry B. Gray and Rochus E. Vogt — have been appointed division chairmen at the Institute, Acting President Robert W. Christy has announced.

Gray has been appointed chairman of the Division of Chemistry and Chemical Engineering, succeeding John D. Baldeschwieler, who has completed a five-year appointment in that role. Gray is the William R. Kenan, Jr. Professor and professor of chemistry.

Vogt, professor of physics and chief scientist at the Jet Propulsion Laboratory, has been appointed chairman of the Division of Physics, Mathematics and Astronomy. He succeeds Maarten Schmidt, professor of astronomy, who has been named director of the Hale Observatories.

“Both of these men have earned international reputations for their work,” Christy said. “We’re fortunate in having people of their ability and experience to fill these important roles.

Gray is widely known for work in the chemistry of excited states of metallo-organic compounds and the role of metal ions in living organisms. He and his research group are studying the mechanisms by which energy is stored and released to the body. Their work bears upon such important areas as hemoglobin, enzyme action, and photosynthesis. Recently he and his colleagues developed a compound — a molecule containing rhodium—that can convert the energy of sunlight directly into chemical fuels.

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Vogt, who joined Caltech as an assistant professor of physics in 1962, and in 1961 he joined the chemistry faculty at Columbia University, becoming the youngest full professor in that institution’s history. He came to Caltech as professor of chemistry in 1966 and was appointed Kenan Professor in 1976.

New rings of Uranus found

Indications of three additional rings around the planet Uranus — bringing the total to eight — have been discovered by astronomers of Caltech and the Hale Observatories. Peter M. Goldreich, professor of planetary science and astronomy at Caltech, announced the discovery.

Goldreich said the observations were made April 10 by Eric Persson of the Hale Observatories, using the 100-inch du Pont telescope at the Las Campanas Observatory in Chile. Philip Nicholson, a Caltech planetary science graduate student, reduced and interpreted the data.

The rings of Uranus were originally discovered on March 10, 1977, by several independent groups of astronomers. The most definitive results were obtained by a team from Cornell University headed by James Elliot. The astronomers found four main rings with radii ranging from 44,800 kilometers (km) to 51,800 km, and widths from 3 to 100 km. The Caltech-Hale Observatories team observed the rings, which are normally too faint to be detected by telescopes, by measuring how the light from a distant star blinked on and off as it passed behind them.

The star used for the new measurements was 100 times fainter than the star used in the original discovery. The astronomers were able to perform more sensitive measurements than before by observing the star in the infrared region of the spectrum. At these wavelengths, Uranus reflect more light. Thus, it appears extremely dark, allowing astronomers a more sensitive look at the star passing behind the faint, narrow rings.

Goldreich also described what is known of the rings of Saturn. Studies of radar waves bounced off the rings, and of reflected sunlight and infrared and radio emissions, have given rise to two competing theories about their composition. One theory holds that they consist of centimeter-to-meter-sized chunks of water ice. The other theory is that they are composed of meter-to-kilometer-sized chunks of meteoric iron.