

Volume LII

No. 27

Conger Talks At Assembly Friday

Chong, Crichton, Enright, LaFleur, and Sweet Will Present Papers on World Peace Tomorrow, 11 a.m.

The Conger Peace Prize will be the feature of tomorrow's assembly. The five contestants have been chosen to speak on the topic of World or Industrial Peace.

Judging on Clarity

The judging, according to Dr. Lester L. McCrery, is based on the ability of the contestant to express himself clearly on an original theme. The first prize is \$50 and the second is \$25. Judges for the contest will be Mr. G. M. Nelson, who is chairman of publicity and public relations of the United Nations southwest region, Dr. John Schutz of the history dept., and Dr. Beach Langston of the English dept.

The finalists this year are Bob Crichton, Sanford Sweet, Jim LaFleur, Kwok-Ying Chong, and Jim Enright. Last year, the first prize was awarded to Ralph Stone.

Pastor's Gift

The history of the Conger Prize is quite interesting. The contest takes its name from Rev. E. L. Conger, pastor of the church attended by the Honorable Amos G. Throop, founder of Caltech. Rev. Conger believed that the ability of a person to express himself clearly was of prime importance, and for this reason he left a fund which was to be used to finance the oratorical contest which bears his name.

The rules of the contest are:

1. Each contestant must be enrolled as a student of the Institute.

2. The talk is to be delivered from memory and is not to exceed a 7 minute limit.

3. There will be no contest if there are less than four entrants.

4. Each contestant is allowed the assistance of one faculty member, for a time not to exceed one hour.

5. The contest is open to any student of the Institute who has not previously taken first prize in this event.

McKinney Prize Winners Named

The winners of the McKinney Prize Contest in English were announced last Friday, May 4. The first prize, \$75 and a copy of Webster's Geographical Dictionary, was awarded to Sanford Sweet, while the second prize of \$50 went to Kwok-Ying Chong. Both Sweet and Chong are seniors.

The two runners-up, Alexander Dessler and Bernard Engholm, both juniors, as well as Chong, were awarded copies of the Reader's Encyclopedia.

Papers Read

Each contestant read a 1200-word essay entitled "The Search for Values" at a special assembly in Dabney Hall on May 3. The essays were based on assigned readings including *The Autobiography of Robert A. Millikan*, T. S. Eliot's *The Cock-tail Party*, Arthur Miller's *Death of a Salesman*, and *The Mature Mind* by H. A. Overstreet.

Edward Hutchings, Jr., editor of *Engineering and Science*, David C. Elliot, Assistant Professor of History at Caltech, and Wesley L. Hershey, Director of the Caltech Y.M.C.A., judged the contest. Seventy per cent of the score was for thought and 30 per cent for delivery.

Campus Calendar

THURSDAY, MAY 10
3:00 Swimming—Conference Trials
Varsity and Frosh at Oxy
7:15 Board of Directors Meeting

FRIDAY, MAY 11
11:00 Assembly

1:00 Tennis—Conference Meet

Varsity and Frosh at Whittier

1:30 Golf—L. A. State

Varsity at Tech

7:30 Demonstration Lecture 201B

SATURDAY, MAY 12
9:00 Art Class 04 Mudd

9:00 Tennis—Conference Meet

Varsity and Frosh at Whittier

2:00 Swimming—Conference Meet

Varsity and Frosh at Oxy

2:15 Baseball—Chapman

Varsity at Chapman

2:15 Baseball—Whittier

Frosh at Tech

SUNDAY, MAY 13
7:30 Film Classics Culbertson

MONDAY, MAY 14
7:30 Film Classics Culbertson

TUESDAY, MAY 15
4:00 Beginning Music Theory Course

4:15 Baseball—Pepperdine

5:00 Advanced Music Theory Course

7:30 Band Practice, Culbertson

WEDNESDAY, MAY 16
7:30 Orchestra Practice, Culbertson

California Institute of Technology
Pasadena, California, Thursday, May 10, 1951

Pre-Registration

Techmen expecting to return to Caltech next year should pre-register for the first term next week in 119-A Throop. Students should pick up their cards as soon as possible next week and get them signed by their advisers, returning them to this office. Students who do not expect to return next year should contact the registrar immediately.

Draft Exam Deadline Set

The deadline for all applications for the forthcoming draft exams is next Tuesday, May 15. By that time all students who intend to take the draft deferment exams, which will be given at Tech and other centers throughout the country, must have obtained their cards from a local draft board and mailed them into the test headquarters.

Three Test Dates

The tests will be given on three Saturdays—May 26, June 16, and June 30, but the individual student will have no say in the date he takes the test.

The two nearest draft boards are the Pasadena board at 35 S. Raymond Ave., Pasadena, and the Alhambra board at 2960 W. Valley Blvd., Alhambra.

ASCE Chapter To Hear Alumnus

Next Monday, May 14, the ASCE Chapter will hear a talk by Mr. Jennison, a Caltech alumnus, on the Variable Angle Torpedo Launcher which he designed for the Navy.

Discussion of the projected year-end beach party will also take place at this meeting.

Prof. Leighton Presents Paper On Neutron Structure to APS

Experimental evidence that protons and neutrons, building blocks of the core of the atom, may have an internal structure of their own was presented April 28 in a paper prepared for delivery before the American Physical Society at its Washington, D.C., meeting by Professor Robert B. Leighton of Caltech.

V-Particles

The evidence was obtained in understanding of "V-Particles" found in cosmic radiation. Existence of these mysterious bits of matter was first indicated in British experiments carried out in 1947 and verified last year by a Caltech research team headed by Carl D. Anderson.

The latest findings, if borne out by further research, will require that physicists revise and extend their basic notions of protons and neutrons as elementary particles which act like points in space and have no structure.

Origin of Term

V-particles, named for their V-shaped tracks on Wilson cloud chamber photographs, seemed at first to represent a new kind of meson more massive than the types already known. Highly unstable, they disintegrate by emitting particles originally thought to be mesons exclusively.

Dr. Leighton, Assistant Professor of Physics at Caltech, offered data from a continuing study carried out under an Office of Naval Research contract which indicates that protons and neutrons are among the decay products of V-particles. V-particles thus may actually represent excited, or higher-than-normal energy, states of the familiar nuclear particles.

Excited Particles

This, in turn, implies that the latter may have an internal framework which can absorb energy for a brief instant of time. On this picture, the "excited" particles—after about one ten-billionth of a second in an unstable state—emit a meson and decay to their natural state.

Pioneer Research

Study of V-particles is a pio-

DuBridge Says Techmen Aid U.S. By Summer Work

"The California Institute of Technology is cooperating with industry and government agencies to place its students in summer work closely associated with the defense effort," President Lee A. DuBridge said today.

Its object, he explained, is to give the students an opportunity to make an immediate contribution to the national defense and at the same time acquire experience which will make them even more valuable when they graduate. A substantial number already are signed up for defense jobs next summer, he said.

76 Per Cent Work

A special faculty committee which surveyed summer employment habits of Caltech undergraduates found that 76 per cent worked during every summer recess in the past, Dr. DuBridge reported. In the case of seniors, 93 per cent worked at least two out of four summers.

The committee forecast that in view of the present employment market, the percentage which will be employed this summer will be higher than ever before, he said.

More organizations have approached the Institute this year to employ students than in the past, and government agencies have already arranged through the Placement Office to consider men for summer work.

Y's Doing

Classes Elect New Officers

Groner, Janssens, and Henderson New Prexies

Last Thursday's class elections brought in many new officers and returned a few old ones to the various positions of president, vice-president, secretary, treasurer, athletic manager, and Board of Control members. Three run-off elections are necessary for some offices in the sophomore and freshmen classes, and were held yesterday.

Groner, Miller Head '52

A little over a hundred junior classmates voted Stan Groner in as '52's senior class president with Chuck Miller as Veep. Barclay Kamb will occupy the secretarial chair while Bill Edmonson will keep an eye on the till. Hal Woody was chosen athletic manager to keep next year's seniors out in front in sports.

Hank Richter and Don Stewart swept the field of one lone opposing vote to become B.O.C. members. In general, Groner and Miller were elected with fairly small margins, while Kamb, Edmonson and Woody won decisively.

Janssens Junior Prexy

Tom Janssens was elected to next year's junior class presidency. As of yesterday he had no vice-presidential sidekick, since Al Johnson and Morgan Ogilvie were still fighting it out in the run-offs. The soph's new secretary-treasurer is George Moore, while Bob Wood copped the athletic manager's seat without opposition. A run-off has to be held between Mike Lourie and Ken Nicholson for one B.O.C. chair, but the other member is Pat Fazio.

"Moose" Re-elected for '54

A little more than half the freshman class participated in the voting to put "Moose" Henderson back in for a fourth term. John Kidder was re-elected decisively to serve a second term as Veep, while Bob Salkeld managed to land the secretarial chair.

Fred Garrison and Phil Miller have to contend again for the treasurer's spot. Gene Kaiser barely edged out a victory over Bruce Kaiser for the athletic manager's position. Board of Control members from the future sophomore class are George Johnston and Sam Vodopija.

Foreign Students Organize INSB

An inter-nations' speakers' bureau has been organized by a group of foreign students at Caltech, according to Dr. McCrery, sponsor of the group.

The purpose will be to provide speakers, individually or in panels, who can give first-hand information about the ideas and ways of life of peoples of other nations, Dr. McCrery stated.

Non-Political

"The bureau, a strictly non-political organization, was established in recognition of the critical need today for a closer understanding among peoples of the world," he added.

The program is adapted to the needs of off-campus service club luncheons, dinner programs, civic groups and high school or college classes. Speakers are available without cost to the host, although any group wishing to do so may contribute to the speakers' travel expenses.

Large Representation

Present speakers available through the bureau include students from Bolivia, Brazil, Colombia, Mexico, Panama, Japan, Pakistan, Turkey, France, Australia, The Netherlands, Italy, and Germany.

Don Ricardo's Catalina Island Band To Supply Music at Altadena C.C.

All hands will be on deck Saturday night for an evening of dancing, entertainment, and fun, as Captain Gil Kitching pilots the student body on a colorful Catalina Cruise. The point of embarkation will be the Altadena Town and Country Club, and the time of departure will be 9:00 Saturday night.

Sailor guys and gals will don the attire of dressy sport, with the music of Don Ricardo's Santa Catalina Orchestra rising above the rolling waves.

Female Vocalist

Don Ricardo is completing his fourth year with the Santa Catalina Island Co. He has been making musical history with successful bands at the famed Casino Terrace room, and as the contractor for the two bands on the steamers plying between Wilmington and Avalon, daily. The group consists of eight pieces, with a female vocalist and violin.

Danceable Music

The entire band doubles on the violin and turns out some very sparkling entertainment and waltz music. The orchestra plays very smooth danceable music and not South American as the name implies, while request numbers are encouraged.

Admission will be by student body card only.

The best route to take to the club is via Hill street. Near the top there is a sign indicating the location of the site.

Steamship Theme

The ballroom will be decorated like the deck of a large steamship. The entrance will be over a gang plank and centered in the room will be two large stacks. The floor will be surrounded by a ship's rail; life savers and other deck riggings will round out the decorations for the theme.

During intermission we will see couples waltzing on the shores of Catalina, and the later part of the evening will picture the ship cutting the waves for home, dropping anchor at 1 a.m.

Attention Seniors

The Senior class will hold a class meeting in 201 Bridge on Monday, May 14, at 11:00 a.m.

Nominations will be made for the office of permanent class secretary, after which the election will be held.

Y's Doing

by Rubenstein

The Caltech Y is sponsoring a discussion and action group of Tech undergrads and grad students who are interested in investigating and doing something about vital political issues of today.

The aim of this group will be to stimulate campus interest in political affairs. Anyone interested in participating in this group should see Phil Orville or Ernst Gehrels in Blacker or Derrick Murkett at the Athenaeum.

Communism Topic

The second in the series of May Firesides was held Tuesday with Rev. George Hill of the Pasadena First Baptist Church speaking on the topic "Christianity and Communism." Dr. Hill pointed out that with our present course we are encouraging communism rather than stopping it, and that a more Christian outlook may do much to halt the communist threat.

Third Fireside Tuesday

The third of the Fireside discussion series will be held this Tuesday at 7:30 in the new Y Residence, 391 So. Holliston. Dr. Robert Hinshaw is the guest speaker. His topic is "Religion and Psychology." This series has been so popular that those who wish to attend should see Phil Orville by Tuesday to put in their reservation.

YMCA Takes to Air

The Caltech Y Radio Forum is once more taking the airways. Tonight at 8:15 the first of two programs will be given over KXLA, 1110 kc.

Ulrich Merten and Stan Groner, who won honors in the recent Oklahoma debate tourney, will discuss a timely topic which they have not yet made known. Carl Larson will act as guest moderator.

Feynman Perfect Host

Last Sunday evening, 20 lucky Tech students were the guests of Dr. Richard Feynman. Dr. Feynman has, to those uninforme, an interesting hobby—he beats drums. The group was treated to a short concert of rhythmic patterns. Dr. Feynman was the perfect host and the affair was one of the best Faculty Firesides of the year.

Two Germans

In these films, which are graduated in difficulty, two young Germans are seen and heard conducting brief conversations, the dialogue being later broken down and repeated.

This Thing I Fear

By Bob Crichton

Editorial Note: The following poem was edited from a set of free verse notes taken by Bob Crichton, '51, at the atom bomb trials at Las Vegas last winter. The poem was published in MOTIVE and is reprinted with permission. We are reprinting this as a poem here in the editorial column of the Tech, since we feel that such creative work should also receive recognition as well as student activities at Caltech.

What we do not understand, we fear.
Therefore when I fear, I seek understanding.

February 6th, 1951.
Thirteen miles south of Indian Springs, Nevada.
5:45 A.M.

The dawn was glowing in the east,
A slow, beautiful dawn.
The dark mountains showed crisply
Through the fresh morning air.
Afar—airplane beacons winked
And glowed in the sowy gathering dawn.

A bright light in the north caught my attention.
The whole hemisphere of the sky in that direction was
floodlit and illuminated. Then the light died and a
sharp, brilliant, white light was visible at the base. A
bright balloon swelled and grew, turning from white to
orange and then dull red. It surged slowly upward and
formed a small doughnut-cloud—a livid venomous pink
—purple—changing to luminous lavender.

Then the white tower began to form;
It looked like the big question mark.

The earth shook;
The blast hit you and left you dumb.
Not too loud here, but the tremendous boom
Had an uneasy rumble to it.
It shook once again as though to let you know
It could do more!
A muttering in the earth. The mountains
To the west caught it up and rumbled.
It seemed to stomp on them
And be flung back.
The rumble moved southward, shaking the hills,
And the hills shouted.
It moved counterclockwise around the horizon,
Dying in the east.

• • •
The cloud has not yet grown into
A towering mass.
It hangs forlorn in an empty sky.

• • •
A lone plane headed east.

• • •
What does it all mean?

There are two sunrises this morning. (And he who misses that fact misses the significance of this day.) One slow and beautiful, giving light and heat to all the earth. The other is beautiful, but shocking—like something that crawled out of the cellar—that livid LIVING purple form was something alive!

The sun, all unconcerned,
Continues to rise in the east.

The cloud is headed this way. I'm leaving.
It looks as though it's dropping little bits of death.
A plane is flying directly under it;
Appears to be a drone.

That sound—
I've heard before;
It is the sound of Cain
Killing his brother Abel.

The mountains to the west have now assumed form.
They are snow covered. The cloud—

The wispy death is spreading now.
It will bring the news of this day's happenings
To the unhappy Slav in Moscow.

Still rises our star, the sun,
Quite unconcerned with these man's triflings.

I got some pictures
Hope they turn out.

Meanwhile the pale messenger, not climbing upward,
Is spreading arms as if to say—See!
I am not what you think I am.
Now the sun's rays have caught it and turned it red.
Now pink, now yellow-orange.
Even this—this deed of man
Is illuminated and made
Beautiful by the rising sun.
It's drifting faster now.
And the pale death it sows will soon be here.

Cars are fleeing down the highway
Like startled rabbits.

A low dust cloud lies to the north of Indian Springs.

The white cloud still grows and writhes—
Medusa, wreathed with snakes.

The sun is not letting the challenge go unanswered.
The clouds in the east catch up the golden glow,
A burning ball much larger than the poisonous globe.
And now the sun—

It is not wonderful to us because we never look at it.

The filmy brown dust clouds
Like lacy death
Drift westward.
And white death sits overhead Las Vegas
And mocks the people at their breakfast coffee.

Must get out from under it though.
Don't like being under—THAT!

• • •
Now I have seen it, I no longer fear the bomb.
It is merely another instrument of killing.
I fear the rumbling,
The noise of man lifting
Up his hand against brother man.

I fear the spirit within us that invented the bomb,
Which is proud of our country for creating it,
Boasting of that accomplishment,
Curious only to see how it will be used.

Here is man's question to the world—
A burst of light, a shaking of the earth.
A muttering and a roar.
The hills give back the answer;
A rumbling, muttering roar from every side.
And the sun still rises in its
Appointed place and time.

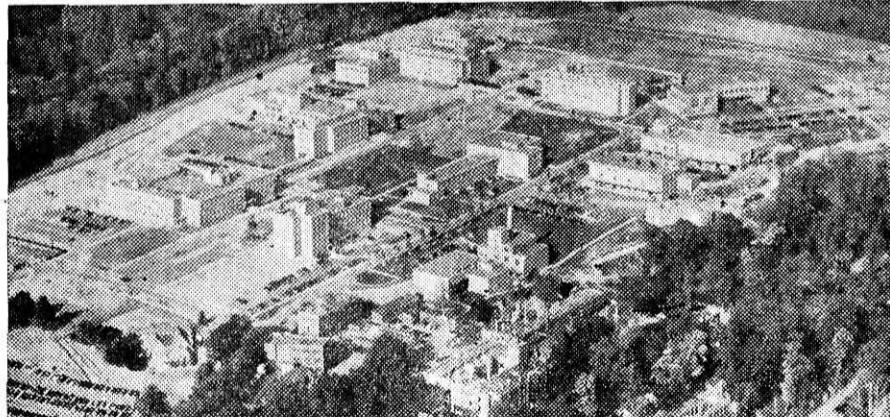
THE DU PONT DIGEST

Research Takes the Long View

Fundamental studies are one of the most important phases of Du Pont research

Fundamental research is designed to discover new scientific facts without regard to specific commercial use. Yet from it have come many products of commercial significance.

At Du Pont, for instance, fundamental research has pointed the way

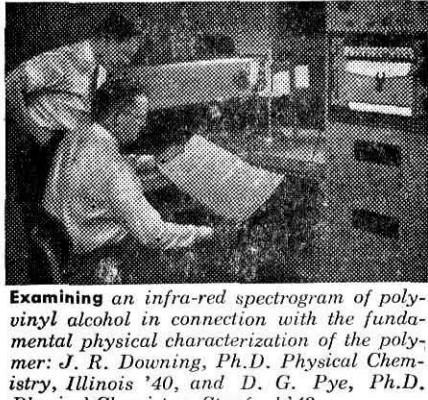


Where long-range and fundamental research is emphasized: the newly enlarged Du Pont Experimental Station near Wilmington. Photo: Aero Service Corp.

to products like nylon, the first wholly synthetic organic textile fiber, and neoprene chemical rubber, to name only two.

Expanding for Tomorrow

With the expectation that still more



Examining an infra-red spectrogram of polyvinyl alcohol in connection with the fundamental physical characterization of the polymer: J. R. Dowling, Ph.D., Physical Chemistry, Illinois '40, and D. G. Pye, Ph.D., Physical Chemistry, Stanford '43.

"products of tomorrow" will come from the test tubes, flasks and stills of the research laboratory, the Du Pont Company recently expanded its Experimental Station near Wilmington. In this thirty-million-dollar addition, major emphasis is being given to long-range and fundamental research.

The enlarged Experimental Station with its 20 new buildings repre-

sents one of the largest and best-equipped research establishments in the world. Even so, less than half of the Company's total research personnel is situated here. Du Pont laboratories in more than 25 other locations also carry on both fundamental and applied research.

There are now about 800 technical people engaged exclusively in research work at the Experimental Station. Assisting them are 1,500 others, in technical and non-technical capacities. The research people represent a wide range of training. Among them are organic, inorganic, physical, colloid, analytical chemists and biochemists; physicists and biophysicists; chemical, mechanical, metallurgical, electrical and electronics engineers; plant pathologists, plant

physiologists, agronomists, entomologists, horticulturists and others trained in biological science. In addition, there are specialists who are not classified in any of these groups.

Free for Research

At the Du Pont Experimental Station every effort is made to permit the research man to concentrate on research. He is provided with the most modern laboratory tools and for the construction of special equipment he can call on a wide variety of services. These include machine shops, carpentry, electrical, welding, instrument-making, and glass-blowing shops. When the research worker needs any service or equipment within the scope of these shops, it is provided for him.

At this industrial research laboratory, Du Pont scientists are devoting themselves to extending the frontiers of science and creating "Better Things for Better Living...through Chemistry."

DID YOU KNOW THAT...

Nylon came out of a fundamental research program begun in 1927. However, it took 13 years and \$27 million in research and operative investment to get into satisfactory commercial production.

DU PONT
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BETTER THINGS FOR BETTER LIVING
...THROUGH CHEMISTRY

Entertaining, Informative—Listen to "Cavalcade of America," Tuesday Nights, NBC Coast to Coast



Fleming Poop

The Fleming-Blacker-Throop Barn Dance set a new low for attendance. Reason: no band. All three Houses can't be that destitute; let's not see that repeated.

Perpall's date was about to help Fleming out in the crew race until she was rudely pushed out of the line and the goods snatched away by Pete Pauling. Aside from the fact that Burner got there there was very little of interest.

On the list for Blacker's flammers were Stryker and date. Throop won the affair.

Getaway

The cops seem to be able to sense the presence of Jailbird Jack Behnke. Peeling out from in front of his girl's house at 3:00 a.m. with Ron Willens driving, they found the cops blocking their way with red light on. In the ensuing hubbub, while Behnke and Willens were being grilled, out ran Behnke's date and her father to see what was going on. After an hour of heated discussion, all finally convinced the protectors of the peace that they were not burglarizing the house.

For Shame . . .

And then there are those like Johns, Kidder & Gee, who attend Oxy Formals. Your author is unable to tell if they lucked out or not, they will reveal nothing.

Rained Out

The Beak slithered along happily through the mud and

rain a week ago Saturday night, pushing aside a mound of old fingernails chewed off by the Social Chairmen of Ricketts and Fleming and their respective committees. So it did rain after all; a formal dance outdoors wouldn't be really proper unless it rained.

Where

The Beak proceeded to gallop along to fetch his date. Midterms were over, this weekend was his to blow. Beginning next week, he would have to start snaking for finals. Eagerly the Beak upped the stroke on his pogo stick. Neil Sundt was so flustered by the idea of having a date that it wasn't until after he had set out to get her that he remembered—he didn't know where she lived. His previous exchanges with her had been via phone. Luckily, he did know the general neighborhood, and a phonebook supplied the rest.

Suave Merten

At the dinner itself, Merten was chief wheel, complete in tux and white flower, a picture of old world courtesy.

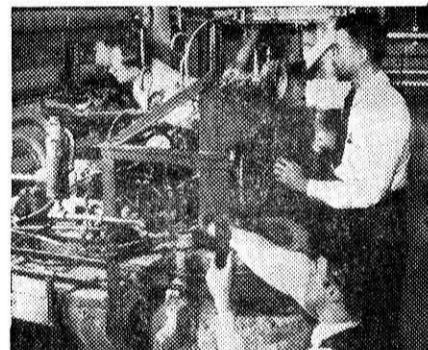
Professor Feynman was the honored guest of the evening. Instead of being entertained as is the usual procedure, it was he who kept his table entertained.

Later in the evening, Hirsch's girl, while dancing for the moment with Dzendolet, seemed to be quite fascinated by Feynman. She finally got up

enough courage to ask, "Are you a speech teacher?" Eager's choice of dinner music was more conducive to ulcers than easy digestion. I suppose dinner went faster while trying to eat in time to Gaite Parisienne.

Everyone at Enslow, Dyer, and Price's table was trying on one another's glasses. Good news, men, you're not blind, Mert just turned the lights off. Stratton and Lewis had their dinner with a bottle of Angostura (nat-

(Continued on Page 4)



Carrying out experimental autoclave polymerizations of condensation polymers: J. H. Blomquist, Ph.D., Chemistry, Ohio State '41; O. A. Bredeson, Ph.D., Chemistry, M.I.T. '41; J. E. Waltz, Ph.D., Chemistry, Indiana '41.

physiologists, agronomists, entomologists, horticulturists and others trained in biological science. In addition, there are specialists who are not classified in any of these groups.

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Carl's Caltech Barbers

On California St.
Near Lake

For

A Season

In the Sun . . .



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California Tech

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ON THE RECORD

by George Abell

Artur Rubenstein

The internationally famed pianist, Artur Rubenstein, will be heard in the last of the series of Behymer concerts at the Philharmonic Auditorium in Los Angeles this Sunday afternoon at 2:30 p.m. The program is to be all-Chopin.

Mr. Rubenstein's recital will not only mark the end of this year's season, but the culmination of the long-established series of concerts sponsored by Mrs. L. E. Behymer, who has announced that she does not intend to continue these programs next year.

Ojai Festivals

Those who make frequent trips to Ventura County may be interested in the Ojai Festivals in Ojai Valley. This year's series of 11 events will feature a wide variety of works by classical, romantic, and contemporary composers.

William Steinberg will conduct the Ojai Festival Chamber Orchestra. Other famous artists and groups include the American Art Quartet, Szymon Goldberg, the Hollywood String Quartet, Lili Kraus, the Los Angeles Woodwinds, James Schwabacher, and others. The concerts begin Friday, May 25, and continue through Wednesday, May 30.

Los Angeles Music Festival

The Los Angeles Music Festival, much closer to home, consists of three programs at Royce Hall, UCLA, on Tuesdays evenings, May 29, June 5, and June 12.

The

Conference Tankmen Vie In Meet Saturday

Beaver Swimmers Out to Upset Favored Oxy; Pomona Swamped

This afternoon at Oxy all the conference swimmers will be competing in the preliminaries for the conference finals, which will be held Saturday at 2:00 p.m., also at Oxy.

Oxy Favored

Judging from the dual meet records of the various teams, the home team will be favored to take the championship, but with the right breaks it would be possible for the Beavers to upset them. Coach Don Garman is switching the lineups around somewhat in an attempt to pick those few extra essential points.

Never Behind

Last Friday at PCC the Sagehens were swamped by the Beavers for the second time this season, 57-15. The Caltech tankers won the medley relay to open the afternoon's scoring and were never behind after that. Even though none of the times were exceptional, Pomona took only two first places and one second plus an assortment of thirds.

No Trouble

As usual, von Herzen took the 220, Libbey the 50 and 100, Weil the back, and Houser the 440. The only defeated Tech swimmers were Stanaway in the diving, which was won by Yeager, and Connor, who lost to Malone in the breaststroke.

Winners:

Medley Relay—Caltech, 3:32.2; 50 yd. free style—Libbey (C), 25.6; 100 free style—Libbey (CT), 58.3; 220 free style—Von Herzen (C), 2:33.3; 200 back—Weil (CT), 2:44; 200 breast—Malone (P), 2:56.4; 400 relay—Caltech, 4:06.6; diving—Yeager (P).

Lineups for the Conference Trials:

300 medley relay—Weil, Connor, Wyman.

220 free-style—Von Herzen, Houser.

50 free-style—Libbey, Haire, Cagle.

100 free-style—Libbey, Von Herzen,

Cagle.

200 backstroke—Weil, Ogilvie.

200 breaststroke—Von Herzen, Connor,

Haire.

400 free-style—Houser, Wyman.

400 relay—Wyman, Haire, Houser, Lib-

bey. Diving—Stanaway, Merten.

Ham Club Meets Monday at 11

With a lot of new and old equipment gathered from here and there, and a new set of officers, the school amateur radio club is set to go into operation on an enlarged scale. So, to get things really rolling, all voting members and all licensed hams are requested to be at a meeting this Monday at 11, 401 Bridge.

First on the agenda will be a discussion and vote on the revised by-laws for the club. Details of a proposed beam antenna will also be brought up for discussion.

Frosh Sports Roundup

By Chuck Sargent

Last weekend was a rather ordinary one for frosh athletics. All three of the teams still playing in league competition lost to their opponents from Pomona. The swimmers lost, 41-12, the tennis team was trounced, 8-1, and a game but beaten baseball squad was defeated, 15-11.

Good Try

Although they did lose, the frosh horseshiders put up a respectable battle. Led by catcher Bart Stryker's 3 hits and pitcher Salkeld's 13 strikeouts the beavers finally showed that they have the ability to score against an opponent. In their previous 5 games they had scored but 17 runs to their opponents' 81.

Stryker Shines

Stryker's 3 hits, a double, a triple, and a home run, accounted for 5 RBI's. He also scored 4 runs himself. Bart's 3 for 5 batting effort strengthened his batting average which is now .435. He is top man on the team in this department, as well as in RBI's.

Errors Galore

Probably the biggest cause of the loss were the 13 errors committed by the Techmen. Let's hope the lads can overcome this trouble for their last two games. The game this Saturday against Whittier is the next to last game of the season, and a great improvement over the last game's score of 0-17 is expected.

Conference Meet

Tomorrow and Saturday the conference tennis tournament will be held at Whittier. The Tech frosh will be represented by Bruce Kaiser and Ben Davis in singles and by the doubles teams of Kaiser-Davis and Johnson-Potter. Last week Davis and Potter were voted co-captains of the 1951 frosh tennis team.

Tank Finals

This afternoon the conference swimming trials will be held at

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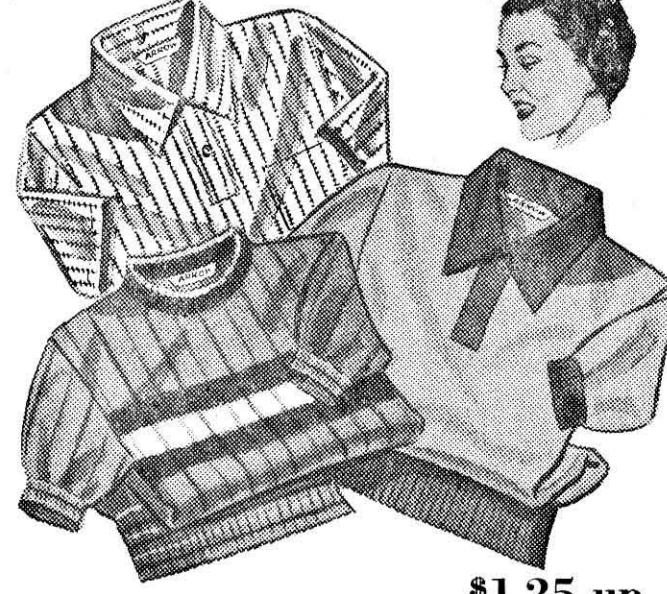
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BEAVER SPORTS

Rowdies Strong In IH Volleyball

The past week of IH volleyball brought about many upsets. Ricketts turned out to have the only team which didn't lose a game.

Close

Probably the closest match was between Throop and Fleming. The first game went into deuce score, and Throop squeezed out with a winning score of 16-14. The second game was even closer, going to 17-15 before Throop won.

Rowdies Hot

Ricketts defeated Dabney in a rather one-sided match, 15-8 and 15-4. Dabney just seemed to have a bad day, a dark cloud by the name of Dick Taylor dimming the horizon.

Darbs Bounce Back

The Dabney-Throop match was really something to see for a good example of team spirit. Throop won the first game by a one-sided score of 15-4. Throop, overconfident, put in their second string for the second game to meet a really pepped-up Dabney team. Dabney won by the phenomenal score of 15-3. Throop put her first string back in for the third game, but Dabney was too riled up to be beaten. Dabney won 16-14.

Occidental Tech will be represented by the following frosh: 300 Med Relay—Bryan, Ellett, Smith. 520 Freestyle—Perdigao. 50 Freestyle—Smith. 100 Freestyle—Perdigao. 200 Backstroke—Bryan. 200 Breaststroke—Ellett, Collins. 440 Freestyle—Perdigao. 400 Relay—Bryan, Collins, Ellett, Smith. The finals will be held on Saturday, also in the Oxy pool, at 2:00 p.m.

Net Tournament Closes Season

The last of the Varsity tennis activities for the year will consist of a practice match with Glendale Wednesday, the finishing of the Scott Tournament, and the Conference playoffs next Friday and Saturday at Whittier. Palmer Smith and Jack Martin will represent first and second singles and first doubles from Caltech. The second doubles team will consist of Welch and LaFleur.

Smith Gets Win

In spite of the ineligibility of Oxy's first singles man, Caltech was defeated by them by a score of 8-1. Palmer Smith came through with the only win. The weekend match, played May 5 with Pomona, consisted of a hard fight but another Caltech loss, with the outcome being 6-3. Baier and Welch came through with the single wins and Martin-Smith overpowered the first doubles.

Singles—
Cortes (P) def. Smith (C) 6-4, 6-4.
Biddle (P) def. Martin (C) 4-6, 6-1, 6-4.
Baier (C) def. Linnithum (P) 6-0, 5-7, 7-5.
Gornet (P) def. LaFluer (C) 7-9, 6-3, 7-5.
Welch (C) def. Grey (P) 1-6, 7-5, 6-3.
Hatch (P) def. Woods (C) 6-0, 6-0.
Doubles—
Martin-Smith (C) def. Cortes-Hatch (P) 6-4, 2-6, 6-4.
Biddle-Linnithum (P) def. Welch-LaFluer (C) 6-1, 6-2.
Clarkson-Chappell (P) def. Woods-Hymen (C) 6-2, 6-3.

Scott Tournament

To date the only contestants who have finished their quarter finals' playoffs and have moved into the semi-finals bracket of the Scott tournament are Palmer Smith and Rodger Baier. Finals of the tournament will be finished May 17.

Beaver Diamondmen Whip Sagehens, 8-6

Gray, Neverman, Johnson Shine; Second Place Standing Assured

The Varsity baseball team, by virtue of beating Pomona last Saturday, is now in second place

Buttin' In

by Butler

As the spring sports program

draws to a close, I can see only two bright spots in the Beaver's bid for glory in the SCIC. Both the swimming and baseball teams have turned in excellent showings. With just a little luck, Don Garman's splashes might have tied Oxy for the league championship. In last Tuesday's meet, a first in the 220, which was expected, and a first and second, instead of first and third, in the 100, would have brought victory for the Engineers. But I guess the cards were not stacked that way.

Baseball Hopes

While the baseballers have yet to complete the season, the nine should easy finish second and still might walk off sharing the title with the Tigers. The only chance for a tie depends on Preissler's lads completing the remainder of the season with an unblemished record while the Oxy nine drops one to give both clubs an 8-2 record.

Others Out of It

For the other competing sports, track, tennis, and golf, their showings have been just so-so. Well, now and then you have to expect a few weak clubs.

Tennis Turney?

The conference tennis tournament at Whittier should supply a wild scramble for the singles crown. Now that Oxy's Jack Simpson, a cinch for the title—he has national ranking—is in

the league. Norm Gray pitched for Tech and did a good job. Right fielder Neverman hit three for four and batted in four runs. The team as a whole batted .361, but made six errors. They completed one sharp double play, Stallkamp to Koons.

Wins One Game

Monday the baseballers beat Glendale in a practice game, 12-1. John Winslow did most of the pitching, allowing only one run in five innings. He also hit two for three, batting in four runs.

Second Assured

Next Saturday the diamondmen will play Chapman at Chapman and will have a good chance to end up with second place in league standings.

The Pomona game results:

	Pos.	AB	R	H	PO	A
Karasawa	3b	4	0	1	0	4
Wise	cf	3	1	0	0	0
Stallkamp	3	3	1	2	0	0
Koons	1b	4	2	2	0	2
Neverman	rf	4	1	3	2	1
Pfeiffer	c	5	1	2	8	1
Johnson	2b	5	1	3	6	1
Hedrick	if	5	0	0	0	0
Gray	p	3	1	1	0	4
	SO	Gray 7, Drew 5, BB	BB	Gray 4, Drew 8		
RBI	Neverman	4, Johnson	4, Karasawa			
Runs	002	002	110	11		
Hits	013	011	221	21		
Caltech	100	023	11x	8		
Hits	302	022	22x	13		

eligible because of scholastic difficulties, there are several good men who, on a good day, could waltz off with the cup.

As of Old

The conference swimming meet at Oxy should be reminiscent of past dual meets. The Beavers and Bengals will walk off with honors, leaving only a few crumbs for the other schools. However, this meet should prove exciting. If Garman can get a few of his charges to come through as expected, the meet should be nip-and-tuck down to the relay.

Be Happy-Go Lucky!

The upperclassmen kid me so;
I think that they are mean;
For of my twenty Lucky Strikes,
They get at least fifteen!

Paul E. Moore
Indiana University



We profs are absent minded;
To that we must agree.
But one thing that we don't forget
Is L.S./M.F.T.!

Richard A. Yocom
University of New Mexico



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L.S./M.F.T.—Lucky Strike
Means Fine Tobacco

Some students drive their cars to school,
Some walk, some ride a bike,
And yet it's true that on the way
They all smoke Lucky Strike

Goetz Develops New H₂O Purifier

Renewed interest has been undertaken in a water purification technique developed by Dr. Alexander Goetz, professor of physics at Caltech.

In 1945, this process was tested on cooperation with the Mexican Public Health Dept. in the tropical forests of southern Mexico, where conditions were much as they were to be found in the islands of the Pacific. These tests were successful, and the Latin-Americans were interested in larger units which could supply water for several hundred people. In 1947 tests were successfully completed on the larger units.

Valuable in Emergency

Since the start of the Korean campaign both the Air Force and Civilian Defense have tested the unit. It was tested on water from the Los Angeles River and in one cycle the water was drinkable. This unit would be suitable for use in an emergency if the water systems of the city were bombed out and it were necessary to use contaminated water.

The experimental unit weighs 12 or 13 pounds and can purify a canteenful of water in 30 seconds. Less than two pounds of the purifying agent can supply a ton of water or enough for 500 men's daily ration of water, at a cost of one-half to one cent per canteenful. This is in contrast with the large pieces of equipment needed to purify water by settling or chlorination.

The most unusual part of this method is that it adds nothing to the water in its action. The bacteria are killed by oxidation. This is accomplished by forcing the water through a fine powdered mixture of diatomaceous earth covered with silver and calcium peroxide. The silver sensitizes the bacteria to oxidation by the peroxide.

The dead bacteria are allowed to pass through the material and the diatomaceous earth holds back the sludge and larger particles in the water. It is unexplained as yet, but these dead bacteria have a germicidal action against reinfection by bacteria. The water when purified by this method is clear and has no chemical taste, unlike water purified by chlorination or other chemical means.



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CAMPUS BREWINS

(Continued from Page 2) (Continued from Page 2)
urally) Bitters sitting on the table. This must be significant of something or other.

Love Wolves

Vodopia, Patraw, Tyson, and Savran, sans women as usual, decided to spend their evening chewing on an old salami Sam happened to have on hand. Chuck Forrester, with a former Oxy May queen, held a Snake Alley reunion with Dave Vigercho and his wife.

Eager Beaver Eager

Eager really lives up to his name. While Stratton and his lovely friend were dancing outside the Lounge, Eager followed them dutifully around dusting wax on the tiles.

This Week's Rowdies

The Ricketts house Luau Saturday night, in spite of pessimistic meteorologists, turned out to be a tremendous success. Al Sereno and his many Hawaiian friends arranged the affair and provided appropriate entertainment, while the perfect location was found in the Portuguese Bend Club near San Pedro.

Some came early in the afternoon to play volleyball and soak up sunshine, and a few hardies like Gardner and Baier even went swimming. The dinner was composed entirely of native Hawaiian dishes including an immense pig roasted in a pit which was enjoyed by everyone and poi which was enjoyed by Hanna.

Music

Incidental entertainment was provided by Dave Mason and his accordion, Jack Harper and his guitar, and the clear inspiring voices of Dzendolet and Peppin who were last seen climbing Sunshine Mountain amid cheers from the faithful.

Dabney

Furtively passed to the Beak was a scrap of paper with the Drab Dabney doings. I can't read der handwriting.

The band members were sad indeed at the formal. They forgot to bring any alcoholics.

H₂O

Monday nite was the time. Dabney and Fleming was the place and a boat would have been the thing. Water was traded freely between the two houses. Dabney appears to have triumphed insofar as Gee and one unknown received whirlpool shampoos.

Web Moose?

Most notable of the evening was Moose, who sat through the fight playing bridge . . . and who was attacked by patriotic Darbs and carried off to some horrible fate at the hands of his own angered kind.

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Open Evenings

ON THE RECORD

(Continued from Page 2)
Waxman, who is also a composer of movie scores. He recently won the Academy Award for his musical score to "Sunset Boulevard."

The program on May 29 is all-Verdi, commemorating the 50th anniversary of the composer's death. Included are "Madre Pietosa Vergine" from Forza del Destino, and the Manzoni Requiem. Assisting the orchestra will be Stella Roman, soprano; Katherine Hilgenberg, mezzo soprano; John Ford, bass; Eugene Conley, tenor, and the Roger Wagner Chorale. Incidentally, the Verdi Requiem will also be performed as a postseason concert at the Hollywood Bowl, under the direction of Victor de Sabata, and with Ezio Pinza.

On June 5 will be presented Prokofieff's Classical Symphony, Steinert's "The Nightingale and the Rose," with Joseph Cotten as narrator, and Bernstein's Symphony No. 2, the "Age of Anxiety," with Andre Previn, pianist.

The final program on June 12 will include Honegger's Prelude, Arios and Fuglette on the Name of Bach and Mahler's Third Symphony, with contralto Jean Bonacorsi, and the Roger Wagner Chorus of Women's and Children's Voices.

Tickets for all three concerts are available for as little as \$3. Write to the Los Angeles Music Festival, 405 Hilgard Ave., Los Angeles 24.

Hungarian Quartet

Just as a reminder to all music lovers, the Hungarian Quartet will give a concert on campus Friday night, May 18. This is an event which no one will want to miss. The group will play quartets of Haydn, Milhaud, Brahms, and Copeland.

Blacker to Hold Associates Tea

Blacker house will hold its annual Associates' Tea this Sunday afternoon in Blacker court from 3 to 5 o'clock. Some 50 house associates, faculty members and their wives are expected to attend the affair. Vice-President Stan Groner is in charge of the arrangements.

LaVerne Boyer's Band

A sparkling new mantle of grass had been carefully planted and tendered for this occasion. The music was fine and, surprisingly enough, so was the weather. LaVerne Boyer and his band furnished dance music, and punch and french pastries were served as refreshments.

The planning committee was headed by Bill Whitney. Jon Goerke was in charge of the flowers and decorations; Winston Royce arranged for the music, and Fred Eisen, with the help of Sue Huck, saw that there were plenty of refreshments for everyone.

Black to Hold Associates Tea

Blacker house will hold its annual Associates' Tea this Sunday afternoon in Blacker court from 3 to 5 o'clock. Some 50 house associates, faculty members and their wives are expected to attend the affair. Vice-President Stan Groner is in charge of the arrangements.

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Jrs., Srs., Enjoy Garden Festival

The annual Junior-Senior garden party, held last Sunday in Dabney gardens, was termed by all a great success. More than 150 Techmen and dates turned out to enjoy a refreshing afternoon in association with faculty members and their wives.

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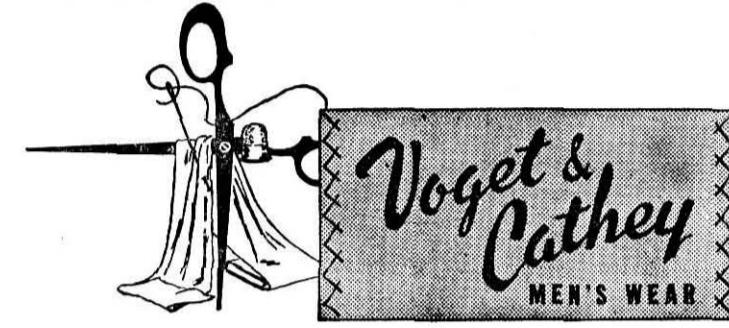
Ricketts Tans at Pyatt Winner Hawaiian Fete Of ASCE Contest

A sunshiny afternoon and a tropic evening provided the setting for Ricketts' event of the year the Luau at Abalone cove where the Palos Verdes hills meet the ocean. During the afternoon the colorful Ricketts Hawaiians enjoyed themselves in beach sports, dancing, swimming, sunbathing and exploring, while Al Sereno and his helpers prepared the food.

Speaking on "Radiative Tracers in Hydraulic Studies," Pyatt competed against students from the University of Arizona, Santa Clara, Stanford, University of California, University of Southern California, San Diego State college and the University of Nevada.

Each presentation was limited to 10 minutes and judging was on effectiveness of delivery as well as technical content. This is the fourth time the contest has been held; the third time Caltech has taken first.

Pyatt is the secretary of the Caltech chapter of the ASCE and social chairman of Blacker.



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Number 19...THE WEASEL



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