Dr. Linus Pauling, professor of chemistry at Caltech and chairman of the Division of Chemistry, received the 1954 Nobel Prize in Chemistry. The award, which includes a gold medal, a certificate, and a cash prize of $35,000, was announced yesterday by the Swedish Academy of Science. Dr. Pauling will receive the award from King Gustaf of Sweden at a banquet in Stockholm this December.

Dr. Pauling received the award principally for his discovery of the fundamental principles determining the nature of the chemical bond and the structure of molecules, for his impact on the discoveries concerning the essential atomic structure of proteins.

3 others
Pauling is the fourth Caltech scientist to receive the Nobel Prize. The others have been: the late Dr. Robert A. Millikan, professor of physics and chairman of the Caltech Executive Council, from 1922 to 1945 who received the Nobel Prize in physics in 1923; the late Dr. Thomas Hunt Morgan, professor of biology and chairman of the Division of Biology from 1925 to 1945 who received the Nobel Prize in medicine and physiology in 1933; and Dr. Edward L. Israel, a Caltech alumnus and professor of physics at Caltech from 1936 to 1947 who received the Nobel prize in physics in 1945.

Pauling has now undergone a complete face-lifting and is ready for the grand opening next Monday. The Interhouse Committee has planned a program that will feature an exhibition by an expert billiard player and the finals of our ping-pong tournament. Refreshments will follow.

B and G help
This project has been carried on by the Institute with the help of Buildings and Grounds. The materials have been purchased through Institute funds and consequently have come from the students' own expense accounts.

BOD room, too
The main room will have billiard tables, shuffleboard and ping-pong. Off the main room will be a recreation room with chairs and facilities for playing cards. In addition to the game rooms, all the studentës have been made in the ASCIT Guggenheim Laboratory is important contributor in aeronautical developments

By John Howell
A quarter-century of leadership in aeronautics distinguishes the Daniel Guggenheim Aeronautical Laboratory

Karman, brilliant scientist, engineer, and applied mathematician, was brought to this country to help develop and organize the new school. Karman became full director of the Laboratory, and in 1928, he became vice-president of Caltech.

Modern aeronautics has undergone tremendous technological changes in the last decade. The feasibility of aircraft flying at hypersonic speeds has been made possible by a relatively entirely new set of concepts, derived in part largely by research conducted by GALLITC men. High speed, therefore, has changed the very nature of the airplane. A high speed effect of turbulence, visibility, shock-wave boundary-layer interaction, and jet effects have all been studied with the aid of GALLITC facilities. Three major developments at Caltech originating at the GAL.

CIT and later growing into separate administratively unique units are:

Barbecue and parade to Oxy replace annual Pajamarino

An institution is dead. With the advent of the new gym comes the demise of a Caltech tradition: the Pajamarino and its nightly raids on box stockpiles, the general store group—their bread and butter. The Caltech Polo and Fire Department, the Los Angeles Police and Fire Department, were instrumental in preserving the Pajamarino’s green-fingered custom of using their money to build our bonfire, and the fire permit to hold the bonfire next to the gym.

To fill the void a replacement has been provided. On Friday night, November 12, the evening of the “Oxy” game, a barbecue will be held in Townsend Park. Dinner will be served at 6:30, and will include a pound of meat, a pound and a half of box variety—will burn during the entire evening. Both meat and box variety—will be free to those with Student Identification cards and dates and off-campus Technicians. The Pajamarino has stepped into a higher plane. The Pajamarino’s as they once were will be no more. The Pajamarino’s as they were will be no more.

Guggenheim Laboratory is important contributor in aeronautical developments

By John Howell
A quarter-century of leadership in aeronautics distinguishes the Daniel Guggenheim Aeronautical Laboratory (DGLLITC) as it celebrates its silver jubilee this year. The remarkable story of these twenty-five years is told in an expensively produced booklet released last week under the direction of Clark B. Millikan, aeronautical head.

Although the commencement is two years overdue, the story of Guggenheim’s research is as timely as our era of aviation.

In 1925, Dr. Robert A. Millikan obtained a grant of $300,000 from the late Daniel Guggenheim Fund for the Promotion of Aeronautics, to construct a laboratory and start a graduate school of aeronautics at Caltech. Dr. Theodore von Karman, brilliant scientist, engineer, and applied mathematician, was brought to this country to help develop and organize the new school. Karman became full director of the Guggenheim Aeronautical Laboratory at the California Institute of Technology (referred to by the simpler abbreviation GALLITC).

Under the able guidance of Dr. Karman, the laboratory grew to 200 people and a staff of approximately 750 students, and has contributed heavy-lifting to the development of fluid flow, applied aerodynamics, stability and structures, and jet propulsion.

Modern aeronautics has undergone tremendous technological changes in the last decade. The feasibility of aircraft flying at hypersonic speeds has been made possible by a relatively entirely new set of concepts, derived in part largely by research conducted by GALLITC men. High speed, therefore, has changed the very nature of the airplane. A high speed effect of turbulence, visibility, shock-wave boundary-layer interaction, and jet effects have all been studied with the aid of GALLITC facilities.

Three major developments at Caltech originating at the GALLITC and later growing into separate administratively unique units:
New society to be formed

A "Caltech Engineering Society," with emphasis on freshmen and sophomore participation, will be initiated with a speed boat exhibit and lecture next Wednesday.

The new group is to be organized jointly by the local chapters of national engineering societies to acquaint freshmen and sophomores with engineering careers. Underclassmen will be able to join this group until they have chosen an option and a national society.

The display, a home-built Chris-Craft inboard speedboat constructed by Dick Hyde, a Tech student, will go up in front of the cafeteria Wednesday, November 30. That evening, in 206 Engineering at 7:30, Hyde will lecture informally on the problems of converting automotive engines for marine use. The method of construction of Chris-Craft boat kits will also be discussed.

The marine power meeting is the first of a series to be given freshmen-sophomore emphasis. Underclassmen are urged to attend this and keep tab on other meetings, as the new society will depend upon their participation to get its start.

Pendulum copy due this weekend

This weekend is the deadline for late entries for this term's Pendulum. The editors are looking for fine material, and assure us that they'll print anything reasonable.

Consolidated balance sheet

June 30, 1954

Assets:
Cash in bank $3,649.29
Investments United States defense series F bonds 300.00
Share in endowment fund Investments of the California Institute 2,739.27
Accounts receivable 1,471.17
Total $8,092.73

Liabilities and Surplus:
Accounts payable $3,968.00
Cap and Gown Reserve 2,590.25
Surplus 1,508.48
Total $8,092.73

When you know your beer...it's bound to be Bud

In pleasant moments of leisure, beer belongs. And the most popular beer of them all is Budweiser...the beer brewed by the costliest process on Earth. Every sip of golden Budweiser tells you why it is preferred everywhere.
**Letters to Editors**

Dear Editors,

From time to time in the past year I have had occasion to go out with some of the students at your noble institution, particularly engineers. After a long and careful study of their habits and thoughts, I have this to say: With clouded wits the engineer sits and pushes pens and pencils. While day by day, years slide away Among his ink and stencils. He works and works, and never-shirks (He couldn’t do without it). And if he stops, asleep he drops And then he dreams about it.

With head that sinks and frame that shrinks He does his toilsome duties Without a glance from gay romance And blind to all her beauties. And when at last his life is past There comes no chance to show it. For engineers are dead for years Before they ever know it.

Yours sincerely,

*Frustrated*
Tech trounced by 'Hens, 60-6

Schmid scores twice, Engineers, Oxy next on schedule for footballers.

The greatest massacre since D.C.L.A. waxed Stanford 72-0, the Tech football team enjoyed a 60-6 contest to league-leading Pomona-Claremont last Saturday afternoon at Claremont. To be sure, Tech was never in the game after the first scrimmage play when Pomona halfback Bill Schmidt rushed 86 yards for the first touchdown. The Hens made the score 14-0 soon thereafter when they capitalized on the Tech fifteen yard line and crossed the goal after six plays. It wasn't long before Pomona had still another touchdown, their halfback intercepted a Conley pass and ran it back to the Beaver 32. In two plays, presto, 260.

Only TD on pass

The Tech team started a losing march late in the first quarter. The culmination of the 18-play drive came early in the second period when Tech, behind a good punt holding by Pullback Walt Menary, while Pomona was rolling up 365 yards. In its last six plays of the period, Tech was little the better of it as it gained 117 yards. Bob Chilson caught two passes for 16 yards and Dick Schmid small yards to nullify the Pomona effort.

Out to win

The Hens have a bye this week and next Friday they meet Oxy at 3:00 in the same line-up they used several Saturdays ago and won against Pomona. The week after next the Hens play the last regular season game against Occidental in the dingy old Multifield stadium in Los Angeles.

(Continued on Page 6)

Tech aquaman lead league

In a tight contest at Pomona last Friday, the Tech water polo team defeated Pomona, 16-5, to take over undisputed first place in the conference. The game was nip and tuck all the way with Pomona leading 2-1 at the half. Tech then rolled up a commanding 5-2 lead in the last quarter only to have Pomona dump in three goals with two minutes to go to tie it up. Two overtime periods passed before Tech scored, with the Beavers bringing three goals through in the final period to sew it up.

Ball scores six

Leading the Tech scoring parade was Jim Ball, the top scorer in the conference with six goals this season. Ted Wiltgen scored two goals and Bill Davis scored two. The Oxy Jayvee holds the lead, scoring an average of 10.5 goals per game. The Tech varsity team really wants inSan Diego for the Pacific champion title.

(Continued on Page 7)

Booters play miserably, salvage tie with Cal Poly

By Helgekrone

Caltech's varsity soccer team journeyed to San Luis Obispo to play Cal Poly last weekend and brought back a 2-2 score. The Beavers were lucky to be as they played their worst game of the season. Part-time coach Hutton back who referred the game said that this was the worst game he had ever seen a Caltech team play.

Early in the first half Stefan­ son missed a penalty kick for Caltech, but he redeemed himself a few minutes later by scoring on a close-in shot. Caltech had the best chance on this game against Cal Poly. Dick Schmid scored for Engineers, 60-6.

Tech trounced by 'Hens, 60-6

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Frosh Sports Roundup

By Bob Walsh

Caltech's frosh football squad lost its third straight game to Pomona-Claremont 24-0 at Paddock Field Saturday.

Despite outstanding running and pass receiving by Howie Hilton, the Beavers never came close to scoring against Pomona's single-wing offense powered consistently for good gains, but the Tech game was inconsistent.

Van Kirk hurt

Bob Mitchell sparked the Beaver line with his hard tackles and Don Stocking's passing was greatly improved. With Dick Van Kirk on the sidelines with a torn knee ligament, Stocking connected consistently with Hilton.

The big weakness in the Caltech offense was failure to keep a drive going. Time after time a long gain would be followed by an interception, a fumble, or a big loss.

Krehbiel punts

A bright point in the game was the fine punting of fullback Ed Krehbiel. Although hampered by poor passes from center, he chalked up punts of 49 and 50 yards from scrimmage.

There is no game next week as the teams sniveled for mistricks but the week after they meet California Baptist on the local field.

Press box (7 notes): Hilton's brilliant performance came despite the fact that he missed almost half the game with an upset stomach. . . . Van Kirk will be out for the rest of the season and may miss part of the basketball season. . . . Next week your reporter will bring you a report on the water polo and cross-country teams.

Tech debate team scores

Last weekend, at the San Diego Invitational Tournament, two certificates of excellence were awarded to Tech debaters. Don Meyer and Herb Rasch were each awarded a degree of excellence in lower division extemper talking. Each had a record of two first places and one second in the tournaments in which they competed.

Almost

In another division of the tournament, Bill Lindley competed in upper division discussion and missed a degree of excellence by only one point out of a possible 15 for three rounds.

Not quite

Don Meyer and Herb Rasch also competed in lower division oral interpretation but failed to place.

Bill Lindley entered upper division extemper speaking but failed to place.

Taking part in the tournament were representatives from all of the colleges in the Pacific Coast area active in forensic activities.

Ruddock chosen

(Continued from Page 1)

 loan embassy in Berlin from 1912 to 1916, and held the same post in Brussels the following year. From 1917 to 1920 he served in the State Department in Washington and from 1920 to 1925 in the American embassy in Peking. He has been associated as trustee or director with the Security-First National Bank of Los Angeles, Occidental College, the Los Angeles County Museum, the Town Hall of Los Angeles, and the Pasadena Civic Music Association.

Ruddock has been chairman of the advisory committee of the Los Angeles County General Hospital and chairman of the management committee of the Huntington Memorial Hospital. In 1940 he received the Arthur Noble award for outstanding service to Pasadena. Currently a resident of Santa Barbara, he is president of the Universal Consolidated Oil Company, the Santa Barbara Foundation, and the Santa Barbara Museum of Art.

Dr. William B. Munro, former vice-president and treasurer, was professor of history and government at Tech for nearly twenty years and has been a trustee since 1945. He is a trustee of the Huntington Library and the Huntington Memorial Hospital.

L&M... Now King Size or Regular!

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MUCH LESS NICOTINE!

L&M... Now King Size or Regular!

Why do L&M sales soar higher every day? It's the one filter cigarette that gives smokers a taste they can enjoy — a filter they can depend on. Now L&M comes king-size, too, at the same low price as regular.

In either size — only L&M Filters give you the Miracle Tip — the effective filtration you need. Get much more flavor — much less nicotine — a light, mild smoke. Yes, it's the filter that counts ... and L&M has the best!

BUT L&Ms King-size or regular, just what the doctor ordered!