

Caltech Taubates Resume Activities For Coming Year

Honorary Scholastic Society to Elect New Junior and Senior Members Soon

The California Beta chapter of the Tau Beta Pi, national organization of honor students in the field of engineering, held a meeting last week to outline activities for the coming school year. The Caltech organization has the reputation of being one of the most active chapters in the nation and plans for various social events have already been drawn up under the leadership of Charles Murphy, president.

Nature of Tau Beta Pi

Tau Beta Pi is more than an honorary scholastic society; its primary purpose is to serve as a yardstick of engineering achievement and professional excellence. It strives for the maintenance of engineering ethics, its members are much in demand in industry and science. Membership in the organization is thus a very desirable asset to graduating students.

Membership Requirements

Tau Beta Pi was founded as an engineering counterpart of Phi Beta Kappa. Because of the highly specialized nature of training in engineering and science offered at Caltech, the campus chapter has made it a practice to elect both engineers and scientists into its ranks. Twice a year the top fifth of the senior class and the top eighth of the junior class are considered for election; the final selection is based upon scholastic achievement, extracurricular activities and ability to get along with people. These are considered vital in achieving professional excellence. In the coming weeks 17 seniors and 6 juniors will be considered for election.

Initiation Activities

Present members will have an opportunity to get acquainted with prospective members at a party given at Brookside Park on Sunday, Nov. 9. Eligible students will receive their invitations on the Friday before. The final elections will take place the following week after each neophyte had been interviewed. The initiation and banquet will take place on Friday, Dec. 5, and the new members will put on their traditional skit.

Four More Sunday Firesides This Week

Promising to be as big a success as last week, the "Y" Sunday Evening Firesides lists as this week's hosts Drs. Clark, Pauling, Swift, and Untereiner. These informal gatherings will start at 7:30 and end with light refreshments about 9:30.

Proof of the popularity of these Sunday chats is the fact that already this week the lists are over half-filled. The lists will be available for signatures in the house lounges or the "Y" office, but the 12 places are going fast.

Campus Calendar

- Thursday, October 30—**
 - Upper Class Luncheon Club at the Training Table, 12.
 - Throop Club Meeting, 12:20.
 - Caltech Ski Club Organizational meeting with movies, 155 Arms, 7:30 p.m.
 - Orchestra Practice in Culbertson Hall, 7:30 p.m.
 - Glee Club, 8:30 p.m., in Dabney Lounge.
 - Fleming-Clark Hall (Scripps) Exchange. Ricketts Stag.
- Friday, October 31—**
 - Student Rally in Culbertson Hall, 11 a.m.
 - Water Polo Game. Caltech at Muir, 4:30 p.m.
 - A.S.C.I.T. Halloween Dance at Glendale Civic, 9 p.m.
- Saturday, November 1—**
 - Fresh football game. Pomona at Rose Bowl, 5:30 p.m. (Advanced.)
 - Caltech vs. Pomona at Rose Bowl, 8 p.m.
- Monday, November 3—**
 - C.E.S. Meeting, 11 a.m.
- Tuesday, November 4—**
 - Band Rehearsal in Culbertson Hall, 7:30 p.m.
- Wednesday, November 5—**
 - Fresh Luncheon Club at the Training Table, 12.
 - Mudeo
 - Dancing Class in Culbertson Hall, 7:30 p.m.
 - Fencing Club, 15 Dabney, 7:30 p.m. (Beginners), 8:30 p.m. (Advanced.)
- Thursday, November 6—**
 - Upper Class Luncheon Club at the Training Table, 12.
 - Throop Club Meeting, 12:20 p.m.
 - Orchestra Practice in Culbertson Hall, 7:30 p.m.

ASCIT Dance Tomorrow Night

How To Get To Dance

From Tech go West on Colorado, through Eagle Rock, up either Broadway or Colorado in Glendale. Turn right (north) on Verdugo Road, or, if you wish, Glendale Blvd. It is about 2 miles up either of these roads (Glendale Blvd. runs into Verdugo Road) to the Glendale Civic, 1401 N. Verdugo Road.

From other than Tech, merely get to Glendale, and either of the two previously mentioned roads.

Halloween Affair To Feature Laverne Boyer's Orchestra

Glendale Civic Will Be Scene Of Opening Sport Dance Of Social Year

Mittenthal Wins First Rep Post

Bud Mittenthal was elected First Representative at the runoff election held Thursday, October 23.

Voting was very light, according to Leigh Sherriffs, head of the Election Committee. Mittenthal received 215 votes to Bill Smyth's 164.

The runoff was necessary because neither of the candidates received a majority of the vote cast in the primary election held October 16th.

Mittenthal is Senior Class President, and Bill Smyth was acting First Rep. at the time of the election.

The First Representative is a member of the board of directors, the Honor Point Committee, and also controls social functions.

On Friday, Oct. 31, the Caltech Student Body will open the social year with a sport dance at the Glendale Civic Auditorium. From 9 to 12 the couples will dance to the music of Laverne Boyer and his 11-piece band, who have played for numerous Tech functions in the past with marked success. His smooth and sweet style will be augmented by two vocalists, Gaye Lane and Larry Straight, who sing both solos and duets.

Glendale Civic Excellent

The Glendale Civic cannot but provide an excellent setting for Boyer's music and assure a successful evening. Maple flooring and wooden overhead beams will provide the proper informal touch, while an open balcony and a garden within sound of the band will bring together music and night. A soft drink bar will be available for refreshments.

Intermission Contest Planned

During intermission the Dance Committee will engineer a contest for the crowd. Three tunes will be played that refer to an event or series of events that have occurred on campus recently. All events have been reported in the CALIFORNIA TECH, so success depends on astuteness only.

The committee guarantees the questions not to be difficult, but a knowledge of Math 3 is definitely helpful.

Student Body Card Admits

Presentation of a student body card is entrance to the dance. Those who do not possess a card may attend for a donation of \$1.50 to help defray the function's expenses.

For directions on how to arrive less than 1 hour late, look elsewhere on Page One.

I.R.E. Meets To Elect Officers

The student section of the Institute of Radio Engineers met last week for the purpose of electing officers and planning activities for the forthcoming year. C. A. Rypinski spoke of the recent West Coast I.R.E. Convention in San Francisco, which he attended as Caltech student representative. A tentative schedule of field trips was set up, the first trip being the combined A.I.E.E.-I.R.E. jaunt to Don Lee's television station in Hollywood next Monday, Nov. 3.

Officers elected were C. A. Rypinski (chairman) and Charles Susskind (secretary-treasurer.) Students wishing to join the I.R.E. may obtain application forms from Rypinski, who can be found at the Throop Club during any lunch hour.

E.E.'s To Visit Don Lee Radio Station

Next Monday the Cal Tech Electrical Engineers will journey to Mount Hollywood to inspect the Don Lee Station television equipment. High point of the visit will be the testing of the transmission equipment.

This is the second of a series of trips sponsored jointly by the A.I.E.E. and the I.R.E. The first was a visit to the City of Los Angeles' Power Plant at Wilmington, where the Engineers studied the 60,000-k.w. turbo-generator units.



TANTALIZING "T"—or, the "Spirit of '47," Caltech's five rally gals, who've been doing a swell job and filling a vital role well at Tech games and rallies with their precision performances and ebullient spirit. Top row: Pat Gaard, Ginger Graham, June Wooley, from left to right. Center: Virginia Bean; in front, Joyce Baker.

Second Meeting Held By ASCE

The ASCE held its second meeting of the term last Wednesday afternoon, Oct. 22, 1947. Tom Waters, president, appointed the following program committee: Carroll (chairman), Patterson, and Shaller. Perry was assigned to help Hausmann with publicity.

Waters reminded the boys that the next meeting of the Los Angeles Chapter of the ASCE will be a dinner-dance on Nov. 12. Student members are privileged to attend for half price (\$2.00 per couple) and have an opportunity to make connections in the profession while having a good time. The fears of the snakes were allayed when Waters recalled that last year the assignments in CE courses were usually reduced the day after such a meeting for the benefit of those who attended. For further information, see any of the officers.

The main event on the program Wednesday was a twenty-minute sound film in color, "Driving the Alva B. Adams Tunnel," courtesy of the Ingersoll-Rand Co. This tunnel, used as an irrigation conduit in Colorado, is the longest ever driven from only two portals. The film showed the actual construction in a nontechnical manner and doubtless would have been of as much interest to other engineers as it was to the CE's.

Dr. Went Elected To Presidency Of ASPP

Dr. Fritz W. Went, professor of plant physiology at the California Institute of Technology, has been elected president of the American Society of Plant Physiology for 1948.

Dr. Went's work with plant hormones has been outstanding and he is accredited with being the first to advance that phase of plant physiology so that it could be dealt with experimentally. His discoveries in the use of plant hormones for rooting

(Continued on Page 2)

Tech Debating Squad Opens At Pepperdine

Caltech's Debating Society, the Pi Kappa Delta, will open this year's activities with an extemporaneous speaking contest at Pepperdine College, November 14 and 15.

The debate question for this event, "Resolved, that a Federal World Government Should Be Established," will concern present Russo-American Relations, the duels in the U.N., and the partitioning of Palestine. Irving Sulmeyer and Thomas Vrebaloich, our champion debaters, and John Health, orator, will be included in Tech's squad of 21 members.

Receives Commendation

Irving Sulmeyer, the President of Caltech's Pi Kappa Delta, was very recently granted by this national speech organization the degree of Special Distinction for his activities in debate last season. He and Joseph Green won distinction in debate at Redlands University last April.

Future Plans

At the present time Caltech is planning to offer a debate tourney similar to last year's affair later on this year at an unspecified date. The matter, though, is still in the hands of the officials.

"Clear Water" To Be Shown By C.E.S.

Monday, Nov. 3, the student chapter of the ASCE is presenting a program under the auspices of the Consolidated Engineering Societies. A Technicolor sound film entitled "Clear Water" is being shown. Produced by General Electric, it is excellent on the problems of stream pollution and the methods used to correct this. Many examples are used, these being taken from all over the U.S.

It is hoped that everyone will take advantage of this opportunity to find out how one of our most vital social problems is being solved. Next Monday at 11:00, Room 201 Bridge.

"Palomar" Dr. Mason's Subject For Nov. 7; "Hen" Rally Tomorrow

Dr. Max Mason, Ph.D., LL.D., Sc.D., will be the speaker at assembly next Friday, Nov. 7, it was announced today. His topic will concern the development of the Palomar Observatory.

Dr. Mason is chairman of the Observatory Council of the Institute and a member of the Board of Trustees.

The Observatory Council is in full control of the design, construction, and operation of the Palomar Observatory and Caltech Astrophysical Laboratories. As chairman of the Council, Dr. Mason is necessarily the man best qualified to summarize the exciting events comprising the story of the Giant Mirror; in addition, he brings to his subject the driving enthusiasm which has pervaded his tenure as Council chairman.

This Friday's assembly will be a pep assembly for the Pomona game, Jack Ottestad, rally commissioner, announced. "There might even be girls," he opined.

Civil Service Exams Announced

Civil Service Examinations for 16 different categories of jobs will be held in the near future, it was announced by Dean Eaton's office today.

Applications for the positions listed below, the basic salary for which is \$2644, close November 4. Students interested in taking any of the examinations, or interested in the special training course conducted by the National Institute of Public Affairs for eligible candidates who contemplate a career in Government Service, should contact Dean Eaton in 119 Throop for further information.

Categories for which examinations leading to probational appointment will be held include: Administrative Technician, Archeologist, Astronomer, Bacteriological (Medical), Chemist, Economist, Engineer, Geographer, Legal Assistant, Librarian,

(Continued on Page 6)

Robert Weede Well Received

Robert Weede, operatic baritone, received a warm ovation at the conclusion of his courtesy recital at Culbertson Hall during last Monday's assembly.

Mr. Weede, who started his prominent career at the Radio City Music Hall, has been a soloist with the Metropolitan Opera Company for a number of years. He is well known for his portrayal of the role "Rigoletto."

During "off" season at the Met, the singer has divided his time between concert tours and appearances with other ranking operatic groups, notably the San Francisco Opera Company, with which he is now appearing in Los Angeles. In continuation of his USO activities during the war, he has recently performed numerous benefits for hospitalized veterans and other deservingly groups.

Dorothy Richardson accompanied the singer.

Bonfire, Parade Stir Tech Spirit

For those of you who were unfortunate enough to miss the pre-Oxy game Pajamarino, the "TECH" offers the following solace. At 7:30 the troops gathered in Tournament Park and enjoyed a fine picnic dinner consisting of delicious hot dogs, potato salad, and all the rest of the goodies that make up a picnic dinner.

After this, everyone joined in a pep rally. George Willie, the President of the Oxy student body, was there and he got a rousing send-off. The bonfire was lit, and an inspiring sight to see was the outhouse version of Oxy's Orr Hall go up in smoke.

The parade started promptly at 8:45 and the citizens of Pasadena were greeted with Tech spirit, songs, yells, and souvenirs all the way from California and Lake to Colorado and Raymond.

Assembling at the Armory, the enthusiastic students then witnessed a most excellent performance by the Pasadena City College Highlighters. This was their first performance of the year, and it was very successful. Lois Boswell's torchy singing was

Prizes, Scholarships, Tours Offered To Writers

Variety Of Contests For College Writers Opened By Foundation, Magazine, Line

Any potential authors present? Pick your subject and you, too, may win a trip to Scandinavia, or if it is the cash that you prefer, enter one of the other contests that is being offered.

Take a look at the variety of contests, the rules of entry for which are given below: Choose your topic—and good luck!

College Writers' Contest

"Tomorrow" magazine will begin its second annual college writers' contest this month. The contest will run until December 31, 1947, and is open to all officially enrolled undergraduate college students in the United States.

The best short story will win a \$500 first prize, and the next best a \$250 second prize. All manuscripts received will be considered for publication, since the magazine pays \$125 and up per accepted story, this will provide an additional opportunity for young writers.

Stories should not exceed 5,000

words in length, should be typed in standard manner for submission, and should have on both manuscript and envelope the phrase, "College Contest," and the writer's name, college, and mailing address.

All entries must be accompanied by a self-addressed, stamped envelope; and sent to Tomorrow Magazine, 11 East 44th Street, New York 17, N.Y.

Swedish Influence

The Swedish-American Line is holding an Essay Contest commemorating the Swedish Pioneer Centennial. There will be three separate contests open to the following: 1. College undergraduates; 2. High School and Preparatory School students; 3. Adults regardless of occupation.

Six free trips to Scandinavia will be the first and second prizes in each of the three groups. The subject of the essay will be "The Influence of Swedish Settlers on a Region or Community."

The contest closes April 1, 1948.

Inquiries and manuscripts concerning the contest should be addressed to: Contest Editor, Swedish-American Line, 636 Fifth Avenue, New York 20, N.Y.

Short Stories and Poetry

The "Mainstream Literary Quarterly" announces its contest for a best unpublished short story and poem or group of poems. Four awards of \$150.00 each will be awarded.

The contest is divided into two groups: 1, students in colleges; and 2, members of trade unions.

This year's competition will end March 21, 1948.

All manuscripts should be addressed to the "Mainstream" Awards Committee, 832 Broadway, New York 3, N.Y.

Lincoln Foundation

The Trustees of the James F. Lincoln Arc Welding Foundation announced the resumption of their Annual Engineering Undergraduate Award and Scholarship Program.

Students' papers are to deal

with design for arc welding of parts of machines, complete machines, trusses, girders, structural parts, or their maintenance. It is not necessary that the machine, structure, or part be built, but the design or method must be described in the paper.

Resident engineering undergraduate students registered in any school, college or university in the United States which offers a curriculum in any branch of engineering leading to a degree are eligible to submit papers in this award Program.

This Program contains two interdependent plans: the Award Plan and the Scholarship Plan. Under the Award Plan, engineering students will submit papers on arc design and the use of welding in maintenance of machines and structures. Under the Scholarship Plan, scholarships will be awarded to the schools in which the three highest award recipients under the Award Program are registered.

Awards for papers will be as follows: One award of \$1,000; one (Continued in Column Five)

THE BOUDOIR BEAVER

Last Thursday night it was demonstrated that the well-dressed Tech Man wears in the bedroom. We feel this was evidence of a Logical Error in the Caltech Mind. He shows what he wears to the boudoir before he knows how to get in. To improve this most dismal of conditions is the solemn purpose of this column.

POSTULATE ONE: The Tech Man is a Boor. An astounding number of us have the idea that to impress a woman we must act like Mittenthal instead of a human being. In attacking the Female the Straightforward Method is only successful among the peasants. It is true that a large number of women refuse to date Techmen.

POSTULATE TWO: This is Unfortunate. We must either change, or perish of Slow Frustration. Unhappily none of us know how Women really want us to behave.

CONCLUSION: Cherchez la Femme! A number of us have sacrificed ourselves in the glorious spirit of science, in that we have gone out unto the Opposite Sex to obtain Data ament the alleviation of our misery.

DATA: Our Cosmic Research Group sallied forth bravely into the world, seeking knowledge and advice. Away from the roar of the drop compasses and double integrals, our minds began to adjust to their new environment. We sought a mountain retreat, high above complexities of textbooks and learned lectures, with life unadorned, limited only by nature.

Mount Palomar: Symbol of knowledge, temple to truth. In the center chamber the great eyeless structure was half-lit by the chilled rays from the moon. The focus was towards Venus, selsyns tracking slowly about the polar axis.

"Welcome, seekers after sex." The voice floated down from the observation cylinder, warm, enticing. Big Bob mumbled, "What was that?" The voice returned, "Vector." We gazed aloft to see two legs, distinctly not masculine, coyly dangling over the oil bearing. Carl reached for his notebook, jotted down "a woman." The voice corrected him. "Vector, the hyper-woman of N dimensions." Carl, ever the Explicit One, said: "Puuh."

"Don't be timid, I'm practically normal," the voice answered. "Just treat me as you would any girl." The bravest among us, Dean, then spoke up, "But Miss Vector, we don't know

how to act with girls." Bill added, "There are none where we come from." Pat's British voice, "But we should rather like to know how to meet them."

Vector stood up, slid gracefully down the oil bearing, and wrapped one of her N dimensions around Big Bob's waist. Bob tried to stifle a burp. "You silly children. I really think you're afraid of girls. But you've come to the right person for advice. I, Vector, am the Oracle of the Boudoir. My opinions are the elixir distilled from the thoughts of all women. When you know me in my infinite dimensions, you know every woman. I see all, know all, tell all for a price."

Tom called the cosmic research group into a quick huddle. "We've found our answer. No longer do we need the advice of the girls from Scripps, Pomona, Oxy, PCC, the Playhouse, or the Catacomb Queens. We don't have to ask them the short-comings and boorish habits of Techmen. We won't have to hold any more parties in the Alley Six Kitchenette, plying our dates with Seven-Up and marshmallows, in the hope that they will give tips for the timid, facts for the frustrated, hints for the Blacker men." Carl added, "Vector shall be the synthesis of the suffering of girls who date Techmen. Let's offer her a dime and see what she says."

Six men out-fumbled each other to pull out their wallets last, but Vector finally received a slug nickel and five pennies.

"To the men of Tech, the Oracle of the Boudoir says this: 'Success awaits he who is groping in the darkness.'"

As we gaped at a thin wisp of cosmic dust rising from the ground, Vector slipped off into her seventh dimension.

Next week: Vector's Analysis

Tech Ski Club To Meet Tonight

Sound movies from Hollywood will be featured in the Ski Club meeting tonight at 7:30 in 155 Arms.

Membership in the club is open to all persons affiliated with Tech who are interested in the sport. No experience is necessary, and, in fact, instruction will be furnished.

Besides instruction in skiing, there are many other advantages for members, such as transportation arrangements and use of the hut in Snow Valley. The hut (Continued on Page Four)

(Continued from Column Four) award of \$500; one award of \$250; four awards of \$150 each; eight awards of \$100 each; 12 awards of \$50 each; and 50 awards of \$25 each.

Under the Scholarship Plan the institutions in which the three top awards are made to students will receive amounts of money equal to the awards granted. These amounts are to be used for the purpose of scholarships in the departments in which the award students are registered.

Use of Scholarship Funds:

The department of the institution in which the first winner is registered will receive \$1,000 for four annual scholarships of \$250 each. The department of the institution in which the sec-

ond winner is registered will receive \$500 for two annual scholarships of \$250 each. The third institution will receive one \$250 scholarship.

Papers must be postmarked not later than midnight, May 15, 1948, and awards will be announced as soon thereafter as possible.

A copy of the Rules and Conditions may be obtained by writing The James F. Lincoln Arc Welding Foundation, Cleveland 1, Ohio. Further information may be obtained from Prof. Judy.

CALIFORNIA PHARMACY

PRESCRIPTIONS PHARMACISTS
575 S. Lake Street Pasadena, Cal.
SYcamore 2-6222

CALTECH SPECIAL LAUNDRY AND DRY CLEANING
Left at the **CAMPUS BARBER SHOP**
IN THE COFFEE SHOP BLDG ON MONDAY WILL BE RETURNED ON FRIDAY
REMEMBER
Campus Barber Shop

Voget & Cathey
MEN'S CLOTHING FURNISHINGS
Fridays till 9:30 p.m.
459 East Colorado Street
Sy. 2-3871 - Pasadena 1

NOTICE!

JONKER'S FLORISTS

A new flower shop under the same management as the Raymond Florists

You can walk to this new shop which is only three doors South of Lake & California St. to order

Corsages OR TO TELEGRAPH Flowers

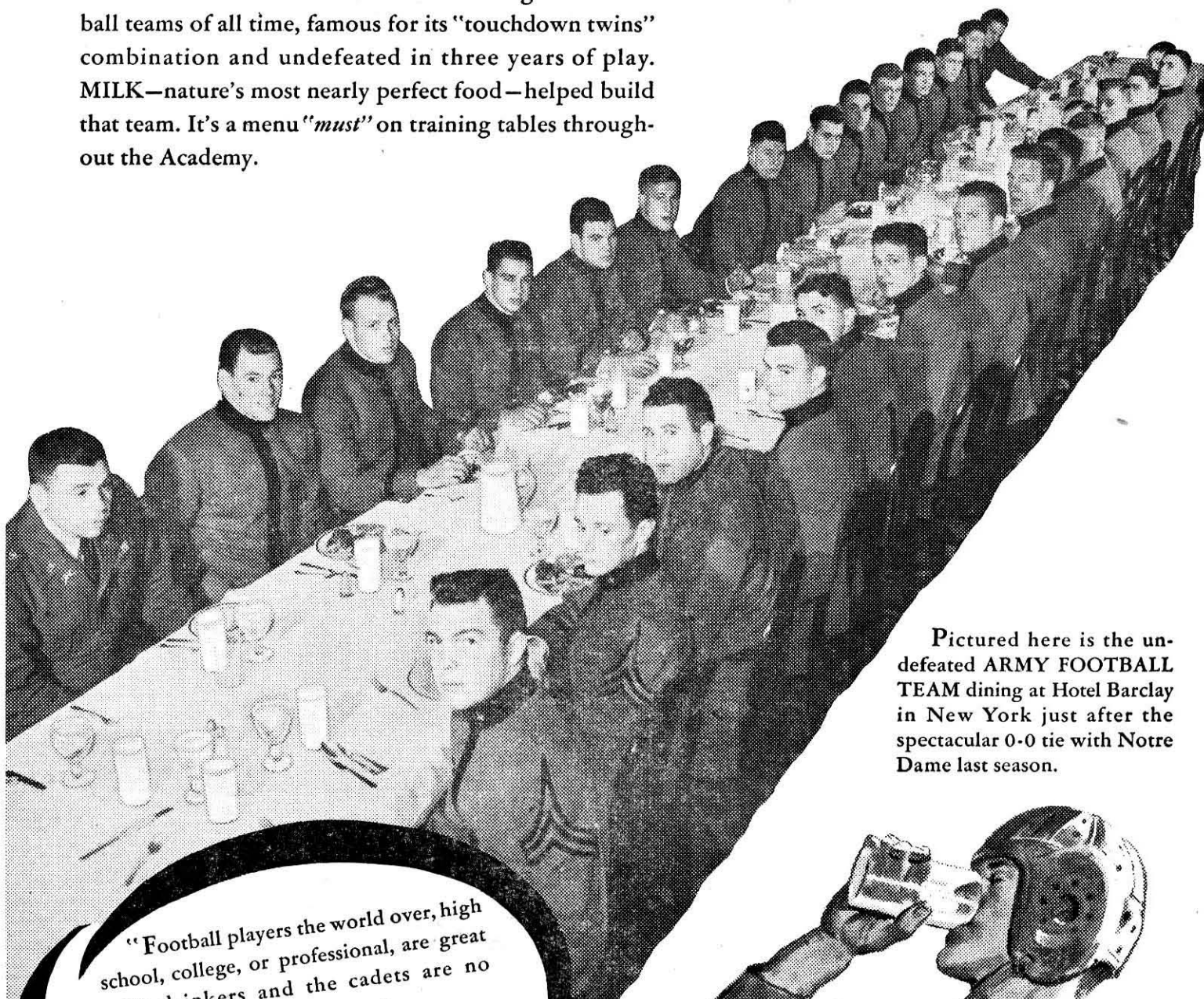
OPEN EVENINGS AND SUNDAYS
TELEPHONE YOUR ORDERS SY. 3-7167

MILK

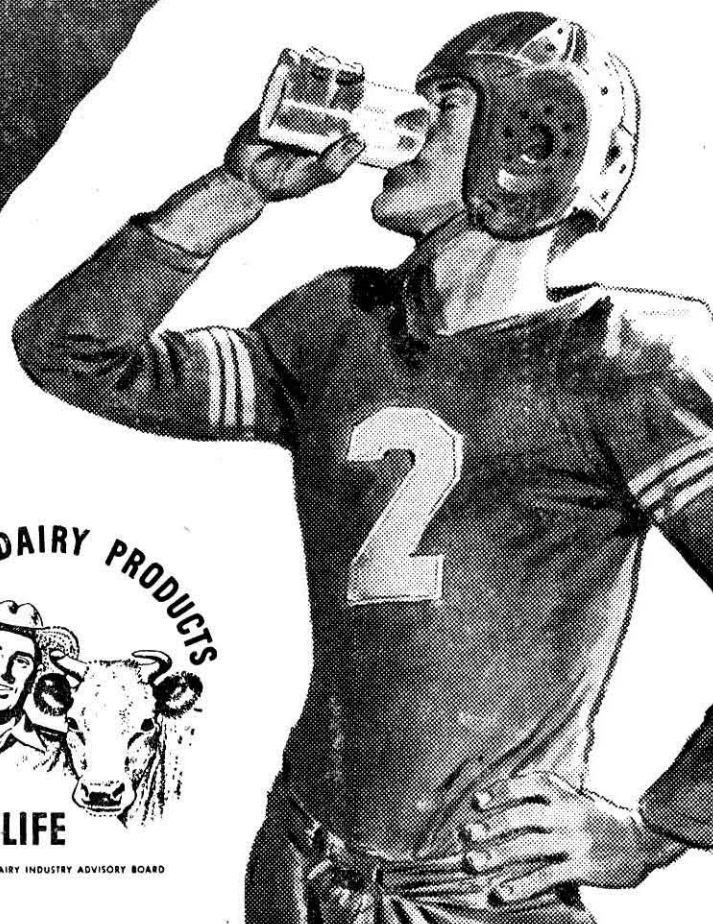
helped build the undefeated ARMY FOOTBALL TEAM

WEST POINT—molder of men and military leaders—slants the rigid training of all cadets toward health and physical fitness. Every cadet participates in some type of sport, constantly developing mental alertness and sound body, the first requirements for leadership.

Out of West Point has come one of the greatest football teams of all time, famous for its "touchdown twins" combination and undefeated in three years of play. MILK—nature's most nearly perfect food—helped build that team. It's a menu "must" on training tables throughout the Academy.



Pictured here is the undefeated ARMY FOOTBALL TEAM dining at Hotel Barclay in New York just after the spectacular 0-0 tie with Notre Dame last season.



"Football players the world over, high school, college, or professional, are great milk drinkers and the cadets are no exception."

Quoted from an article entitled, "Blanchard and Davis, West Point's Touchdown Twins," which appeared in the March, 1947 issue of PHYSICAL CULTURE magazine.

MILK

a he-man Drink



CALIFORNIA DAIRY INDUSTRY ADVISORY BOARD

Beaver • • Sports

Powerful Occidental Eleven Stops Tech 9-0

Tiger Cubs Roll Over Frosh Footballers In League Tilt

Passing and Running Attacks Ruin Beavers as Oxy Wins 33-0

Displaying a terrific passing and running attack, the Occidental Frosh romped over the Beaver Freshman eleven, 33-0, in the preliminary game last Friday night.

The Bengal T-formation functioned surprisingly well as time after time yardage was reeled off against the Beaverbabes on delayed line bucks and pass completions. At the end of the first half the Oxy men went into the dressing room with a 20-0 lead by virtue of two touchdowns on passes and another six-pointer on a 70-yard run.

Beavers Drive

Midway in the second quarter the Beaver yearlings made their only real drive of the game. With the pigskin on their

own 30, Walt Pfeiffer passed to End Noel Reed for 15 yards, and three downs later Pfeiffer ran from punt formation around right end for a first down to the Tiger 41. A penalty gave the Frosh another first down before their march was halted on the 25.

Caltech's offense was stymied by the charging Occidental line, and only one threatened to score when a recovered fumble put the Beaver on the Bengal 15. Meanwhile, the Tiger eleven rolled up two more touchdowns in the second half, both from passing.

Roland Berner, 205-pound Frosh tackle, incurred a painful shoulder injury in the second stanza but finished for the Tech-men.



DON'T LOOK NOW GLENN, but that third hand means business. P. S.—Believe it or not, on this play Chaffee cut to the right, got away and went 7 more yards before being stopped.

Engineers Bow To Occidental In Thirty-fourth Grid Battle

The last laugh in the traditional annual Beaver-Tiger football rivalry went to the Tigers, as Oxy downed the Tech grid squad, 9 to 0, before a crowd of 6500 fans in the Rose Bowl last Friday night. This was the twenty-second win for the Bengals and the thirty-fourth tussle of the series which began in 1895, but was Oxy's first taste of Beaver blood since 1941.

Fighting Mermen Downed In Opener Against Compton

In its first start of the year, against Compton JC, Caltech's water polo team put on an exciting show, keeping the opposition worried up to the final whistle.

Going into the fourth period Compton was leading by one slim goal, but with the addition of two points in that quarter the final tabulation gave a strong Compton aggregation a 7-to-4 victory. Beaver swimmers constantly drove hard, but at the same time kept their number of fouls down to about one-fourth as many as the opposition made.

Palmer Shines

The boys from Compton scored first, but it wasn't long until "Battling Bill" Palmer came thru for the first of three goals which he contributed during the contest. Besides performing brilliantly on the offense, his defense was indispensable.

Scoring was even between the teams for both the second and third quarters, with B. Waters producing Tech's score in the second period, and Palmer garnering Tech's third-period scores.

Next

Another thrilling game is in store for those willing to brave the long journey to Muir this Friday at 5:00 p.m.

If you can swim and like the idea of team competition in the water merely drop a hint to that effect any late afternoon in the vicinity of the Pasadena City College swimming pool.

The only score for the Tigers came in the second quarter when Sanders, flashing Occidental backfield ace, swished 40 yards to pay dirt after twisting and turning through the Tech defense just over scrimmage. Two well-placed blocks by Oxy's Fain and McLean stopped a possible brakeup of the play by Tech.

HELP WANTED

Anyone interested in writing sports for the Tech should see Len Herzog or Jack Scantlin immediately. Those out for a sport will be especially valuable writing on that sport, but anyone who has an interest in athletics is needed.

This touchdown jaunt culminated a sustained drive from the Occidental 17-yard line, with Trump and Sanders lugging the leather into Engineer territory.

Tigers Score Safety

As the second half got under way Oxy seemed to be on the way again until Muehlberger broke up a third-down reverse play, Ross to Trump, on their 45. Tasse's kick went dead on the Tech 5-yard line and three plays later Glen Chaffee was dropped in the end zone to give the Tigers a safety and two more points to make it 9-0. Bengal ends Levin and Pearson combined to rub out Chaffee when he faded into the cross-hatched section to flip a pass.

The Engineers began to do a little line smashing themselves after this display of power by Oxy linemen. Twice in the next drive, Tiger backs threw away the ball to save yardage when Tech men crashed into their backfield.

Three men left the field for (Continued on Page 6)

Dabney Leads In Interhouse Cross Country Tournament

Fleming, Ricketts, and Blacker Follow; Cobb, Bochanski, and Simons Win Top Positions

The Big Green of Dabney House has taken an early lead in the interhouse cross-country competition by winning the 1½ mile meet and taking a close second in the 2-mile race. The Dabney runners have a total of 37 points, followed by Fleming with 44, Ricketts with 49 and Blacker with 57.

Cobb Wins Both Races

The standout performer in both meets, however, has been a Throop Club freshman, Bob Cobb. Bob forgot about his shin splints long enough to win handily in the 1½ mile with a time of 8:12.5, and breezed through the 2-mile in 11:33.2.

Throop derived no benefit from the little man's mighty ef-

orts, however, since in neither race did three Throopmen finish.

Herbie Simons of Dabney and Felix Bochanski of Fleming took turns with the runner-up and third spots in the two races, while Fleming's Jay Montgomery, Blacker's Larry Nobles and Don Peterson of Ricketts have stepped in and out of the also-

ran positions.

Houses Vie for Honors

Simons, Dick Spellman and Bob Kurland of Dabney brought the bacon home by winning the first meet, while the same aggregation took second place in the 2-mile. Peterson, Rich Smyth and Don Asquith garnered second spot for the Rowdies of Ricketts in the 1½ mile and slipped to third in the 2-mile.

Bochanski, Carl Anderson and Erle Brown obtained third place for Fleming in the first race and when joined by Montgomery in the 2-mile they nosed out Dabney by one point for top honors. Nobles, Ray Bowerman and George Abell scored to bring Blacker fourth spot in both meets.

Tomorrow at 4:30 the leather-

TECH SKI CLUB

(Continued from Page Three)

is located in an excellent skiing area, has a gas stove, and electric lighting. Since most newcomers won't have equipment, the club reminds us that the whole works, skis, boots, and poles can be rented for only \$3.50.

Many old Tech students, familiar with great ski week-ends at the hut in Snow Valley, advise newcomers that skiing offers thrills they can't afford to miss. The hut is put to good use all year 'round, skiing or not.

All interested Tech men are asked to come to the meeting tonight, but those who are unable to attend can get further information from Sage Burrows in Room 43, Dabney House.

CARL'S CALTECH BARBERS

5 GOOD BARBERS—APPOINTMENTS IF DESIRED ON CALIFORNIA NEAR LAKE

The Three Suns—reading down: Morty Dunn, Artie Dunn, Al Nevins



"Sleepy Time Gal" Whatta Gal! Whatta RECORD!

...latest disk by The Three Suns for RCA Victor

BACK in '25 everybody was humming 'bout that "Sleepy Time Gal." Now "Gal" is back in a new and wonderful record.

And here's another favorite with a great record: cool, mild, flavorful Camel cigarettes. More men and more women are smoking Camels than ever before.

Why? The answer is in your "T-Zone" (T for Taste and T for Throat).

Try Camels. Discover for yourself why, with smokers who have tried and compared, Camels are the "choice of experience"!

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

I LEARNED BY EXPERIENCE THAT CAMELS SUIT ME BEST!

Al Nevins

More people are smoking CAMELS than ever before!

Read 'em & Weep

CALTECH		OCCIDENTAL
10	First Downs	12
6	Rushing	2
0	Passing	2
4	Penalties	1
114	Net yards rushing	206
48	Yards lost	17
112	Net yards forwards	40
22	Forwards attempted	15
9	Forwards completed	4
226	Net yards gained	246
1	Intercepted by	0
4	Yards interceptions return	0
9	Punts, number	10
6	Returned by	4
0	Blocked by	1
37.7	Punts, average	36.0
1	Kickoffs, number	2
2	Returned by	1
59	Kickoffs, average	46
71	Yards kicks returned	68
32	Punts	64
39	Kickoffs	4
1	Fumbles	0
1	Ball lost	0
3	Penalties	7
25	Yards lost on penalties	85
0	FINAL SCORE	9
0	Conversions	1
0	Safeties	1

PASADENA BOWLING COURTS

970 East Colorado
Rendezvous of Caltech Bowlers
Open 11 a.m. to 1 a.m. SY. 3-1341
Special Student Rate before 6 P.M.
except Saturday, Sunday, and Holidays
20c Per Line

OAK KNOLL CLEANERS and TAILORS

Let a Vet Serve You

THREE-DAY CLEANING SERVICE

FOUR-DAY LAUNDRY

902 East California

(4 Doors East of Lake on South Side of St.)

Beaten Beavers Face Strong Pomona Gridders Saturday

Engineers Again Underdogs; Hens Show Strength in 19-18 Loss to Redlands

On Saturday night at 8:00 p.m. the Caltech Beavers will face the Pomona Sagehens in the Rose Bowl. The Engineers will really be out after this one after losing a heart-breaker to Oxy last Friday. The game should turn out to be hard hitting, fast running, since both squads are trying to attain the conference win column.

Talkin' It Over

with The Goon

Here it is, men. The Goon has a brittle beak today, and most likely before you get thru reading this column, you'll be wanting to come over and knock it off.

Hate to bring up last week's party at the Rose Bowl, but there were a few occurrences that did not sit well with the cider and do-nuts later. The first point is the matter of clean play in an athletic encounter or any dealings with others. It's not very often that a kid like Baker will get mad enough to throw a hay-maker at an opponent. In fact, "Bake" is one of the cleanest living, cleanest thinking, and cleanest playing guys in a helmet and hip-pads. Nor are men like Bass, Hibbard, and Long likely to use knees, elbows, or fists when the little black book says no.

Rules are made in any game to protect the players and to give each side an even break. When you see someone getting kicked in the ribs intentionally, or notice a fist sink in below the belt after a tackle has been made it doesn't make the game any more exciting. This is not meant to be an excuse for a 9-0 score. It is, however, a pat on the back to a bunch of fine sportsmen who went out Friday night to play the game as it should be played, lost, but proved themselves worthy of the name "Athlete."

Another sore spot Friday was the outcome of the Frosh scrap. The score itself is not the main beak. But that pressure is now being brought to bear on the Coaches to let Frosh pigskinners make mud pies in the Mudeo Thursday is making a lot of men blow their top.

For as many years as Tech has been in inter-collegiate athletics there has been a constant negative approach to the relative importance of competition. This perpetual unwillingness to go into athletics wholeheartedly stemmed in the past basically from the faculty. But now we find that men like DuBridge,

Since both schools emphasize brain over brawn, there should be plenty of ding-dong play with a strong aerial attack on both sides. Statistically the squads are fairly even, with two wins and two defeats for the Sagehens, and with a win, a pair of losses, and a tie for the Beavers. And for those who predict outcomes by comparative scores, both teams have played and knocked off LaVerne; Pomona walked over the Leopards 41-7 while Tech took them to the tune of 20-0. Glancing into the past, in the Tech Pomona series, Tech has won 7, lost 18, and tied one. Last year's score was decidedly one-sided—Pomona 32, The Engineers 14, but the Bevs weren't too impressed by the Hens, who scored mostly on breaks, while the Beavers did most of the offensive work. On Saturday night the Beavers will be out for revenge and a victory to stay in the Conference race.

The Engineers should start the same team as last week with Wozniack and McLean leading the backfield and ends Marshall and Hibbard doing the pigskin snatching. For the Sagehens

Swift, Goldsworthy, and many more are carrying the ball for athletics, while the students pay lip-service but refuse to take a definite stand.

You saw it last term, when the Interhouse Committee left the responsibility for Discobolus eligibility up to the Athletic Office. The Committee said quite strongly that they were for Tech first, last, and always. But their actions did not prove this. It has come up again in the arguments for Mudeo eligibility. 33-0 is a rotten score. It does not show that men out for the team can miss any practice.

Any guy in a uniform who feels hurt by not being allowed to play in the mud pit should turn in his suit. He is not a true athlete. He has not a fighting heart. And he does not belong on a team that represents Tech. For he is the man who will slow down before he is hit, who won't drive in for the set-up, who won't finish out a race because he is last—who doesn't deserve the name "Athlete."



WHAT'S THIS? Students of zoology will recognize the animal peering out of the discard in the above cut as a rather moth-eaten specimen of *Felis tigris* (Oxy). P. S.—Motheaten or not, this cat got out of the mire Friday night, promptly pushed the Beaver in.

center Maln and Schafer, a 220 tackle, should bear watching, while in the backfield McColl and Mertz will see plenty of

action. A preliminary game between the Frosh will commence at 5:30 p.m.

**WHEN YOU ARE HUNGRY
WHEN YOU ARE THIRSTY
or
WHEN YOU JUST
NEED RELAXATION
IT'S THE
SKIP INN**
Beer - Plate Lunches
1352 E. WALNUT
Open Till 2 A.M.

Associated Oil Sta.
Lake & San Pasqual
Not a classy layout, but
Best Products & Service

**REMEMBER
CAMPUS BARBER SHOP**
in
Coffee Shop Building

Frosh Sport Roundup

—By Jim Gillett

Last Friday the Frosh grid squad took a terrific walloping from the B team of Occidental. Looking around for the causes of this massacre, members of the Tech eleven came to several important conclusions.

In the first place, as Neville Long and Coach Ed Preisler pointed out, we might say that Oxy deserved the victory when you consider that their team has about two more hours of practice every afternoon than do the Engineer gridsters. The fact that our eleven does get only about

Dr. Pol Duwez Is New ME Professor

PASADENA. — Dr. Pol Duwez has been appointed associate professor of mechanical engineering at the California Institute of Technonology.

Professor Duwez came to Caltech in 1941 from Belgium as a special Belgan-American Education Foundation student on research work. During the war he was concerned with research work conducted at the Institute for both the O.S.R. and the Navy and since then has been connected with the Jet Propulsion Laboratory doing research and development work with both ceramics and metals in the field of jet propulsion.

half as much practice as it should get, explains some of the important missing attributes of the little Bevs.

Tech linemen and backs, too, as they left the field Friday, complained that they had not been shown how to combat the overshifted and diverging line style which the Tigers were using to such good advantage. Some men felt that the coaches should have brought out this point at least slightly at half-time. But then you can't learn everything in a couple of weeks.

In connection with the power of the team, it must be remembered that a coaching job at Tech is no gravy train. A coach here has to compete with many other activities, and also is handed mostly inexperienced players in the first place. Men on the Tech team can't get the sleep and training time they need because of the tough nature of Caltech courses.

As a result of all this, Neville and Ed found that their men, not in as perfect condition as their opponents, were being out-rushed and outplayed all through the battle. Tech had the spirit; they didn't have the know how necessary to let the spirit show.

Saturday afternoon, the junior squad will come up against another foe, and of course will be out there to win. Our coaches and the team hope that one more week of practice will have eliminated enough of the principal faults so that the Frosh Engineers can win this game.

YOUR COLLEGE SPORTS SHOP

Headquarters for Tennis Sportswear

WYNN MACE
Tennis Shop

Phone 5Ycamore 6-5804
904 EAST CALIFORNIA ST.
Pasadena, Calif.

Ice Skating

Daily 2:30 to 5, 7:30 to 10:30
Sat. & Sun. Morn. 10 to 12:30

Skates for Rent
Instructions

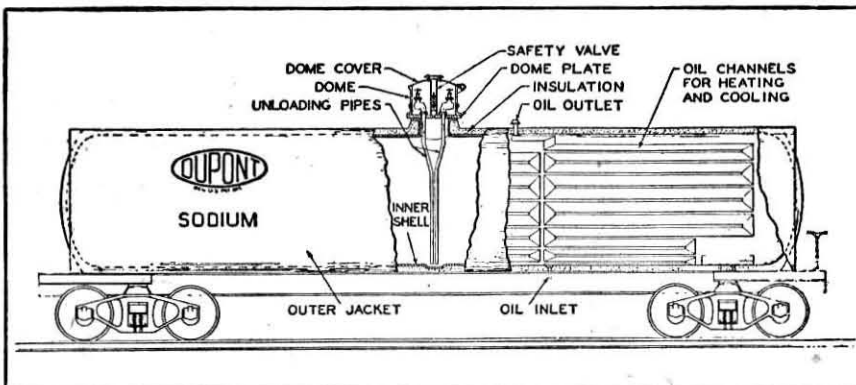
Pasadena Winter Gardens

171 S. Arroyo Parkway

Du Pont Digest

Items of Interest to Students of Science and Engineering

Industrial Organic Applications of Metallic Sodium

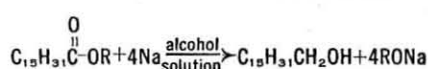


Sodium for organic reactions is shipped in 80,000-lb. quantities. It is pumped into the car, solidified by cooling and melted by hot oil for removal.

There would seem to be a considerable gap between the electrolysis of salt to make sodium, and research in the field of organic chemistry. However, at Du Pont as much emphasis is placed on organic research to develop outlets for sodium as on its inorganic uses.

For more than 15 years, intensive work on industrial uses for sodium has been carried on in Du Pont laboratories and plants by chemists, physicists, chemical, mechanical and electrical engineers.

In the organic field, this research has contributed a number of important uses for sodium such as the reduction of fatty esters, particularly of natural glycerides, to alcohols.



Du Pont organic chemists have found that sodium with selected secondary alcohols, such as methyl amyl alcohol, in the presence of toluene or

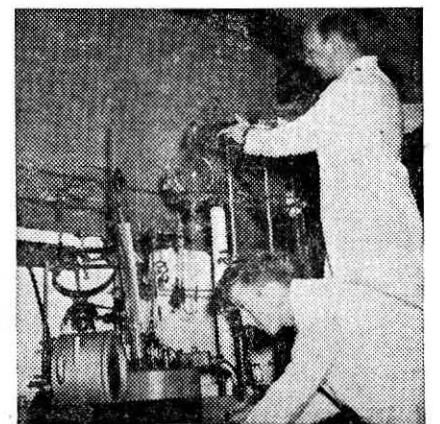
xylene, eliminates shortcomings of the classical method involving ethyl alcohol and sodium. Practically quantitative yields of the higher molecular weight alcohols are obtained.

This new method is especially useful in preparing unsaturated alcohols not easily made by catalytic hydrogenation. The process can be carried out at atmospheric pressure and compares favorably with catalytic hydrogenation of saturated, higher fatty esters because of the simplicity of operation and equipment.

The discovery of the new reaction conditions has led to the use of millions of pounds of sodium annually for manufacture of long-chain alcohols for wetting and emulsifying agents and synthetic detergents.

Other important processes developed by Du Pont organic research include the use of sodium for reduction of fatty esters to corresponding long-chain acyloins, and reduction of nitriles to primary amines.

Du Pont has also contributed to the development of many other uses for sodium and its simple derivatives, such as in the manufacture of tetraethyllead, used in high-grade motor fuels, dyestuffs synthesis, and de-scaling of alloy steels. In the form of sodium hydride or sodium alkoxides, sodium is a catalyst for many Claisen condensations, useful in the manufacture of barbiturates, sulfa drugs, vitamins, keto-acids and diketones.



Preparing to carry out an organic condensation reaction involving the use of sodium, R. B. Clark, B.S., West Virginia University '42, and W. J. Hills, M.S., Syracuse '36.

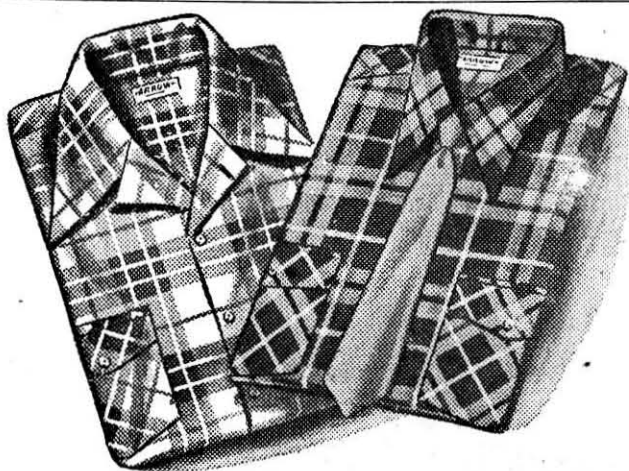
Questions College Men ask about working with Du Pont

WILL AN ADVANCED DEGREE HELP ME?

For certain types of work, particularly research and development, a higher degree is a distinct advantage and about a third of the men engaged in this work are Ph.D.'s. However, the majority of our technically trained men are Bachelors or Masters. Every effort is made to recognize a man's training as well as his special experience and aptitudes. Write for a copy of the new booklet, "The Du Pont Company and the College Graduate," 2521 Nemours Building, Wilmington 98, Delaware.



BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY



SCOTLAND COMES TO THE CAMPUS!

Aye, laddie! Arrow has a galaxy of new medium weight Scotch plaid sports shirts calculated to brighten your appearance and your outlook on life.

These carefully tailored sports shirts are made with the same know how that goes into famous Arrow Shirts. We're "sartin" these spartan tartans will play a part in your winter wardrobe once you see one. Come in and see us now!

\$ 7.95

ARROW SPORTS SHIRTS

HOTALING'S

TWO STORES

54 E. COLORADO ST.
921 E. COLORADO ST.

More facts about Du Pont—Listen to "Cavalcade of America," Mondays, 8:30 P.M. PST, on NBC

Post Game Dances Highlight Fleming Social Calendar

The social whirl at Fleming continued on its merry way; this past week added one more successful Open House to its list of successes. A light repast was served to the hungry Flemingites and their guests upon their arrival from the Bowl, to ready them for an evening of dancing to soft music, illuminated only by a blazing (?) fire.

The Scripps Open House scheduled for the following night was postponed to some future date. The facile, fluid female mind of the "Sophisticates" from Claremont decided that the 25th was not the night that they meant.

For this coming week, tonight is the night for the Exchange Dinner with Clarks Hall of Scripps. This exchange comes at a most opportune time for any Fleming men, if there are any, who are still without "Dates" for the ASCIT Dance on Friday.

On Saturday there will be another Open House after the Tech-Pomona game.

Smooth music and refreshments will be featured.

CIVIL SERVICE EXAMS

(Continued from Page 1)
Mathematician, Metallurgist, Patent Examiner, Physicist, Psychologist, Social Science Analyst, and Statistician.

really out of this world, as was Harvey Wright, who almost passed out, will testify. Further entertainment consisted of singing, dancing, ballet, and a much-applauded quartet, the Crown City Four.

The United States Civil Service Commission has notified the Placement Office that applications for Junior Professional Assistant Examination are now available. As the closing date is November 4, 1947, applications must be mailed promptly.

All seniors and graduate students eligible. Those accepted will be considered for Federal government positions in the Professional, Clerical, Administrative and Fiscal services, including Administrative Technician, Chemist, Engineer (Aeronautical, Chemical, Civil, Electrical, Mechanical, Metallurgical, Mining, Naval Architecture,) Mathematician.

Special notice will be found on the bulletin board of the Placement Office, Throop Hall.

Mudeo, Dance Head Next Week's Doings

Mudeo Time is creeping up on Tech! The annual mudbrawl will be held one week from yesterday, and afternoon classes will be canceled that day for the event.

Frosh, Sophs, and eventually Juniors will be implicated in the miry business, while haughty Seniors look on disdainfully and reminiscently.

Recuperate

As good a way as has been proposed for muddled Frosh and yearlings to recuperate from the fray (the Juniors, alas, have no such recourse) is to shake a leg at the annual loser-sponsored Frosh-Soph dance, which this year will be held Friday night, Oct. 7, at the Pasadena Athletic Club.

Herb Adkins' combo will furnish the music.

Calm Of Library Broken By Frosh

An interesting incident occurred last week when Freshmen Berg, Johnson, Jones and Munro serenaded Senior Librarian Frances Spinning and her charming bevy of assistants. The customarily hushed General Library resounded to the manifold voices of the self-styled "Throop Club Four" as they intoned the Oxy Song and other student favorites. A fascinated graduate student from abroad was quickly reassured that such musical displays were not part of standard daily library procedure.

The event was thought up by considerate Throop Club upperclassmen as part of Throop freshman initiations.

DABNEY LEADS

(Continued from Page 4)

lunged speedsters will engage in a 2 1/2-mile contest and spectators are urged to be on hand to see a fine show.

- Results of 1 1/2 Mile**
- 1—Cobb (T.) 2—Simons (D.) 3—Bochanisk (F.) 4—Peterson (R.) 5—Nobles (B.) 6—Spellman (D.) 7—Smyth (R.) 8—Bowerman (B.) 9—Kurland (D.) 10—Anderson (F.) 11—Asquith (R.) 12—Brown (F.) 13—Schroeder (F.) 14—Abell (B.) 15—Cust (B.) 16—Stoese (R.) 17—Newman (R.) 18—Sampson (F.) 19—Johnston (F.) 1—Dabney, 17; 2—Ricketts, 22; 3—Fleming, 25; 4—Blacker, 27.
- Results of 2-Mile**
- 1—Cobb (T.) 2—Bochanisk (F.) 3—Simons (D.) 4—Montgomery (F.) 5—Peterson (R.) 6—Spellman (D.) 7—Bowerman (B.) 8—Lansdown (T.) 9—Nobles (B.) 10—Smyth (R.) 11—Kurland (D.) 12—Asquith (R.) 13—Anderson (F.) 14—Abell (B.) 15—Brown (F.) 16—Cox (F.) 17—Stoese (R.) 18—Schroeder (F.) 1—Fleming, 19; 2—Dabney, 20; 3—Ricketts, 27; 4—Blacker, 30.

TIGERS BOW

(Continued from Page 4)

unsportsmanlike conduct as a result of slugging when Friese of Oxy broke up a Beaver pass in a way that two Tech men did not think was according to Hoyle.

Opponent Trump threw another scare into the Tech cheering section when he ripped off 45 yards from the Oxy 25 to the Tech 30-yard line, but the play was called back on a clipping penalty. After the punt the Tigers got a scoring break when a Chaffee to MacLean play went to the Occidental 45-yard line but ended in a fumble recovered by Adams for the Bengals.

Tech Shows Power

In the final heat Coach Anderson's men began to show their offensive power as they piled up three first downs in five plays. A pass, Chaffee to MacLean, and

a lateral to Dahm was good for 12. A delayed line buck by Wosniak rucked up 11 more, moving the pigskin to the midfield stripe and Hibbard took a pass on the dive six yards in enemy territory in the next two plays.

Then Chaffee took a 14-yard jaunt to the 28 where he was stopped by Pearson after it had looked like a possible scoring breakaway. After this the drive turned cold and Oxy took over.

With fifty seconds to play the Engineers started one more show for the grandstands, punching from their eight all the way to the opponent's five-yard line in five tries. Chaffee took the left side for 35 yards and passed from there to the Tiger 41. A toss to End Burke went to the 35 and one more throw put the leather on the five-yard line when the gun sounded.

CAMPUS BREWINS

(Continued from Page 2)

same Russian that was mentioned in last week's column. She is living up to advance notices as Warren's shirt still had lipstick on it Monday, or did this come from San Marino?

Ricketts was jumping as per usual on party night. Carl Fox, whose last name should be wolf, attended the affair—his first dance since arriving at this institution. However, in the past his lack of being able to dance didn't cramp his style, or did it? Bob Pilling had his O.A.O. up from San Diego for the weekend. Stan Boicourt, after much fast talking, convinced JuRe Blankenship, an OXY lass, to sit on the Tech side at the game, but she showed no ill effects from the experience.

Bill Bradley got himself in a

pickle that night as he spent the first part of it running around trying to find someone to take his second date for the evening off his hands. Can't figure out how he does it as I have trouble getting one.

Bob Dalton seems to have established a beach head at Scripps dating the same tall, dark and beautiful gal that he met at the exchange the week before. Larry Dahm also gave the boys a break by bringing a most delightful dish who was appreciated by all the connoisseurs.

Mr. A.B.C. is going to be on campus next week so try to catch him; it will be profitable.

NOTE to all victims and critics of this column:

This is to certify that this column has been approved by the Caltech chapter of the Boston Watch and Ward Society.

**"I'M A
CHESTERFIELD FAN
BECAUSE THEY REALLY SATISFY"**

Barbara Stanwyck

**SEE BARBARA STANWYCK IN
WARNER BROS. PICTURE
"CRY WOLF"**

A

B

C

CHESTERFIELD

ALWAYS BUY

**A ALWAYS Milder
B BETTER TASTING
C COOLER SMOKING**

The sum-total of smoking pleasure

PASSENGERS RELY ON COCA-COLA AND TRAVEL REFRESHED



5¢ PLEASE return empty bottles promptly

BOTTLED UNDER AUTHORITY OF THE COCA-COLA COMPANY BY COCA-COLA BOTTLING CO. OF LOS ANGELES

© 1947, The Coca-Cola Company