Dr. Feynman gives keynote address at Caltech-Scarpa Conference. Note Dr. Vogt's attentive expression.

**Techmen Meet Scrippsies**

BY LIS FISHBONE

Kissing off all the finer things in life available during the weekend at Caltech, 50 of our finest sought the refuge of Camp Oakes in the San Bernardino Mountains for the annual conference, meeting, or, as the case may be, escaping from reality with the girls from Scripps College in Claremont. The theme of the conference was creativity; certainly the work of the faculty members present and the potential of the students made everyone most receptive to widespread discussion of the topic.

Dr. Richard Feynman delivered the keynote address Friday night. It was entitled "What Is Creativity?" Speaking mainly from the scientist's point of view, he pointed to five main prerequisites for the creative act. First, all good work is done while alone; the individual concentration and freedom from criticism resulting from a lack of involvement with others is mandatory. Second, "the problem must be yours." You create your own way of looking at it, and have absolute faith that nobody else in the world can solve it. Balancing this egoism must be the third point—excellent judgment and an ability for self-criticism. In Feynman's opinion, this is the crucial factor that seemingly creative children lack. Finally, the creative individual must have infinite motivation to sustain the rare successes that he has achieved.

In concluding his talk, he mentioned five methods most used by creative scientists: analogy; generalization; skepticism of the standard; and, above all, looking at a problem, e.g., taking it out of its historical context; a naïveté or not knowing that an idea may be wrong, since it might have applications not immediately apparent; and the courage to take a stab.

**Mostly Sex**

With such interesting thoughts provoking them, the Beavers and Scrippies proceeded to thrash out the actuality of such discussion groups. However, the theme did not long remain the center of discussion. Inevitably, talk moved to such topics as what is wrong with Caltech and Scripps, marriage, sex, and the American mating ritual. As might readily be imagined, students and faculty toms themselves and their views to pieces.

Certainly the most provocative opinion of the weekend was delivered by Dr. Anthony Athos, a personnel relations expert and disinterested observer from USC: "The Caltech student is an inferior being who does not know what he wants. The results will be an annihilation of the Alma Mater of the U.C.S. The two candidates were Carl Ehrlich and Greg Zenigos. Mike Hetherington, second place candidate for secretary and likewise the team of Steve Card, John Howell, and Lenny Fisher for the social chairman. For athletic manager the team of Marshall Hall, and Bob Vance runs against the trio of Haydavon, Ron Peterson, and Norm Whitely. The candidates for the concert, or "the 'nose job'" as Mike and Leo Ehle were acclaimed alternatively, the third week of this term.

The election of the officers of Blacker, Lloyd, and Rudderock.

**In House Sing Tonight in Beckman**

BY MICK MERO

Tonight the 24th Annual Student Houses will gain the use of the exclusive Beckman Auditorium for their Glee Club's Spring Concert. All Houses are represented; Blacker, Lloyd, and Rudderock. These groups will line up on the stage outside at a quarter to eight, and the groups may get under way by eight bells. First, the House glee groups will present the Schlernberg, which will be judged upon appearance, tone quality, intonation, balance, pronunciation, and the general ability of music. Then the quartets will come on stage, each in turn.

While the judges deliberate on the scoring, the caltech Glee Club will sing a few numbers, after which the results will be announced. The house with the highest winning team will sing the same "Der Herr Segne dich" as the first prize song. All the Houses' efforts will be recorded for a fee of about $5, and Lloyd plans to dedicate one of his songs to the physics新鲜讲师Dr. Rochus Vogt.

**Female Intuition**

The judges this year are all female: the voice of our Dartmouth professor of music there, and the voice of our Columbia professor of music there. Certainly the most provocative opinion of the weekend was delivered by Dr. Anthony Athos, a personnel relations expert and disinterested observer from USC: "The Caltech student is an inferior being who does not know what he wants. The results will be an annihilation of the Alma Mater of the U.C.S. The two candidates were Carl Ehrlich and Greg Zenigos. Mike Hetherington, second place candidate for secretary and likewise the team of Steve Card, John Howell, and Lenny Fisher for the social chairman. For athletic manager the team of Marshall Hall, and Bob Vance runs against the trio of Haydavon, Ron Peterson, and Norm Whitely. The candidates for the concert, or "the 'nose job'" as Mike and Leo Ehle were acclaimed alternatively, the third week of this term.

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**Free Tickets For Concerts**

Caltech students have until 5 p.m. today to purchase free tickets (two per student) for the Pasadena Symphony Orchestra concert on Saturday, March 14, in Beckman. The 3 p.m. concert features Alice Scho- lenberg, an acclaimed German soprano in a recital concert. At 7:30 p.m. the orchestra will perform a handbell choir, and a variety of other concerts is available at the Beckman Ticket Office. The orchestra will play works of Schubert, Honegger, and Bizet. Details can be obtained at the Beckman Ticket Office.

**ASCIT, BOC, Y Fill Positions**

Doug Eaton is now ASCIT social chairman and Ian Logan is rep.-large. These races were decided in run-offs occurring after last week's TECH went to press.

The outgoing Board of Control members appointed Greg Shapley to the ASCIT BOC; after interviewing a trio of candidates, the board voted for three candidates. The other seven positions will be filled by House pollution.

In the YMCAs elections, Mike Gotoff was elected to the ASCIT assembly; student. John Eyler, vice-president; Phil Coleman, secretary; Dick Hacket aon, treasurer; Ben Cooper, publicity manager; and Mark Souter, regional and area representative.

Dr. Feynman gives keynote address at Caltech-Scarpa Conference. Note Dr. Vogt's attentive expression.

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**Precracy of both scientists and artists**

**Creativity**, he defined, meant exploring something new and of value. The creative person, born and nurtured, is one who can pursue his own problem to a deeper degree than anybody else.

**Creativity At Tech**

The Caltech physicist then listed five prerequisites for the creative act. First, all good work is done while alone; the individual concentration and freedom from criticism resulting from a lack of involvement with others is mandatory. Second, "the problem must be yours." You create your own way of looking at it, and have absolute faith that nobody else in the world can solve it. Balancing this egoism must be the third point—excellent judgment and an ability for self-criticism. In Feynman's opinion, this is the crucial factor that seemingly creative children lack. Finally, the creative individual must have infinite motivation to sustain the rare successes that he has achieved.

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**ASCIT APPOINTIVE OFFICERS**

Assemble your tek business manager and ASCIT assembly chairman, tech business manager applications must be submitted by 9 p.m., March 8; those for assembly chairman will remain open indefinitely. Appointment should be submitted in writing to Fred Andy Kempeck and Fred Andy Kempeck; applicants will be interviewed later.

Applications for other ap-
Innovations

are coming to the California Tech.

We believe the readers will find as much interest in this column as we do ourselves. It will contain news and current events of the university and community. The views expressed are those of the editorial staff of the Tech, and the opinions of the readers are welcomed. The views do not necessarily reflect those of the university administration.

Help! Help you to make some innovations for us. What we want—and what the California Tech is really sorely needs—is more feedback from our readers. Our goal—and your goal—is a better, more interesting campus newspaper.

Tim Hendrickson
Norton Greenfeld

Matt Hendrickson

Book Review

Pornographic Satire

Candy by Terry Southern and Mason Hoffenberg, G. P. Putnam’s Sons, 1969; $3.95.

BY TOM GREENFIELD

Modeled after Canned Heat, this book is perhaps best interpreted as a satire on sexual behavior in the US, but it might be thought of as a spoof on pornography. Anyway, whatever its motivation, the artist has skillfully combined the techniques of various people, the chance to raise a little hell, power, glory, graft, prestige, and your name in the paper. Besides, it snows girls and good sports.

—Bob Berry
Tim Hendrickson
Norton Greenfeld

EDITORIAL POLICY

For the information of its readers, the Tech presents the following summary of its editorial policy:

1. The Tech is independent and not bound by any college or university policy. It is a free forum for the expression of ideas, and all students, faculty, and staff are encouraged to contribute to its content.

2. The Tech welcomes all letters, opinions, and opinions expressed in the Tech.

3. The Tech reserves the right to reject any submissions that do not meet its editorial standards.

4. The Tech editor reserves the right to edit submissions for clarity and brevity.

5. The Tech aims to provide a platform for diverse voices and perspectives.

6. The Tech reserves the right to run anonymous columns if necessary to protect the identity of the writer.

7. The Tech welcomes contributions from all disciplines and marginalia.

8. The Tech does not guarantee the accuracy or completeness of any information provided.

9. The Tech reserves the right to make changes to its editorial policy at any time.

Letters

Parkinson View Library

I should like to direct the attention of the California Tech Community, the results of recent localizations on the proposed Milton Library.

C. Northcote Parkinson, in the monumental work in which he has made such notable contributions (Principles of Human Motivation, states (ch. 6): “It is now known that the construction of planned layout is achieved only by institutions on the point of collapse.”

In general, it is rife, etc., much of the Western complex, completed long after the greatest days of the pagum. Vervain, similarly complicated following the Sun King’s neath splendour; and of course the palace of the League of Nations, completed in 1917.

It seems presently impossible to halt the erection of the Lin­

ards, perhaps that the design might be inverted to pro­

old-story down, rather than up.

But this latter course would be only in error. Five according to Ernest Ibramah, as quoted by Sir Harold and Lady Jeffreys, it has been appeased that even the appearance of a gal­

characteristic upward accent.

In summary, perhaps only min­

oring considerations are in order. These should certainly include:

(a) A modest mooting mast

for dirigibles.

(b) A central shaft (for here is probably a singular oppor­

portunity to replace the ag­

ing apparatus in Robinson).

(c) A modest mooting mast

for dirigibles.

Prosperity, I beg to remain, your most humble & obedient ser­

vants.

C. Puno Theophaen

Editors’ Note: Letters submitted under the column must generally be accompanied by the author’s real name, the Tech editor reserves the responsibility for an un­

known author. The above is such a case.
Campbell Labs Exposed

Have you ever wondered just what goes on in the greenhouses on San Pasqual—the Center for Agricultural Plant research labs? The Tech has found out, and we've found out in the first place, they are not operated as efficiently as they could be. According to Dr. An led Lang, professor of Physical, a phytotron is a controlled environment laboratory which also permits changing environments. Dirty Old Man

It is undoubtedly the hardest place to get into. In order to prevent contamination of plants, the visitor on reaching the main entrance must phone ahead and receive clearance. He then enters something akin to an isolation chamber where he must wash his face and hands and comb his hair. He then enters a second room where he strips down a pair of sterilized pajamas. If he wants to smoke, that's all right, but he has to use one of the lab's autoclaved cigarettes.

Weir's opinion. He feels there are no short cuts, the conferees all enjoyed the meeting. Both the conferees and the visitors frolicked in the sunshine of events ranging from total darkness to 24-hour lighting. By moving plants through the various conditions ranging from total darkness to 24-hour lighting. By moving plants through the various

Corcoran Talks on Fuel Cells

BY TASS

Dr. Corcoran talked about fuel cells at this week's demonstration lecture. He covered basic principles of fuel cells, compared them with other sources of power, and described the future advantages and possible uses for the cells. The talks he received his BS and MS in chemical engineering here. During World War II, he worked on propellants for the Army. After the war, he received his PhD and became a member of Technical Development at Cutter Pharmaceutical Laboratory. During his absence, from Tech, the faculty seattle team suffered great hardships.

Wide Ranging Interests

Team spirit and other factors called Corcoran back, and he has since been doing research in electrical. It ranges from high temperature systems to engines for electric cars, he explained that one of the attractions of the fuel cell is its efficiency—up to twice that of the best alternatives, such as steam turbine or diesel engine. The talks may be improved by running them at higher temperatures and pressures, and by improving their catalysts and fuels.

Engineers' Problem

Current fuel cells can produce up to 200 amperes per square foot. Corcoran predicts that this figure can be increased four-fold in a few years. The best one can produce two or three kilowatts per cubic foot of fuel cell, and cost several thousand dollars per kilowatt.

Scrippsex

Born as a research project, this week's Scrippsex exposes the results for the winter. Campbell referred frequently to the Scrippsex, and this week's bring down, so that the other end for the other offices were: Sven Anderson, George Jahn, and return for the again lone-...
TECH Baseball Team Lost Three Last Week

The baseball team started the year off with a bang, but it was a short burst of brilliance and some promise for the future the three games to Cal. The first game on Wednesday ended with the score 9:1. The team has been inconsistent despite what the score seems to indicate. Caltech was constantly threatening but was never able to get the big hit. Twice there were men on third and no one out, with the bases loaded, and both times the batter popped up for the last out of the first game of the doubleheader.

The two games on Saturday at Cal Laramie came off much worse, ending with scores of 16-8 and 16-4. The team was hurting from injuries and the absence of the players who went to the snow party or the Scissors conference. The defense was like a sieve, committing more than an error in making and other mistakes. But as a hope for the future the team showed a spark in its hitting by staging a comeback after being 1:36.5. The comeback included a 3-1 lead in the fifth game of the third set.

Wayne Pitcher of Blacker proved to be too strong and too consistent for Walt. Dull and defeated the Ruddock second 6-2.

The third singles contest was by far the closest. Both Frank Pat of Blacker and Jeff Wise of Ruddock played extremely cautiously. Pat was able to make up a 5-3 deficit, but Wise hung on to win the first set 6-4. Wise took an early lead in the second set and, at one point, had match point with the score 6-5 in his favor. Pat was able to rally and take the third set and won the set 6-4. Wise took a 3-1 lead into the fifth game of the third set, but once again Pat came back to win the set and the match after two and a half hours of play.

When George Williams could not be found to finish the fourth singles play, York Liao was called in as a substitute and defeated Bob Dickinson of Ruddock 6-4 after Dickinson pulled a muscle in his arm. Ruddocks only win came in doubles, as Carl Friedlander and Shelby Chapman teamed to defeat Bill Zame and Kelley Booth 6-2, 6-3.

Frosh Tennis Team Loses to Claremont

Claremont-Harvey Mork's frosh topped Caltech's frosh tennis team last Saturday at TP, 8:1. Although this score indicates a dominating victory, the individual matches were close; with a few breaks, it might have been a closer contest.

Playing in the very difficult first doubles position, Ray Xeavek managed to win only one game in two sets. Larry Anderson swam a good backstroke and the third, lost by the score of 6-5, 6-4. Fourth man Roger Davidheiser, playing third, lost a 5-2 lead in his first set and ended up losing 75, 6-4. Fourth man Bert Robinson salvaged Caltech's only victory, 63, 6-3. A few bad breaks cost Jeff Haight a 6-4, 7-5 loss in the 6th set. Ed Groth, playing sixth, lost by the more decisive scores of 6-1, and 6-0.

The doubles teams fared somewhat better. Bob Dickinson and Brown lost by the score of 75, and 6-3 scores; David Heiser and Groth were also beaten in straight sets. Robinson and Haight came close to victory but ended up losing 75-64 sets.

Frosh Swimmers Shine; Take Second in Relays

The varsity swim team met San Bernardino Valley College and Cal Poly (Pomona) last week in the Alumni Pool. The swimmers lost both those meets to teams they had beaten the year before, but there were some good performances.

Larry Anderson swam a good 200.9 in the 200 yard freestyle. Rick Toton won the 100 yard freestyle, and Pat Miller did the best time of his swimming career in the 200 breaststroke in 2:23.7. This is the first time all the men on the relay had been fresh, and the performance was encouraging.

In the SCIAC swimming relays, the Caltech varsity finished third while the frosh took second. Both Occidental teams dominated the meet. Tech's varsity took second place in the 200 yard freestyle relay as Held, Jenkins, Toton, and Anderson teamed together to swim a 1:40.5. The combination of Payne, Ryan, Erickson, and Nilsen barely touched out the Redlands team to take second in the 200 yard back stroke relay in 2:12.4.

The only other varsity medal winners were the foursome of Nelson, Cooper, Siba, and Miller that took second place in the 200 yard breaststroke relay in 2:03, faster than the backstrokers. This team broke the existing record but finished behind the Redlands team, which set a new record of 2:02.8.

Wet Wrestler

Brutag, Garibbe, Spencer, and Ilnane combined to take second in the 200 yard back relay for the frosh. The frosh won the 200 yard breast relay with a record time of 2:16.9 swimming DeWitt, Gerristen, Haviland, and Wood, whose only consistency consisted of intercollegiate wrestling. Boons, Bruttig, Sperner, and Griswold took third in the 500 yard freestyle relay.

Final frosh standings: Oxy 74, Caltech 52, Redlands 36, Pomona 32, and Claremont-Harvey Mudd 28. Final varsity standings: Oxy 78, Redlands 65, Caltech 56, Claremont-Harvey Mudd 39, Pomona 34. As Whittier has no frosh or varsity teams this year there will be an intersquad meet between a team headed by Anderson against one headed by Jenkins. Come and see a winning team at 4.
Page, Flemings Lead Volleyball

Interhouse volleyball produced a couple of major upsets during the first week of competition with the result that Page and Fleming teams were ahead of the rest of the pack after every team but Danbury was halfway through the season.

The top two teams rolled by way to victory thereafter. Fleming over Ruddock 2-0 boat began to slide off the back in the day, Tech got back on the finished.

In fact, Fleming spiked their Page over Blacker 2-1 As the winds came.

The netters had already won the even-numbered singles matches. Hosher won in straight sets 6-4 and 7-5. Ellis rallied to take the last two sets 60, 61, after losing the first set 64. Dunkin then won sixth singles in a close match 64, 86.

BY FISHER BLOOMFIELD

For the first time in three years, the Caltech varsity tennis team defeated Claremont-Harvey Mudd. The win came last Saturday at Claremont by a 5-4 final score.

Both teams were evenly matched, but Tech won the decisive match in third doubles as Rose and Pressing overcame a 4-6 first set loss to win the second and third sets 10-8 and 64 respectively.

HAD Caltech's number one man, Butch Niell, been playing up to his usual standard, the varsity might have had a more decisive victory. Butch lost his singles match 6-4, 2-6 and teamed with John Hosher, who had won his singles match, to lose a close first doubles contest 6-6, 6-3, 6-5.

Then on Tuesday afternoon Pomona routed Claremont 7-0. As the winds came.

The team now looks forward to their heads. They came in back of the eleven boat pack in the next three races and Don Radcliffe and Wayne Rhyack were almost disqualified for paddling backward.

As the winds came up later in the day, Tech got back on the stick and finished fifth and eighth in the last two races. Overall, Tech came in tenth out of eleven, losing to UCLA by one point and Oxy by six.

The team now looks forward to their heads. West Coast Volleyball finishes its spring racing series for the next regatta in Newport Harbor on March 13, but a prior engagement in Dana Bay Hall may limit participation.

Steve Allen has written some great short stories about man's inhumanity to man. John B. MacDonald has adapted them into a

SWEET MUSIC FOR TELEPHONE SWITCHING

Add electronics to telephone switching, and some pretty exciting things happen. Such as a push-button phone that "dials" numbers by a succession of short, musical tones instead of a lengthy sequence of impulses.

And beyond the "Touch Calling" phone is a new Electronic Automatic Telephone Exchange developed independently by GT&E scientists. It will make many new telephone services possible.

If research is one of your goals in life, you might want to know about General Telephone & Electronics. Full information is available from your Campus Placement Director. Or write to General Telephone & Electronics Laboratories, 730 Third Ave., New York, N.Y. 10017.
Trustees Vote New Option

At a closed meeting last Monday, Caltech Board of Trustees voted to implement a new option in three areas of the humanities: economics, history, and English. This vSign actually a formality, as the real test had come the previous Monday at the faculty meeting.

The fresh program for students planning to enter one of those three areas will be the same as the current program for all those who opt to take Ma 2, Fp, and H 2, plus six additional units of math, physics, or engineering coursework each year. The students will be required to take a total of 60 units in technical subjects over his junior and senior years. The program will lead to a B.S. degree in the humanities field that the student had selected.

This change will have little or no effect on the admissions procedure; the committee will not consider the option that an applicant has designated as a criterion for admission. Students originally intending to major in a humanities area but willing to fulfill the still stringent technical requirements will be given equal consideration with pre-scientists.

The new option is expected to make it unnecessary for the student who originally plans to major in science and then decides to go into humanities to transfer out of Caltech. Dean Jones pointed out that the most common reason given ten years ago by accepted applicants for not attending Caltech was the lack of funds; recently, it has been the lack of liberal arts courses. The new humanities option would counter this latter grievance.

Piece Of Candy

(Continued from page 3)

In the inferior copies he is only allowed to say, “You . . . You . . . COMMUNIST!”

In the inferior copies he is only allowed to say, “You . . . You . . . COMMUNIST!”

The real Candy has a photo of her on the front—do not be tempted by the alluring kids or the unassuming candy stick of the unauthentic versions.

Ford Motor Company is:

A key dimension of any job is the responsibility involved. Graduates who join Ford Motor Company find the opportunity to accept responsibility early in their careers. The earlier the better. However, we know the transition from the academic world to the business world requires training. Scholastic achievements must be complemented by a solid understanding of the practical, day-to-day aspects of the business. That is the most direct route to accomplishment.

Stephen Jaeger, of the Ford Division's Milwaukee District Sales Office, is a good example of how it works. His first assignment, in January, 1965, was in the Administrative Department where he had the opportunity to become familiar with procedures and communications between dealerships and the District Office. In four months he moved ahead to the Sales Planning and Analysis Department as an analyst. He studied dealerships in such areas of sales history, market penetration and potentials, and model mix. This information was then incorporated into master plans for the District. In March, 1964, he was promoted to Zone Manager—working directly with 19 dealers as a consultant on all phases of their complex operations. This involves such areas as sales, finance, advertising, customer relations and business management. Responsible job? You bet it is—especially for a man not yet 25 years old. Over one million dollars in retail sales, annually, are involved in just one dealership Steve contacts.

As a growth company in a growth industry, Ford Motor Company offers an exceptionally wide spectrum of job opportunities. The chances are good that openings exist in your field of interest. See our representative when he visits your campus. We are looking for men who want responsibility—and will be ready for it when it comes.