# The California Tech

Volume LVI

Pasadena, California, Thursday, December 9, 1954

Number 10

# Racial prejudice to be subject of McKinney essay contest

"The Problem of Racial Prejudice" is the subject of the 1955 McKinney prize contest in English. Four prizes will be awarded, \$75 first prize, \$50 second prize, \$25 third prize and \$15 fourth prize. The contest, established in 1946 by Dr. Samuel P. McKinney

of Los Angeles is open to all juniors and seniors at Caltech.

The assigned reading for this year's contest includes "Gentlemen's Agreement" by Laura Hobson, "My Life in New Orleans" by Louis Armstrong, "Cry The Beloved Country" by Alan Paton, and "Merchant of Venice" by William Shakespeare.

Each candidate must write an essay of about 1200 words on the given subject, drawing ideas for his paper from the assigned reading. All essays must be submitted to Dr. Kent Clark, 301 Dabney, by Monday, April 18, 1955.

Judging will be done by a fiveman committee, consisting of two men from the Humanities Division and three men from outside of Caltech. The prizes will be awarded on the essays only; there will be no oral presentation of the papers. The quality of the thought and the effectiveness of the writing will be the bases for judgment.

The results of the contest will be announced early in May. For further information, the student should consult Dr. Clark.

### Tech grad student second in contest

Forrest Mozer, Caltech gradnate student, won the \$300 second prize in a recent essay contest sponsored by the Gravity Research Foundation. The contest, the subject of which was the nature of gravity, was sponsored by the Foundation in order to promote the theoretical discussion of the subject.

The first prize of \$1000 was given to co-authors Dr. Stanley Deser and Dr. Richard Arnowitt of The Institute For Advanced Study, Princeton, New Jersey. Third prize of \$200 went to James O. Beaumont of the IBM Advanced Development Laboratory.

## Caltech impresses visiting teachers and students By John Howell

Last Saturday, this campus saw a sudden influx of ducktails and swede shoes, as some 900 high school and junior college students came here for Caltech's fifth annual Students' Day. Professors brushed off their shiniest instruments and prepared their most spectacular demonstration lectures, in order to impress the thundering herd with the allure and magic of science.

The potential and prospective scientists and engineers were conducted around the campus in the morning on guided tours; in the short three hours alotted, the visitors were exposed to a good cross section of the research now in progress in all the various departments.

In the afternoon, they were officially greeted and welcomed by Jim Adams, ASCIT president, and addressed by Dr. Du-Bridge. After that, they were given the opportunity of attending three lectures of their own choice, presented by many of Tech's more colorful and eminent faculty.

No illusions

What the visiting students saw, of course, was not typical of a normal day at Caltech. However, this was made clear to our visitors. As Dr. DuBridge explained it, they were not only invited here to see what scientists and engineers do, but also to become acquainted with their working conditions and unique problems.

All in all, Students' Day was a success for everyone concerned. Of those students who attended, it is probable that only a small percentage will apply for admission to Tech, and it is more probable that an even smaller percentage of those will be admitted. On the other hand, a greater respect and appreciation has undoubtedly been instilled in all of them for the role of such an

(Continued on Page 6)

Field will talk on electronics

"Electrons, Electronics and Microwaves" will be the subject of the Friday evening demonstration lecture this week. Professor Lester M. Field will discuss the study of very high frequency electricity and its applications in his talk, to be given at 7:30 p.m. Friday in 201 Bridge.

Dr. Field is professor of electrical engineering at Caltech. Since coming to Caltech in 1953 he has set up an electron tube aud microwave laboratory and is engaged in research on microwave amplification and interaction processes. A graduate of Purdue University, Professor Field received the PhD degree from Stanford University where he served as a faculty member before joining the Caltech staff.

### Pendulum solicits new contributions

The editors of Pendulum urge undergraduates with literary inclinations to write for the magazine over the Christmas holidays. Contributions can be poetry, prose, art work or any combination of these. Contributions should be submitted to editors Chuck Bodeen, Mike Boughton, Russ Hunter and Jim Short.

### Richards' speech feature of evening; Menetrey and Stefansson win trophies

Olympic pole vault champion Bob Richards was the featured speaker at last Monday's annual fall sports banquet, which also included the presentation of awards to varsity and frosh athletes in football, soccer, water polo, and cross-country. The vaulting vicar delivered a very inspiring speech on "The Heart of a Champion" which he illustrated with numerous incidents from his **own** career in track and field.

# Y prepares for Asilomar conference

**Caltech athletes presented** 

awards at annual banquet

"Where are you?" That is the question the YMCA-YWCA has chosen as its theme for Asilomar, the Y's weeklong camp that is held yearly near Monterey, California. This year the meet will be held from December 26 through January 1.

Several hundred delegates from scores of southwestern colleges will draw together to engage in a week of seminars, discussions, and recreation. The program is headed by students who are aided by YWCA and YMCA officials.

### Seminar leaders

Alexander Miller, lecturer in religion at Stanford University, is the speaker slated for the morning platforms. The afternoon program will consist of eight seminars, led by qualified leaders such as Dr. Floyd Ross, recent visitor to Caltech. Most of these leaders are teachers in the schools participating.

Seminars offered are: "In Scarch of Yourself," "Co-Existence or War"?, "Human Relatedness," "Contemporary Religious Thought," "Meaning of Love and Marriage," "Current Campus Philosophies," "Your Freedom is in Trouble," and "Living World Faiths."

### Recreation

Ping pong, volleyball, swimming in a newly heated pool, square dancing, and trips to the scenic spots nearby are a few of the activities—all co-ed—that will be enjoyed by the participants during the vacation like meeting. The top social event will as usual be the New Year's Eve party.

The evening started with **a** delicious steak dinner. When everyone had had his fill and the air was sufficiently cloudy with cigar smoke, master of ceremonies Bob Huttenback opened the program with a humorous speech in which he proved that Caltech had the top football team in the country. On the scale which the mentor devised, which judges a team by its performance in only one quarter of each game, Caltech had a rating of 5.2, whereas second place U.C.L.A. had only 4.4. Huttenback continued with the introduction of guests including men from the football teams of 1924 and 1934 and the unbeaten, untied, and unscored upon team of 1944.

The coaches of the various teams in turn took the floor to bury the past fall season. Football coach Bert LaBrucherie presented the coveted Wheaton trophy to fullback and co-captain Walt Menetrey. On behalf of the Southern California Soccer Conference, Huttenback presented the big soccer cup permanently to Caltech for winning the championship three consecutive years. Rafn Stefansson received the most valuable player award in soccer from coach Sedat Serdengecti.

Twenty-four men won block T's in football. They were: Co-(Continued on Page 4)

# Total of \$1500 in Caltech Y finance drive

The Caltech Y finance drive has collected \$1490.01 from Tech. undergraduates and grad students since its start November Van Walkley, Y treasurer 15. and drive chairman, said that the total is very satisfactory, and considering that the returns aren't all in yet, it should come close to the \$1750 goal set. Only about half of the grad students have been solicited so far, and contributions are coming in daily. The returns from Blacker House and the off campus students are not final as yet. The total in the student houses this year is \$856.01, which is down from a total of \$894.97 last year. Ricketts men contributed \$254.51 and Dabneyites come through with \$212.00. Fleming gave \$200.00 and Blacker contributed \$189.50. The total from graduate students is \$423.25. Off campus undergraduates have contributed \$210.75 so far, which is a considerable increase over last year. The faculty members weren't solicited in the drive this year. since they contributed through AID earlier this term.

# Faculty produces a lively musical comedy to celebrate Dr. Pauling's Nobel laureate

#### By Russ Hunter

The faculty of Caltech gave Dr. Linus Pauling the "high point of my life. ... as he phrased it, with the largest meal the Athenaeum has ever served, followed by a night of festivities. Friday, December 3, three hundred and fifty-three peoplefaculty members and those who could scrounge tickets-came together to hail Pauling with a bon voyage dinner before he leaves for Stockholm to pick up his Nobel Prize. The evening began with a frantic dinner at the Athenaeum which closed with an ode to Pauling by a harp-strumming. wreath-clad muse who ended his bit by laying his laurels at Pauling's feet. Dr. Norman Davidson, MC for the evening, shifted the scene of the gayety through a heavy deluge to Culbertson, claiming that ". . . the affair's meteorologist, George Beadle, has arranged for a minimum of downpour. . ."

### Habitual

Dr. DuBridge, in delivering the opening remarks to a packed house at Culbertson said, "... Nobel prizes are like hard liquor —the more you have the more you want... We're met here to celebrate the judgment of the Swedish Academy... not Pauling's accomplishments ... after all, you celebrate the arrival of a baby when it's born, not when it's paid for..."

After calculations of Nobel prize winner density as a function of campus area and number in the student body (It's a pity we're so short on student bodies) Davidson announced that the University of California at Berkeley would need forty Nobel Laureates to equal Caltech's distribution. This was to introduce Professor Stanley, Nobel Laureate for his virus crystallization work at Berkeley. Dr. Stanley eulogized somewhat and brought the "greetings of Linus' and Helen's (Mrs. Pauling) friends all over the world. . ."

#### Stochasticism

Dr. Hughes next gave a "lovingly disrespectful" appraisal of Pauling's work. Actually, he showed a batch of slides ferreted out of the Pauling household starting with the darling baby in curls and pearls, and continuing by adolescent bounds to a pink-bearded grad student. To hear Dr. Hughes' sly spatter, Pauling's main gift to the world of science is the "Stochastic Method"-guessing the answer to a problem, then looking for experimental evidence to prove it.

The major part of the time in Culbertson was filled by the production of "The Road to Stockholm," a tale of the life of the growing scientist brought to you over "... radio station KCIT, sponsored by Caltech, Pasadena, that's Caltech, Pasadena.

(Continued on Page 6)

Anyone who desires further information or would like to make reservations—the fee for the full week will be \$41.50 should contact the Caltech Y office.

### Here's a chance to jump and shout

More yell leaders are wanted for basketball season, Curt Schulze, head yell leader, has announced. With several games a week, there is opportunity for more men to lead cheers.

Those interested are to contact Schulze who will arrange for tryouts the first week of second term.

For anyone intending to run for yell leader next term, this is a must. News Staff..

### California Tech

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## Letters to the Editor

### A reply to "frustrated"

Los Angeles

Dear Editor.

Spurred on by comments of "Frustrated" in the November 4 issue of your scandal sheet, we felt the call to pen a few words of wisdom to you.

Before venturing out with members of the Caltech contingent, we were violently warned. We were told that these engineering entities were somewhat akin to Martians-that they sported sliderules instead of arms and ambled like automatons on the dancefloor.

But disillusion came. We found not the fascinating Cro-Magnon specimens we had anticipated, but honest to goodness, red blooded American BOYS.

We found that these Caltech creatures were human, with capacity for enjoying themselves and for giving female companions a really good time. So we tried to discover just what these males lacked (besides females). After careful analysis via the scientific method, we have arrived at a conclusion. We wish that Caltech Beavers would busy themselves with a little introspection and come up with some social niceties, such as: 1) Girls

like to be asked where they'd like to go or what they'd like to do of an evening. They will generally be in complete agreement with the fellows, but girls like to be treated as individuals with feelings. Past experience has shown us that Caltech people decide what's going to happen and then announce it to their female companions like a final ultimatum. 2) And Why Are They Always Late?

...Dave Cantor, Jerry

3)While we're at it, we have one more gripe. About conversation on dates. Why does it have to be limited to weather, beer busts and additions to the wind tunnel? We just want people to be natural with us and not treat us as biological specimens. (This also pertains to back-seat activity on the way home.)

We're all for you, boys! All we want is to see some of your potentiality developed. You might enjoy the results yourselves. You might even make the transition from Boyhood to Manhood!

### Hopefully,

The C.I.T. Fan Club (composed of college women throughout the U.S.A.)

Engineering representatives of

**PRATT & WHITNEY** 

AIRCRAFT

will be on the campus

Speaking of the off-campus party, smooth cat Henry Phipps proved to one and all the value of a sophisticated background. After chasing Benning and Benning's date around all evening-(he thought he had known the girl from someplace before)-he finally got up nerve enough to introduce himself. When Benning reciprocated by asking to be introduced to Phipps' date, the suave old boy couldn't remember her last name. And to top it all off, in his state of utter panic he couldn't even remember Benning's last name. Say, boy, that's what we live to see in a man, the master of any situation.

### Perfect vacation

From Dabney comes delayed word to the Beak that Taussig isn't anyone to fool around with prudes. During Thanksgiving vacation he took off for unknown parts with 1) a car 2) a fully equipped house trailer and 3) a girl. Actions speak louder than words.

### Gush, blush, slush

The spirit of "loud-mouth" Lindfors must be seeping across the court into Ricketts. A month or so ago after Lindy had been saying, as his usual reply to most anything, "Bite me" ad nauseam, Pope Tambling, in a state of spirited glee one night, (Continued on Page 4)





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"Had we but world enough, and time, This coyness, lady, were no crime."

Prude-haters of the world, take these words to heart!! The Beak says that the next time you try "to feast of those nectar lips" and she says "No!"-give her a shot from good old Marvell. If that doesn't work, brother, trade her in on a new model.

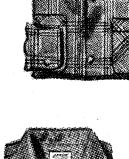
Speaking of taking your time, it has just come to the Beak's attention that Blackerman Nichols should certainly take a few lessons in clock reading. Blacer's off-campus party at the home of Harford's fair-haired and rosy-cheeked maiden broke up at midnight last Friday. At 11:50 good old Nick and date rang the

doorbell. In addition to being three hours late, the fool had lost his way in San Marino. Hey, Nick-you're supposed to park after the party.

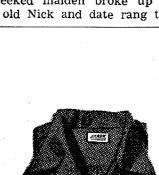
CALIFORNIA TECH

Spastic









-Marvell

Campus Brewins

Tuesday, January 11

Monday, January 10

to interview

AERONAUTICAL METALLURGICAL ELECTRICAL MECHANICAL PHYSICISTS CHEMICAL ENGINEERING GRADUATES

### States States **Please See Your COLLEGE PLACEMENT OFFICER**

for an appointment on

Monday, January 10 and Tuesday, January 11

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## The COOL Corner

### By Frank Kofsky

As proof that contemporary jazz has really come of age, a few weeks ago "Time" magazine featured one Dave Brubeck, jazz pianist extraordinaire, on their cover. As many of you already know, Brubeck is held in highest esteem by all devotees of cool music, and some, your reporter among them, go so far as to say that he is the foremost cool musician in America today.

Brubeck was born in Texas but came to the College of Pacific in California to study animal husbandry, preparatory to taking over his father's cattle ranch. After one year with the cows, he switched to music, and since then, as they say on the sports pages, he has "never been headed."

Following graduation and marriage, he worked with the Octet from the Jazz Workshop in San Francisco, later setting out with the Dave Brubeck Trio, featuring Cal Tjader on vibes and bongos.

At the same time, Darius Milhaud, French modern classical composer, was lecturing at Mills College, and Brubeck enrolled in his class. Under Milhaud's tutelage, Brubeck evolved a definite musical philosophy, rich in counterpoint, polytonality and intricate rhythms. Indeed, much of the contrapuntal tendencies of today's cool jazz are a direct result of the Frenchman's teachings.

Brubeck's attendance at Mills was fortuitous in another respect, for here he met his best friend and musical partner, Paul Desmond. Desmond, an alto saxist, joined forces with Brubeck, Joe Dodge, drummer, and Bob Bates, bassist, to form the Dave Brubeck Quartet. There is no doubt that both Brubeck and Desmond are competent musicians in their own right, but as a team, they are unbeatable. Prior to June of this year, Brubeck had recorded for his own Fantasy label, but at that time, he recorded his epic work, "Jazz Goes to College," on Columbia. Columbia has recently put out his second twelve-inch disk, "Jazz at Storyville," which I recommend without reservations.

Five or six years ago, Dave gave a concert here. I feel that it certainly would be well worth our while to try and make arrangements for another. This idea is not unfeasible; his most vociferous supporters come from college campuses all over the nation. I'd like to hear some expressions of opinion from you on this subject.

### Jazz notes from all over:

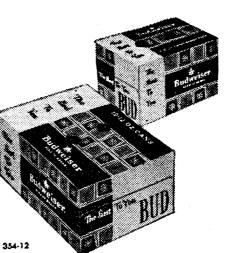
Los Angeles Dept: Progressive fans will be overjoyed to learn that Shorty Rogers' Giants are now appearing at Zardi's (where else?), on Hollywood Boulevard. Shorty is noted for his excellent arrangements for both Kenton's and his own aggregations, and his fine trumpet; moreover, Shelly Manne, leading modern percussionist, is featured with the Giants.

Elsewhere, Charlie (Bird) Barnett is at the Celebrity Room on La Brea, and Conte Candoli has taken over for Bob Williamson on trumpet for the Lighthouse All-Stars.





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### CAMPUS BREWINS

(Centinued from Page 2) almost took him up on it. In Ricketts the other day, Rowdie Bonwell, after a similar remark, was preparing to be taken up on it by Bailey. He had just finished unpreparing himself when in walked Mother Southworth

from the other side of the lounge. Oh, those pretty red faces.

Once during a severe rain storm, three roosters found themselves caught in the deluge. Two of them ran for the barn. The third made a duck under the porch.

### CALIFORNIA TECH

### CALTECH ATHLETES (Continued from Page 1)

captains Ray Grieser and Walt Menetrey, Kyle Bayes, Luke Bogdanovic, Bob Christian, Phil Conley, George Hall, Ted Lang, John Lukesh, Dick Manley, Del McCune, George McDonald, Bill Moeur, John Myers, Steve Nathanson, Ed Nelson, Jim Okada, Dick Schmid, Jim Snyder, Marty Tangora, Marty Vogel, Larry Whitlow, Jim Workman, and manager Dave Clark.

Water polo letters were given to: Captain John Bush, Jim Ball, Bill Davis, Dick Johnson, Ed Park, Fritz Trapnell, Blake Wallace, Dave Yount, and manager John Converse. Twenty-five men, including Captain Don Stocking, were awarded numerals in frosh football. Captain Vince Taylor led a group of eight frosh water polo award winners.

Lettermen in varsity and jayvee soccer and varsity and frosh cross country have not as yet been announced.

# What changed this picture?

IF you ever drove up to that old-fashioned pump and said "Fill her up!" you'll remember that you got the gasoline. But that's all you got!

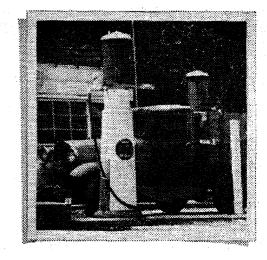
Because the primitive fuel *pump* was a long way down the road from the *service station* of modern times. We know, because we pioneered a surprising number of the customer services the petroleum industry has since adopted.

Like water and air wells. We first sank them on the pump island so you could get gasoline, water and air in one place. Like windshield washing service. We introduced the individual clean towel and special fluid—and first washed your car's windows all the way around.

Like the cash box on the pump island the quicker to make change and save you time.

Like famous Union "Minute Man Service" that, at its best, even empties the ash trays, brushes out and dusts off your car.

Like the full-time cleaning and painting crews that keep Union's 4500 stations in the



West the glistening white that invites you in.

When we introduced them these were "bonus services." Today you take them for granted when you buy gasoline. You do because the oil companies—in constant competition for your business—are continually improving their products and expanding their services.

For in America's free competitive economy, making things increasingly better for the customer is the only way to make any progress for yourself.





# Union Oil Company

Your comments are invited. Write: The President, Union Oil Company, Union Oil Bldg., Los Angeles 17, California.

# Redlands next for Tech cagers

The Caltech varsity basketball team opens its league season tomorrow afternoon against the Redlands Bulldogs. The game will be played at 4:15 in the Pasadena Armory and not at P.C.C. as previously announced. Leading the Bulldogs are Bob Pitman and Bob Edmondson, both all-conference selections last season, as they try to regain the crown which last year escaped them on the final weekend of the season. Both teams are fresh from last weekend's Redlands tournament where the host Bulldogs finished fourth, winning one and losing two, while Tech dropped both of its games.

Pasadena Nazarene, winner of the "R" tourney for the past three years, relinquished the title this year to Whittier, as the Poets grabbed a 69-50 victory in Saturday's final game. Santa Barbara College took third place by defeating Redlands 78-63.

Caltech and Santa Barbara opened the tournament Thursday afternoon and the Gauchos racked up a convincing 92-41 win. The Santa Barbara team had too much height for Tech as they controlled both backboards and made all their shots from close in. Center Phil Conley led Tech with twenty points and Bill Chambers threw in eleven.

In other first round games, Whittier edged Westmont 49-47, Nazarene beat Pomona 66-46, and Redlands squeezed by Oxy 53-52 on a basket by Edmondson in the last three seconds.

On Friday afternoon Tech tackled Westmont and again came out on the short end of the score, 73-67. Phil Conley repeated his twenty point effort to lead Tech's scorers and Chambers bucketed 17. Big Westmont center Tine Hardemann was the difference as he counted 31 big points.

In the semi-finals, Whittier took care of Santa Barbara 67-57 and Nazarene ousted Redlands 53-40. Oxy beat Pomona 88-78 in a high-scoring consolation game.

## Booters bow to USC, 3-1

Southern California dealt Caltech another defeat in soccer last Friday on the wet, slippery turf of T.P. Few people saw this contest, as all but the most avid soccer fans were scared away by the rainy weather.

The Trojans jumped to a quick lead by breaking through the Caltech defense to score three times early in the first half. Receiving notice from Coach Huttenback that the game had started, the defense woke up and began booting the ball down to the lonely forwards. Dick Okada, taking advantage of the situation, brought the avid fan to his feet when he bounced a curving shot off the goalpost. Olaf was right there and he booted it into the goal.

The final and halftime scores were both 3-1. Both teams played tight ball in the second half, neither scoring, although Caltech missed enough close shots to win or tie the game.

This weekend the Beavers meet powerful USF on their own field in the final game of the season.

# Tech harriers take second place in all-SCIAC meet

Led by Dave Crowther and Don Lewis, Caltech's varsity harriers edged out Pomona-Claremont for second place in the All-Conference cross country meet last Saturday. Occidental ran away with the meet, but there were real fights for second and fourth places as Tech beat Pomona by one point for second and Redlands edged Whittier by two points to slip into fourth.

Oxy swept the first three places as Larry Wray won, Burt Stokesbary took second and Dennis Lanterman third. Byron Kough of Redlands was fourth and Ace Emmerling of Oxy fifth. Crowther finished sixth, just a few strides back of Emmerling, and Lewis was right behind Crowther to take seventh. Fred Witteborn had a tough break when he slipped and fell during the race, but he got up and finished seventeenth. Bob Tambling, Bob Hamson, and Van Walkley were Tech's next men, all playing vital parts in beating Pomona.

The race was run on Whittier's rugged, hilly, 3.8 mile course, which, as a result of the

previous day's heavy rain, had in many places the consistency of a layer of slime over plate glass. Several runners besides Witteborn slipped and everyone was slowed down by the mud, but the race was still run at a very fast pace, evidenced by the winning time of 19:13.7.

Reid Saunders grabbed fourth place in the frosh meet to bring home Tech's only medal of the day. Gene Cordes, running his first race of the season, came in tenth, and Tom Moore finished twelfth as the Beaverbabes took third. The score was Redlands 27, Oxy 41, and Tech 52. Steve Emanuel got fourteenth for Tech and Mike Rusch was sixteenth. Rusch had the worst break of the day when he slipped on the mud and twisted his ankle, but he still managed to finish.

After the most successful **cross** country season at Tech in several years, the varsity voted Van Walkley captain, and the frosh chose Reid Saunders. The varsity wound up in second place in conference standings, while the Beaverbabes were third in frosh standings.

# HERE'N THERE IN SPORTS

### By Arne Kalm

Basketball fans in the SCIC got a pretty good line on how the championship race is going to turn out this year when the Redlands tournament ended last weekend. Whittier's victory, coupled with their victory in the recently concluded Long Beach Tournament, established the Poets as the solid favorite for the league crown. Whittier is led by forward Joe Wohlmuth, voted the most valuable player in the "R" tourney, and center Marlyn Davis.

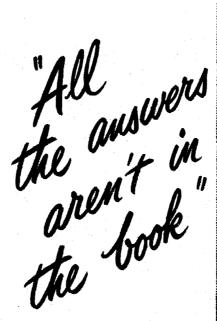
Redlands, whom Tech meets tomorrow, also showed up with a good team sparked by all-conference selections Pitman and Edmondson, and three j.c. transfers. Oxy and Pomona seem to be destined to fight for the cellar.

The Beavers had a pretty rough go of it out at Redlands in their two losing contests. The loss of Jim Tyler, who is now destined to be out for the season with a broken hand, is a big blow to Tech's hopes. Phil Conley and Bill Chambers played well, but they could use Tyler's height and shooting power up in that forward line. If the team could pick up its shooting eye and improve their passing game and rebounding, they might still go places.

As I see it now, the final standings are going to look about like this next February:

Whittier Redlands	 	Lost 1 3
CALTECH Occidental Pomona	 2	4 6 6
PASADENA BOWLING LANES 970 East Colorade Headquarters of Caltech Bowlers Open 11 a.m. to 1 a.m. SY. 3-1341 Special Student Rate before 6 P.M. except Sundays and Holidays 25c per line	CARI TECH 906 E. Ca SY 3-7	BARBERS lifornia

### A CAMPUS-TO-CAREER CASE HISTORY



W. D. Garland, E.E. '52, Univ. of California, is working for the Pacific Telephone Company. We thought you'd be interested in what Don told us about his first assignment.

(Reading time: 45 seconds)



Here Don Garland makes noise distribution measurements with a Level Distribution Recorder

## **ENGINEERING NOTICE**

The Glenn L. Martin Company representative will visit the campus on January 12th to discuss opportunities for graduating seniors of the school of engineering.

Contact your placement office for appointment and further details.

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"First thing the Chief Engineer explained to me was that 'all the answers aren't in the book.' He was right. Most of the problems have required a combination of electrical engineering, a knowledge of costs and generous amount of ingenuity. *I like it that way*. It's given me an immediate opportunity to put into practice the theory I learned at school. "In addition to this on-the-job experience, I have attended several special training courses conducted by the company. Now I'm breaking in a new man, just like when I started."

Don Garland's work is typical of many engineering assignments in the Bell Telephone Companies. There are similar opportunities for college graduates with Bell Telephone Laboratorics, Western Electric and Sandia Corporation. If you'd like to get more details, see your Placement Officer. He will be glad to help you.



### BELL TELEPHONE SYSTEM

# Survey shows factors influencing job hiring

### By Gordon Reiter

Page Six

Personality, faculty recommendations and interest in the company are the factors which most interest job interviewers at Caltech, according to a survey made by the industrial relations section. Grades rank fifth and student activities eighth.

### Survey

The survey was handled by ME grad Alfred Johnson, who sent questionnaires to 149 companies who interview at Caltech. Companies were asked which of 11 rating factors were of most importance in hiring new employees from college.

### Results

In order of relative importance, the factors are

- 1. Personality
- 2. Faculty recommendations
- 3. Interest in the company
- 4. Specific option
- 5. Grades
- 6. General appearance
- 7. Previous work experience.
- 8. Student activities
- 9. Personal references
- 10. Worked self through college 11. Student's pre-interview

### preparation

### Personality

As defined in the survey, personality is a combination of the impression on the interviewer and general ability to get along with people. This ability is usually judged by faculty recommendations, student activities and personal references.

### **Specific option**

Specific option means the student's option in contrast to his general field of engineering or science. In many sales positions, this factor is not very important, since technical training is sufficient. In research and development, specific option is more important, because specialized training is necessary.

### **Pre-interview** preparation

Student pre-interview preparation means what the student knows about the company when he goes in to the interview. This factor is rated low, indicating that companies do not expect students to spend much time preparing for the interview.

### Individual industries

The survey also shows which factors are considered most important by individual industries. Specific option ranks high in such fields as atomic energy and aircraft, because only a few options are interviewed for jobs in these interviews.

Aircraft industries Aircraft industries rank option and interest in the company

highest. Personality, faculty recommendations and grades were also rated high. Personal references and student activities were ranked lowest by the 23 companies reporting.

#### Atomic energy

Four companies who are engaged in atomic energy work reported. They list option, grades and faculty recommendations as being most important. Activities and worked self through college were low.

### Chemical and oil

The 23 chemical industry companies who reported list faculty recommendations, personality and interest in the company as the most important factors, Oil companies also rate these factors highest.

### Mechanical and electrical industries

Companies in the electrical industries like faculty recommendations, personality and grades in their applicants. Mechanical industries think personality, interest in the company and general appearance are most important.

### FACULTY PRODUCES (Continued from Page 1)

" This skit was hung together with continuity by Kent Clark and ditties by Jack Dunitz, Ted Harrold, Norm Davidson and Kent Clark again. One of the more sparkling songs in the show, sung to "Tavern in the Town," went: CHORUS:

- Pauling's courses can't be beat, can't be beat.
- Pauling's courses are a treat, are a treat,
- They will teach you the facts you need to know.
- And maybe some that are not SO. SOLO:
  - If psi-functions give you panics Try his course in wave
  - mechanics,
  - Once you've tried it, resonance theory
- Can't be beat!
- CHORUS: We repeat! Dr. Pauling's never wrong, never wrong,
  - And his double bonds are strong, they are strong,
- They're the strongest, longest, double bonds around,
- The strongest we have ever found.

In reply, the Dr. Pauling of the musical had this to sing: (to the tune of "The Battle Hymn of the Republic,")

Experimental drudgery is now quite obsolete,

I can sit here at my desk and place my head below my feet, And solve all nature's problems

by an introspection neat And make the academies smile. CHORUS: Theoretical creations, Tennis balls can lead to

inspiration, Tennis balls can lead to

inspiration,

And make the academies smile. You needn't spend a lifetime

doing chromatography, With my slick stochastic method and imagination free,

The structure of the proteins is no mystery to me; I make those molecules smile.

### **Popularity** foreseen

These and other songs in the show will drive Tom Lehrer's platter off the local shelves when and if they are recorded and released as has been threatened. Pauling himself capped off the

evening. In a few moments he covered: ideal conditions for scientific research; his reaction to the mood

that makes it difficult for a scientist to express an opinion on public matters; kudos for his wife and a short lecture on a blood problem he is particularly interested in. He concluded that this was probably "The high point of my life."

### CALTECH IMPRESSES

(Continued from Page 1) institute as Caltech in our modern era of technological development.

The high school teachers accompanying their proteges were also greatly impressed with what they saw here. It is well that this was the case; these are the men who will first positively stimulate the interests of younger generations-to-come along scientific lines.

Thanks to Jim Lewis and Rod Supple, chairmen for the day's events, and to Marty Tangora, chief guide, for the work they did that enabled the entire program to run so smoothly. Thanks too, to all the student guides and demonstrators, for their effort and time in the project.

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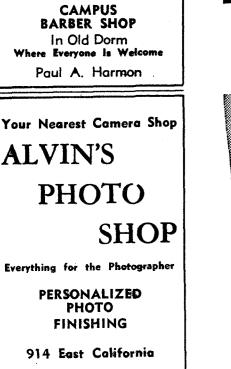
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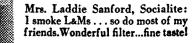
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