# No Color This Week

# The CALIFORNIA Tech

## EE91 Lab Strikes Again

### Volume LXXV "Saturday School" Brings Science To High-Schoolers

#### by Alan Silverstein

If you are anywhere near Chandler at about noon on any given Saturday you can't help but overlook the approximately 360 junior high school students that converge on it for lunch. What you probably don't see are the 30-odd classes each of two hours duration, that meet from 10 to 12 a.m. for 28 Saturdays during the school year in classrooms and labs all over Tech. The Saturday Morning School Program, now in its fourth year, draws motivated pupils, mostly in grades 7-9, from more than 50 different junior and senior high schools all over the L.A. basin.

The program is supported and funded by the Institute, operates under a broad-based faculty committee, and has been managed by Mr. Lee Browne, Director of Secondary School Relations, since its inception in September of 1969. He is assisted by Mr. S. Sharf, a local high school teacher, and mostly volunteers (although some receive slaaries), who conduct classes in subjects ranging from aerodynamics and algebra, and animal behaviour, through computers, ecology, and electronics, to physics, psychology, and space technology. In addition there are some "floating volunteers" and single tutors who help individuals with various problems, both academic and personal. "We do a lot of counseling," Mr. Browne said.

There are two main functions of the program, according to its director. First, "it is sort of a fancy way to interact with secondary schools. We bring the students here and teach them and then send them back to their schools all over L.A." Also, "we try to steer young people into careers of science, math, engineering, and medicine."

In no way is the program slanted towards teaching only gifted students, Mr. Browne pointed out. "Interest is our number-one criteria." Prospective students write a short letter of **Continued on Page Two**  Pasadena, California, Friday, November 30, 1973

**Earthquakes Needed to** 

**Stop Public Indifference** 

On their way to class, a group of Saturday-schoolers meet Mr. Seymour Sharf, a local high school teacher assisting in the program. Photo by Alan Silverstein.

# **Baxter-Prime**? Beckman II Nears Completion

#### by David Callaway

Within the next two months the Beckman Behavioral Biology building will be dedicated, which, if it lives up to the predictions made about it, will be a forerunner of the most important field of science in the next decade.

With funds donated by Arnold and Mabel Beckman, the Behavioral Biology Building will be finished sometine in December, and dedicated January 14. It will be the final complex in the Court of Man, which consists of the Behavioral Biology Building, and the Baxter Hall of Humanities and Social Sciences, which flank the mall leading to the Beckman Auditorium. The Behavioral Biology Building was designed to be the mirror image of the Baxter Hall of Humanities. and will incorporate some of the most modern technical devices available. In addition to individual facilities provided for each of 9 research units, shared facilities will include a laboratory for psychophysiological instruct-

Behavioral biology, or the biological comprehension of man's mind as it affects his actions, is a relatively new scientific discipline. However, it is believed that this research will have tremendous impact upon science in the next decade. The study of the human brain promises to provide significant new knowledge with broad human applications. The implications of behavioral biology affect such diverse fields as genetics, neurochemistry, neurophysics, physiobiology, ethology, and experimental and industrial psychology. The origins of human motivation and aggression, of mental illness, of some forms of criminal and other antisocial behavior, and the processes of education and learning are among the areas that might be illuminated.

by Peter W. Beckman

distinguished scientist declare

"What we need is a few more

earthquakes," Yet that is what

Dr. Robert E. Wallace, Chief of

the National Center for Earth-

quake Research stated during his

lecture "Earthquake Prediction

and Hazard Reduction" Monday

evening in Beckman Auditorium.

of earthquakes per se; he was

complaining about the public's

indifference to earthquake

hazards and ways of minimizing

them - an indifference that is

shattered every time a big quake

hits. He illustrated this point

with aerial slides of housing

construction directly over the

San Andreas fault and photos of

Dr. Wallace was not in favor

One does not normally hear a

Perhaps, then, the "science of the future" will be behavioral biology, with Caltech taking the lead in this important and beneficial research endeavor. The next decades will tell. landslides caused by tectonic movements.

#### Is Your Guess

Earthquakes are caused by the movement and breaking of the large blocks or rock that make up the Earth's crust. These plates are constantly shifting position. In some areas, such as the middle Atlantic, they are moving apart and new material is added to the crust from the mantle. In other areas, the subduction zones, one plate is diving under another. This is the case in California where the Pacific plate is being forced under the California plate. This, of course, results in one of California's most famous attractions, the San Andreas fault and related systems.

Seismologists are currently investigating ways and means of predicting earthquakes, and many promising lines of research are opening up. At the same time, efforts are being made to minimize the damage inflicted by earthquakes.

#### As Good As Mine?

This entire question boils down to cost versus safety. There is no way to construct an earthquake proof building, but it is possible to build one with a high degree of earthquake resistance. Unfortunately, it is also expensive. On the other hand, damage from a severe earthquake can be enormous. For example, a large quake in Los Angeles could cause up to forty billion dollars in damage.

Continued on Page Three



ion, an instrument room, a central sterilizing room and a stockroom.

#### Easy Victories

# **Voters Approve Amendments**

A surprisingly large turnout of 212 voters approved both measures proposed in the ASCIT bylaws amendment election held November 20.

The amendments needed 2/3of the votes cast, or 142affirmative votes, in order to pass. Proposition 1, which raised the cost of *The Big T* from \$8 to \$12, received 179 "yes" votes, 84% of the total balloting. Only 32 members cast negative votes. Proposition 2 passed by a slightly smaller margin, 165-45, with 79% of the voters in favor. It made a complete revision of the bylaws article on ASCIT publications, including an increase in most of the paid positions.

1
The breakdown by polling
place of the number of voters is
as follows:
Blacker25
Dabney41
Fleming
Lloyd
Page
Ricketts10
Ruddock6
Winnett41

PROJECT PEGASUS centered around ELN (Easy Lowering-of-a-lot-of-people's-GPA-to Nothing) in Page House's simulacrum of an asteriod-based space station. Photo by Ray Feeney.

Friday, November 30, 1973

### Throop Beat **Story Behind Miller's Resignation** by E. Squirrel Mole

Peter Miller, formerly Director of Admissions and Lecturer in English, has taken early retirement from the Institute. The events leading up to, and probably causing, this are worthy of note.

In 1971, Stirling Huntley came to the Institute as a Lecturer in Drama and Associate Dean of Graduate Studies. In the latter capacity he was involved with graduate admissions. At that time, and for some time preceding it. Miller was the Dean of Admissions and Financial Aid.

Sometime last year William Schaefer, Registrar, was given de facto control of financial aid. In June, Huntley was made Director of Admissions and Financial Aid. Miller was left to do the day-to-day grungework associated with undergraduate admissions. Since he sat on several committees (including the Admissions Committee) by virtue of the fact that he was Dean of Admissions, he was replaced by Huntley on those committees. Adding insult to injury, he was moved out of his office.

According to Lyman Bonner, Director of Student Relations, this was not a demotion of Miller, but a reorganization of the Admissions Office which brought in new blood. The

Continued from Page One

application in August and those

accepted, along with their par-

ents, attend an orientation in

September-which this year was

given to over 700 people. The

program is so popular and

well-known among local second-

ary schools that at the present

time 50 students are signed up

Twenty-seven structured clas-

ses are now being taught, includ-

ing aerodynamics; five levels of

math; animal behavior; anthro-

pology; two levels of astronomy;

two levels of biology; three of

chemistry; two of computers;

ecology; electronics; geology;

marine geology; micropho-

tography; medical science; pho-

tography; physics; psychology;

After lunching at Chandler

and space technology.

Saturday

on a waiting list.

#### faculty has not been entirely satisfied with this explanation, and has been investigating the circumstances of the change. Negotiations between Miller and the Institute have resulted in his taking the option of early retirement, rather than remaining in the position to which he was demoted.

#### **More Problems**

A rash of burglaries, thefts, and vandalism has been occurring on campus in the past few weeks, indicating a need for increased vigilance on the part of Techers.

According to Lee Chapman, the campus security supervisor, incidents in the last few weeks have included the theft of four bicycles, two calculators, and a car. (The last item was recovered.) A change machine in the penthouse of Business Services was broken into and robbed, apparently with a crowbar. The Coffeehouse lost a phonograph and a television.

A perhaps more disturbing event occurred last weekend when Chandler was broken into, a relatively small quantity of food stolen, and a lot of food strewn around. It was largely an act of vandalism, rather than of theft, indicating that the person(s) responsible probably had a grudge against R&R Food Ser-

many of the students spend some time at the gym involved in a recreation program that allows them to make use of "everything in the gym."

Speaking of Chandler, Mr. Browne wishes to make it clear that all Techers can go right in for lunch and do not have to wait in the humongous line that forms at noon.

Today the Saturday Morning School Program is fifteen times as large as when it began with 22 students in the fall of 1969, and at one time its enrollment was up to 500. At least two of the original group are now undergrads at Tech.

Volunteers are always welcome. If you are interested in teaching just about anything you know something about, and getting a free lunch in the bargain, please see Mr. Browne in 212 Dabney.

vice. While R&R is eating the cost of the food stolen and spoiled, the damage to the building is being paid for from the residence and dining halls budget, and means that there is less to spend on refrigerators, stoves, etc.

Blacker is having trouble getting a seventeen page survey of House morals printed by Graphic Arts. Dirty David would help, but he's tied up in knots.

News Briefs

# **CALTECH FORUM**

Everyone has been asked to conserve energy at Caltech. Many persons and buildings have responded by curtailing lighting and other measures. The Millikan Building stands out late at night with its many lights, even though the lights have been reduced by 25%. The custodial force has already been shifted to an earlier time schedule.

The Library administration is interested in knowing how the students and faculty would feel

about closing the library at midnight. The saving of power for lighting and airconditioning from midnight to 7 a.m. would be considerable. The schedule might be made flexible enough to permit 2 a.m. closing for a week before finals and during finals. Responses to this proposal will be given consideration in reaching a decision.

> -J. E. Tallman Director of Libraries

## **Teaching Quality Feedback Group Rides Again**

Work has begun in earnest on the 1973-74 Teaching Quality Feedback Group report, Caltech's encyclopedia of all courses offered here, with ratings and comments by students and professors. the report, which has not been printed for three years, is useful to students in course selection and in improving the quality of existing courses.

Help will be needed in (second term) planning this year's questionnaire and report formats, and in editing responses to the questionnaire. Anyone interested in the project should contact Jon Teich in Ruddock or 796-8523.

#### Impeach Nixon Rally At Exposition Park

A rally to generate support for the impeachment of Richard Nixon is scheduled for Exposition Park tomorrow (December 1) at 1 p.m.

#### Second Term Rooms Available in Coop

The Caltech Cooperative Housing has three openings for next term. They are in the COOP house at 297 S. Holliston, Rent plus utilities averages \$53 a month and the living accomodations are superior to campus housing. If interested, drop by 297 S. Holliston for a tour or call 796-2183.

#### A Reminder To

#### **Interhouse Tennis Players**

Interhouse tennis matches must be completed by Tuesday, December 4. That's four (4) days from now. Your ath man will probably be very unhappy with you if you don't play all your matches and end up forfeiting a quarter of your house's points.

#### **CEAC Still Needs You**

We're working on glass and are paying \$2/hour + lunch. Work starts behind Steele at 10 on Saturday.



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#### Our Very, Very Pure Sports Menu Friday, November 30 Wrestling 4:30 p.m. Cal State Northridge Away

	Saturday, Dec	cember 1	
6:30 p.m.	JV Basketball	LIFE College	Away
8:00 p.m.	Varsity Basketball	LIFE College	Away
	Tuesday, Dec	ember 4	
4:30 p.m.	Wrestling	LA City College	Away
6:00 p.m.	JV Basketball	So, Calif, College	Away
8:00 p.m.	Varsity Basketball	So. Calif, College	Away
	Wednesday, De	ecember 5	
4:00 p.m.	Wrestling	Trade Tech	Home
6:30 p.m.	JV Basketball	Pacific Christian	Home
8:30 p.m.	Varsity Basketball	Pacific Christian	Home
	Why go to Ch When we	ina Town are so close!	
		1	

# RESTAURANT





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THE CALIFORNIA TECH

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# <u>MS-quotes</u> Survey Underway

#### by Mary Beth Ogilvie

Last week, a questionnaire was sent out by the Caltech Women's Coalition (CWC) to all women students and to a random sampling of men. The purpose of the questionnaire, as stated in the accompanying letter, is to "establish a) how women feel about situations directly or indirectly related to ... Caltech, and b) in what ways, if any, their attitudes to such situations differ from those of their male colleagues." A similar questionnaire will be sent to faculty and staff in the near future.

The results of the questionnaire will be used for two purposes. "They will provide information" the letter reads, "for the women's segment of the Caltech-sponsored Affirmative Action Seminar, to be held this winter. They will also serve as resource material for the CWC." If the CWC is to properly represent Caltech women, if we are to develop a plan of action which reflects the needs and desires of the community, we must know what those needs are. Therefore, it is extremely important that all questionnaires be filled out and returned.

Another reason for having the questionnaire is to determine how attitudes differ from class to class. It's possible that the women in the class of '77 are less defensive, more relaxed than those in the preceding classes, and this is something we would like to know. So please take advantage of this opportunity to let your feelings be known—a lot of good things can come out of it.

#### Earthquake

#### **Continued from Page One**

Thus, one important task is to identify really dangerous areas and attmept to minimize the dangers. Dr. Wallace used his own community of Portola as an example. There a subdivision plan was changed to create green belts in landslide areas and remove house sites from the fault line with no loss to the developer.



And here we have the answer to the age-old question:

Is the Circulation Manager as literate as the regular staph; To Which the answer is a resounding yes.

This past Saturday marked the debut of a new dramatic and musical production, *A Stalin for All Seasons* at the Fleming Theater in Pasadena. Twice that evening an overflow crowd of 200 people was thoroughly entertained not only by the witty and devastating humor, but by the greater implications of the play as well.

With this play we were exposed to the well-known theory that Stalin was really a kindly old fellow who only did cruel things because he was trapped by circumstances, and was influenced by the presence of the Rasputin-like Beria. This concept was carefully explored in *A Stalin for All Seasons*, where Stalin temporarily flicks in the burdens of his office to go out and help the peasants solve their everyday problems.

The plot? Well, comrade, it's like this. First we meet the hero and heroine, the two young kolkhozniks, Geroy Yustayoff (T. Creswell) and Latrina Dumfuksky (L. Anderson). We discover that Latrina's parents (B.

**REGAL NOTES** 

UNDERSTAND PLAYS, NOVELS AND POEMS

Chansler, H. Poore) are actually evil capitalists who are plotting to sell their daughter to the cruel and ruthless Igor Badanov (C. Russell). The following scene introduces Stalin, a part played merely adequately by one of the play's two authors (L. "Myron" Lichtmann). We see Stalin in his office, surrounded by the incompetent Khrushchev (D. Bruchie), the evil Beria (T. Weaver), and the ever-present spirit of Lenin (M. Roberts). He receives visits from a group of peasants and from the Polish Ambassador (C. Lydick). The Head Peasant, expertly portrayed by Mr. Olshan, and his partner (Mr. Naecker), put on a convincing performance, accompanied by a fine singing number. At the close of the scene, Stalin decides to go out incognito among the peasants. Act II opens with a brilliantly choreographed (by Mr. Olshan and Mr. Hong) adaptation of "When You're a Red," followed by a touching love scene between Geroy and Latrina. Back at the Yustayoff's home, Stalin, cleverly disguised as a Poor-but-Kinkly-Stranger,-Come-to-Partake-of-Their-Simple-Peasant-Hospitality, wins the confidence of Lyubov Yustayoff, who asks him to have a talk with Geroy. This he does, and comes

up with a plan to trap the bad guys with some tempting black market wheat. The trap is successful, and Stalin, now exposed as such, sends for the Red Army to take the Evil Three away. The play ends with a moving rendition of "Vladivostok," sung by the entire cast.

The message in *A Stalin for All Seasons* is sharp, for in it we clearly see the fate of those who are evil and greedy. Of course sometimes this is also the fate of those who are kind and generous, but this is just a correctable accident of the system. We also see, in Stalin's dilemma, the dangers of a power run rampant. Not only was this a Stalin for all seasons, but for all time as well.

Also on the bill were The Ural Mountain Boys, and Gen. H.S.T. Ierley. Ierley's material was of the same wretched quality as usual, including the infamous "turtle joke" (that's J-E-N-K -I-N-S). However, his delivery and his confidence in his material almost made up for the fact that most of us had heard these jokes on the streets in our pre-speaking vears. The Ural Mountain Boys, organized just for this occasion, played some fine old Russian country music ("Folsom Prison Blues," "Cripple Creek," "Old Plank Road," to name a few). This versatile group came prepared with two excellent banjo players, a fiddler, two guitarists, a jew's harpist, a tambourine player, and its leader, Johnny Cashinsky, who is probably the only member of the group, with the exception of Cat Olshansky, with no musical ability whatsoever.

Despite its overwhelming success, the show closed after the second performance Saturday night. For TV rights to the script, one may contact the Fleming House People's Commissariat of the Performing Arts.

-Rob Olshan





**Page Four** 

# ''Kiss Me Kate'' To Be This Year's **Musical;** Auditions In January

#### by Dave Peisner

Two years ago, a group of students banded together to produce a musical. Most people, including the director of the Glee Club, said it couldn't be done, but HMS Pinafore became a reality. Last year, the same group produced Pirates of Penzance.

Most of the group are now juniors or seniors. With two successful productions behind



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them, they have decided to go all out this year with Cole Porter's Kiss Me Kate.

Tentative plans call for two performances in Ramo Auditorium on Friday and Saturday, April 19 and 20.

At a meeting Tuesday night, producer Greg Simay announced that the stage director will be Shirley Marneus and the orchestra director will be John Gustafson. The position of choral director is still open. If anyone is interested, contact Greg in 210 Ruddock as soon as possible.

Auditions for cast and orchestra will be held January 20-26.

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