Assembly opens chamber series

The Caltech Chamber Music Society begins its third year of concerts this Sunday evening, October 12, when it presents the Hollywood Quartet. The program will be the first of 13 programs, all featuring various chamber music players of Southern California. The concerts are on Sunday evenings from eight o'clock in Dabney Lounge, and are given gratis to students, alumni, and others. Stalwarts are particularly welcome, and the evenings are planned for a pleasant time and as a guide for study.

Three styles featured

The Hollywood Quartet has new attained great reputation through its recordings for Capitol records. Their concert on the Coleman Series at the Pasadena PlayHouse last season was one of the best of this series, so Tech is fortunate to secure them for the opening program. They will perform music by Haydn, Dvorak and Walter Piston, thus giving students examples of three styles of ever-sending writing from three periods.

More concerts than ever

The increase in the number of students and increasing support of the Recording Industry Trust Fund has enabled the Humanities Division to increase the number of chamber music concerts from 12 to 13 for this school year. It is hoped that this will make this outstanding series a permanent feature at Caltech.

Campus Calendar

Friday, October 13: 8:00, String Spectacular vs. Pomona at Weingart. 8:00, String Spectacular vs. John Carroll at Weingart. 8:00, String Spectacular vs. California at Weingart. Sunday, October 15: 2:00, Caltech Band and Orchestra at Weingart. Monday, October 16: 8:00, Caltech Band and Orchestra at Weingart. Friday, October 20: 8:00, String Spectacular vs. Pomona at Weingart. Saturday, October 21: 8:00, String Spectacular vs. John Carroll at Weingart. 8:00, String Spectacular vs. California at Weingart. Monday, October 23: 8:00, Caltech Band and Orchestra at Weingart. Friday, October 27: 8:00, String Spectacular vs. Pomona at Weingart. 8:00, String Spectacular vs. John Carroll at Weingart. 8:00, String Spectacular vs. California at Weingart.
On another plant 20,000 gpm of cooling water is processed. Don Emerson.

The greatest density of competence, in addition to an aesthetic development, with an Equipment rather than a house, is the center of interest. Chuck Benjamin.

The powerhouses for M.E.'s.

Each of Du Pont's manufacturing plants is the power house. To make some 1,200 products and produce line the Company operates 37 plants.

Most require steam and electricity for process and treatment, heat reduction systems and related services. The designing of these power plants, their execution and operation are all in the hands of engineers, the great majority being mechanical engineers.

But this is not the most interesting thing about power work. What challenges the highest skills of the engineer at Du Pont is the wealth of original problems constantly arising.

Power requirements vary extensively from plant to plant and from time to time.

Process operating pressures may range from over 15,000 psi. to 5 feet of mercury, electrical requirements from as low as 7,000 to higher than 1 million KWH/day, and temperatures from 360°F to over 3,500°F.

Here are examples of recent "off-the-beaten-path" power problems:

1. A plant using natural gas as its basic fuel produces a waste oil of variable hydrocarbon composition and a waste gas with only 110 Btu cu. ft. Du Pont M.E.'s designated burner, fan, boiler and combustion controls permit the use of all these fuels for generation of steam.

2. At another plant 20,000 gal. of cooling water were to be drained from a nearby river. Since the water level fluctuated 40 feet between normal and flood stages, it was necessary to evaluate several plans for pump house constructions against cooling towers. The engineers installed a unique pump house whose submerged vertical pumps operate even when the structure is entirely under water.

Aside from design and construction, Du Pont mechanical engineers must concern themselves with such related subjects as economic evaluations, equipment selection, heat balances, load calculations, waste heat boilers.

For example, where various process temperatures range from 350°F to 600°F, were required, Dowtherm was selected as the supply medium at the rate of 35 million Btu per day. Dowtherm is used where high temperatures are desired, intermediate temperature and low capacities cannot be met by the more conventional mechanical systems. Dowtherm is a unique liquid with a boiling point of 210°F and a viscosity of 800 SUS.

THE DOWPONT M.E.

"BETTER THINGS...THROUGH CHEMISTRY"

CAMPUS BARBER SHOP
In Coffee House Bldg. Phone Ext. 212

Edward W. Garrison (right) M.S. in M.E., California Tech '46, and Byron R. Brown (center), B.S. in M.E., West Virginia '45, supervise experiments and perform conditions in a study of power-plant efficiency.

Viewed whether from the design and construction side or the operational side, the diversity of Du Pont's manufacture offers a wealth of opportunities in power work for the mechanical engineer.

OPPORTUNITIES for men and women with many types of technical training are discussed fully in the Du Pont Company's "Careers in Chemistry" and "Careers Under the Act of March 3, 1879."

Published every Thursday during the school year by the students of California Institute of Technology. Subscriptions: $1.50 per year.

In California Tech No. 197, Issue No. 3.

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Secretary's report...

Tech editor

A special election for the office of Editor of the California Tech has been set for October 30. Nominations will be held two weeks before that date, on Thursday, October 16, at the morning assembly.

Anyone who is interested in running for this office should get in touch with some ASCIT officials at once. The editorship is a job which requires a considerable amount of time, and prior experience in this type of work.

Student body cards

There are a number of men who have not yet picked up their first term student body cards. If you have not obtained your card, you may do so in the Athletic Office.

Rudolph submitted,
George Johnstom
Secretary, ASCIT.

ON THE RECORD

(Continued from Page 2)

California composers. Here you may find that, strange as it may seem, Hollywood has not totally extricated music from many compositions of local composers, at times almost at home and in the Civil War.

Another quite good chamber music, who seems to prefer the odd gallery's "Art Lovers," effete and often quite good. Thanks to

the fantastic assortment of their first term student body cards. If you have not obtained your card, you may do so in the Athletic Office.

Rudolph submitted,
George Johnstom
Secretary, ASCIT.

FILMS, ARTS SERIES

(Continued from Page 1)

\*1300, "Rhythm of a City" by Arne Sucksdorff.

November 10: "The Battleship Potemkin" (Russian, 1928). English subtitles. Produced and directed by S. M. Eisenstein and photographed by E. Tisse. A dramatic interpretation in terms of mass movement of the 1905 mutiny on the battleship Potemkin.

Short Subject: "H2O." November 24: "Moonan" (American, 1936). Directed and photographed by Robert J. Flaherty. A dramatic interpretation of the traditional forms of hunting, fishing, and love-making in Samoa, ending with the ceremonial of the tattoo by which male Samoans were formally initiated into manhood.

"Song of Ceylon" (John Cromer). Produced by Robert W. Wright. A rare insight into the lives of the women's clubs, and plain dead sexy. The ladies definitely know the vital ingredients to a good exercise program: if you purchase these ingredients to an extent which made for an unignorable

"A General" (American, 1927). Directed by Harry Cohn and Marion Mack. The same. Parker should fall into this same classification, but after the first

"In the Park" and "The Immigrant," two come­

the large numbers of freshmen presenting, making first-hand observations before deciding to join either the ToBlazesWith the 3.000...

CAMELS are America's most popular cigarette. To find out why, test them as your steady smoke. Smoke only CAMELS for thirty days. See how rich and flavorful they are - smoke. CAMELS are -- week after week!

If there is one thing I prize myself on, it's my humility.

The big event of the past week end was the Scripps Open House. Warned by previous experiences, and wishing to be prepared, we borrowed for the occasion a cigarette lighter, and practiced for hours to get the proper nonchalant

CAMELS leads all other brands by billions of cigarettes per year!

R. J. Reynolds Tobacco Co., Winston-Salem, N. C.

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An Electric Timing Machine
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SY. 3-1853
Formerly Botley's

...But only Time will Tell ...

FORGET LAST SEASON! WE'LL BE THE CLASS OF THE CONFERENCE THIS YEAR! YEP...WON'T BE SURPRISED NONE OF US WILL LIM EM'!

GOT A NEW HALFWAY THAT'S SURE-FIRE ALL-AMERICAN!

ONLY TIME WILL TELL ABOUT A FOOTBALL TEAM! AND ONLY TIME WILL TELL ABOUT A CIGARETTE! TAKE YOUR TIME...MAKE THE SENSIBLE 30-DAY CAMEL MILDNESS-TEST. SEE HOW CAMELS SUIT YOU AS YOUR STEADY SMOKE!

CAMEL are America's most popular cigarette. To find out why, test them as your steady smoke. Smoke only CAMELS for thirty days. See how rich and flavorful they are -- pack after pack! See how grand CAMELS are -- week after week!
CAMPUS BREWINS
(Continued from Page 3)
Vive-La-Scripps school of Cal-tech thought. For our own part, we felt it was a highly successful affair—one worthy of repetition at the first available chance.

Car-driving Bill Gardner and careless-for-the-evening Bill McCormick got their signals crossed with the result that McGork had to hitch a ride back with Lynam, who had a flat tire on the way back. McGork is now in disrepute with the sports car crowd for stopping so low as to ride in a Buick. Gardner, frosh Bob Kau-
sen, and dates took off to a dimly lit establishment advertising itself as "The Viennese-Superb Cuisine." There, for 75 cents each, they got small sandwiches made with Hungarian Glub-mumph. Take heed. Dabonair as always

Remembering their conquests of the previous week, last Friday night the gentlemen in green journeyed eastward to the Scripps Refinery. But little daunted by the more than slight-
ly unfavorable ratio, they acquitted themselves in a manner be-fitting Dabney men. Thomas in

A warning

JUST WHAT GOOD ARE PROFITS?

During the last 20 years a great many uncom-
plimentary things have been said about profits. Left Wing propaganda has been so successful that many honest Americans were actually begin-
ning to wonder if maybe there wasn’t something evil about profits after all. But the answer is plain if we understand one of the most important func-
tions of profits in our economy. It is simply this:

The chance for profit constantly encourages the development of new and improved products. Because of the competition for profits, every business strives to put out better and more use-
ful products, with greater efficiency, at lower prices. (At Union Oil, for example, we’re spend-
ing $10,000 per day on research—and our com-
petitors work just as hard as we do on product improvement.)

Because of this essential function of profit the American people have better products in greater abundance than the people of any other country. As a consequence, we enjoy the highest standard of living the world has ever known.

It’s not hard to see, then, why the profit mo-
tive must be preserved. Yet present tax policies and government controls are discouraging pro-
duction by destroying the profit motive. And without this incentive we Americans cannot possibly show the progress in the future that we have shown in the past.

UNION OIL COMPANY
OF CALIFORNIA
INCORPORATED IN CALIFORNIA, OCTOBER 17, 1890

This series, sponsored by the people of Union Oil Company, is dedicated to a discussion of how and why American business functions. We hope you’ll feel free to send in any suggestions or criticisms you have to offer. Write: The Presi-
dent, Union Oil Company, Union Oil Building, Los Angeles 17, California.

MANUFACTURERS OF ROYAL TRITON, THE AMAZING PURPLE MOTOR OIL
Pigskin Prognostications

**GAME**

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<td>Wisconsin</td>
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**Points**

- **Pace:**
  - Princeton: 8
  - Princeton: 5
  - Penn: 5
  - Penn: 5

**Big Edge**

**Tallman stars**

Tech scored first in the early moments of the game when tackle Chihey Tallman took a fumble in mid-air on his own 44 and ran it to the Bulldogs’ 17. Seven plays later Ed Gehle went over left tackle for the score. Redlands then scored twice, first after an intercepted pass was run to the Tech one-yard line and then after Eric Ward’s punt was blocked and recovered by the Bulldogs.

**Redlands romps**

The half ended 144, and then on the second half, after being tied, halfback Jim Ellis slipped around left end for a 68-yard touchdown jaunt, incidentally, Redlands’ only earned touch down. Of course, the tackle, Ed Gehle, then had completely dominated the last quarter, scoring twice, and having the ball on Redlands’ 18 when time ran out. The final score benefited Jack’s Walker’s punt on a drive which started on Redlands’ 46-yard line.

**The future**

The Beavers definitely show promise of coming along this season, and certainly cannot be counted out of the conference. Coach Peter Lakatos’s system, displaced perhaps by the, according to the game program, still think the team scored lots of practice, and defenses we will come in with some with this fell. If it is a ten minute rule, three men from the, you can expect the Ponies to hit the winning road. Oregon State and California in Friday in another tussle at the home of the, Duke, and yes, you can bet that the team which gave away four touchdowns in last Saturday lost will be the same outfit which will face such a...
Caltech Y going to beach on weekend

The Caltech Kick-Off Conference will be held this Saturday and Sunday at J. S. Johnson's beach house at an Emerald Bay.

Mr. Bruce Maguire will speak to about 20 students and Tech Y about "Go Pogo" and the Caltech Student in 1952." After a discussion of this problem, relaxation will be offered in the forms of swimming, volleyball, football and other activities.

See Frank Dryden

Anyone interested in the Y and in expressing his ideas for the coming year's program is welcome to attend the conference.

By Frank Dryden

Pendulum

(Continued from Page 3)

As to finances, a subscription campaign asking $5 for the three issues is planned for this school year. Individual copies will be sold at 30c each. However, this year, as last, the generosity of the Humanities Division provides for the balance necessary to maintain the quality of the printing form.

New French philosophy.

One of the major features of the December issue of Pendulum will be a non-fiction article which will include an explanation of a new philosophy, formerly unpublicized in the United States. The philosophy, L'etetranon, has come from the well-known Left Bank of Paris and expresses very interesting theories of economy, politics, art, poetry, and the production of the cinema. The article will include some of the writings, art work, and theories of this group in Paris, since one of the editors has obtained permission to translate and reprint material from their newspaper and their book on the cinema. It won excellent recognition at the International Film Festival at Cannes, France. The editors feel that Pendulum will assume importance through the publication of such articles.

Grad students too.

This year a special appeal is directed at the graduate students on campus to contribute to the magazine.

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C A L I F O R N I A  T E C H

Thursday, October 9, 1952

ON THE RECORD

(Continued from Page 3)

-eye on the campus calendar should tell you wherever such a concert is about to take place. A sharp eye on the campus calendar should also tell you when midterm week of the first term will be. Look for it because Coral Records have taken the basic theme, a d.i.d.s a Samba rhythm, and made a record of it. Appropriately enough, it is called "The White Samba." It coincides beautifully with the opera season presented at the Shrine Auditorium by the San Francisco Opera Company. In addition to the old favorites such as Aida, Il Trovatore, La Traviata, etc., there will be performances of two very remarkable but very rarely heard works — Montemezzi's L'Amore dei Tre Re and Puccini's three one-act operas, The Triptych.

In conclusion let me say — There is good music around here if you look.

THE PLACE TO GO FOR BRANDS YOU KNOW

Voget and Cathey's

Men's Store

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Readers who are looking for the fabulous molecule machine: "Bubbling, bubbling, high drip, low drip, gargle, gargle, gargle, high drip, low drip, spigot, spigot." Director Alexander Mackendrick and sound editor Mary Hulbert field whenever possible. They blew through a glass tube into a pan of glycerine, drips by playing two different size pieces of brass and glass against the palms of the hands; and the drain by forcing water intermittently through a small opening with a microphone amplifying the sound.

My trial and experiment the sounds were merged into several combinations, gaining a beautiful effect just as an orchestra might stage a theme and develop it to a crescendo.

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and Accessory Organs not Adversely Affected by Smoking Chesterfield Cigarettes

A responsible consulting organization has reported the results of a continuing study by a competent medical specialist and his staff on the effects of smoking Chesterfield cigarettes.

A group of people from various walks of life was organized to smoke only Chesterfields. For six months this group of men and women smoked their normal amount of Chesterfields — 10 to 40 a day. 45% of the group have smoked Chesterfields continuously from one to thirty years for an average of 10 years each.

At the beginning and at the end of the six months period each smoker was given a thorough examination, including X-ray pictures, by the medical specialist and his assistants. The examination covered the sinuses as well as the nose, ears and throat.

The medical specialist, after a thorough examination of every member of the group, stated: "It is my opinion that the ears, nose, throat and accessory organs of all participating subjects examined by me were not adversely affected in the six-months period by smoking the cigarettes provided."

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WHEN YOU ARE HUNGRY

WHEN YOU JUST NEED RELAXATION

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