

Which picture in this paper looks most like Andre?
Hint: Its on page 12

THE CALIFORNIA TECH

Bob, Flees, and Stipe, your toast Sunday. Club Homeboy's gonna be there and we aint takin' no prisoners.

Volume XCI, Number 25

Pasadena, California

May 4, 1990

Biology Prof Demands Tenure

by Ali Mortazavi

In an effort to change the denial of tenure to biology assistant professor Mark Tanouye, members of the local Asian community held a demonstration last Friday afternoon in front of Parsons-Gates. They issued charges of racial discrimination in the Institute's tenure-granting process.

These controversies center around Dr. Tanouye's record, on which opinions vary. A neurobiologist by trade, he has spent the last seven years at Caltech studying the molecular biology of the nervous system. Some other universities have offered him tenured positions, according to Dr. Tanouye.

Tanouye and his proponents have claimed that there was a racist bias to the entire secretive process. In order to be granted tenure, an aspirant (at Caltech, this is always an assistant professor) is traditionally given up to six years to produce research that is of similar caliber to that of the rest of his (or her) division's faculty. At some point, the faculty will decide in a

meeting whether or not to endorse him. If he is endorsed, the decision goes to an institute-wide faculty committee which decides whether or not to grant tenure.

In practice, these requirements tend to be adjoined with a few restrictions. In particular, the aspirant has to be endorsed by most of the members of the division in order to be granted tenure by the administration. In Tanouye's case, several biology faculty members openly opposed his tenure. Although he did ultimately get the official support of the division, his case was de-facto doomed.

As explained carefully by Vice-Provost David Goodstein (the administration is unwilling to discuss the particulars of the case due to Dr. Tanouye's threat of suing Caltech in the courts), the Institute is a small school that could not afford having deadwood (the common locution for a professor who is doing sub-standard work, if any) the way some big state schools can; Caltech can therefore not afford to take any risk. If it turns out that Dr.

Tanouye is worthy of the many praises sung by his supporters, then he will be one of the few to have fallen through the cracks of the system here.

What infuriates Tanouye's proponents is that, according to them, some biology faculty members that have been granted tenure may not be as academically productive and worthy as he is.

The protesters demanded justice, "not only for Dr. Tanouye, but for all who follow as well. Changes must be made so that this type of injustice does not occur again and again."

In any case, Dr. Tanouye is planning to sue Caltech on grounds of discrimination. Although the institute has come close to this point several - rarely mentioned - times, it does seem that this matter will go to court. However this is not an isolated case; similar cases have been taking place all over the country. Caltech therefore has the (un-sought) distinction of joining other prestigious universities in the club of the court-arbitrated tenure.



Joe Fierro has graduated, so you could be the lucky person to be next to Gary in this year's tug-of-war at Sports Day.

Sports Day for Everyone

By Mac E. Thion

This Sunday, May 6th is Sports Day. From 12 noon to 5 p.m. at the gym, on the athletic fields, in the pool, and on the tennis courts, a variety of sporting events will take place, ranging from soccer to tennis to water polo to the polyathlon, which involves pie eating, a 3-legged race, and inner tubing.

Starting at noon, there will be a buffet lunch featuring picnic-type foods. Also featured will be musical entertainment from Caltech's Jazz Band. Even if you aren't interested in the sports, you're urged to come for the food and music.

The only competitive portion of the day's events will be the triathlon, which starts with a twelve mile bicycle leg through San Marino, then has a three mile run on the

track, and will conclude with a 20 lap swim in the pool. This grueling event will start at 1 PM and is expected to take about an hour. As an added bonus, Craig Reynolds, assistant trainer here and professional triathlete will be entering.

The whole point of Sports Day is for people to get involved and to have fun. If you've never tried a sport before or haven't played in a long time, then this is your big chance to do so. All you have to do is show up during the period for that sport. If you don't feel athletically inclined on Sunday afternoon, then take a break, go eat some food and listen to the music for a while.

There's no need to sign up for the activities on Sports Day. Just show up!

FIELD EVENTS

Soccer	Noon-2:30
Softball	2:00-5:00
Challenge sttbl.	2:30
Ultimate Frisbee	2:30-5:00
Triathlon (run, bike, swim)	1:00-2:30
Tug-of-War	3:30
Polyathlon (pie-eating, 3-legged race, inner tubing)	3:00

GYM EVENTS

Basketball	2:30-5:00
Volleyball	12:00-2:30

MISC EVENTS

Water Polo	1:00-3:00
Tennis	2:00-5:00



Photo by Craig Caine

No, this isn't a rally at Berkeley. Protesters want tenure granted to Dr. Tanouye. They claim there is racial discrimination in the Institute's tenure granting process.

CRIME AND INCIDENT BEAT

CRIME TIP: In the 4/27, 2:30 p.m. incident near Church, the man who accosted the Caltech student was described as a white male wearing a white shirt and dark trousers, in his 30's, 5'10" tall, weighing about 165 lbs., having red hair and unshaven. If you see or have seen anyone fitting this description call security immediately.

4/23 The mouse from a Macintosh set up in Jorgensen for promotional purposes was reported stolen.

4/26 A staff member locked his bike on the north side of South Mudd. When he returned, he found that the bike's utility bag had been stolen.

4/27 The gym supervisor reported that a grad student refused to leave the climbing room after midnight when the gym was closed. However, the student apologized for the inconvenience and left.

4/27 At 2:10 PM, a non-Caltech person had a fainting spell while attending a protest march at Parsons-Gates. Paramedics arrived at the scene, but they did not transport her and advised her to seek medical help.

4/27 A student's car parked in the Lura parking lot was broken in to. The passenger side door lock had been pulled out and the car's stereo and a tool kit were missing.

4/27 A student reported that on 4/17, when she was walking towards Church Lab, a suspect told her that she had bad elbows. On 4/27, at about 2:30 p.m., the victim encountered this suspect again, near Dabney Hall. As she walked towards Church, he told her that "since they'd discussed her elbows last time, he wanted to know what part of her anatomy they should discuss presently." The victim became uneasy and believed that the suspect had sexual activity in mind. The victim related these incidents to a friend, who advised her to call security immediately.

4/28 At 11:40 p.m., a student reported that a man approached him, saying that he had seen a screaming woman running from a man, perhaps inside of Church Lab. The student and man tried to enter Church Lab, but had no luck. A search of the area by security revealed nothing.

4/29 A suspect reported a possible book thief walking on San Pasqual. Security found the suspect, but the books she was carrying were not the type used at Caltech. The suspect was informed that she was trespassing on private property.

4/29 A man working at Nakand Check Cashing service called security to report a suspicious person trying to cash a Caltech payroll check made out to a faculty member. The suspect did not have any ID. A call to that faculty member confirmed that his paycheck had in fact been stolen. (His office had been left unlocked and unattended several times.)

4/30 At 3:50 p.m. a security officer found a man stumbling near Sloan. He said that he had to pick up his son at Polytechnic school. The officer escorted the man to the school where family members were waiting for him.

4/30 A Caltech security officer noticed that his truck had been broken in to. The truck's stereo amplifier, his ATM card and some cash had been stolen.

4/30 A staff member whose office is in Noyes left work on 4/26 and locked his office. When he returned on 4/30, he found that his camera was missing. However, the office is shared with other staff members.

4/30 A faculty member reported that a clock radio was stolen from her office between 4/24 and 4/30.

5/1 Officers responded to a fire alarm call in Page House. Two smoke bombs caused thick smoke to form in a first floor hallway. Total dollar value stolen this week: \$2723.

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Netters Winners

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letters

Reply to UASH

To the Editors:

I read with interest Dave Jeitner's letter last week, which referred to my "ludicrous" complaints about UASH, which "stemmed from misinformation." To clear up a few things for Mr. Jeitner, let me inform him that no, I do not tell Ms. Lindelef what to write or do. She actually has opinions of her own. Perhaps he is used to dictating to the girls he knows what their opinions are; that is a skill I do not, personally, wish to master. Let me also say that the discerning reader can find differences between her letters and mine. For example, I misspell certain words. I also tend to be less tactful.

Mr. Jeitner encourages everyone to read pp. 67-68 of the Catalog for the "standards which govern the actions of UASH." Go ahead, everyone—read it. It's a description of when you need to go before UASH. It doesn't say when UASH meets. It doesn't say what criteria UASH uses to decide cases. For all we know, they could be coin-tossing, and that would fit perfectly with the non-existent catalog description of their "standards." For an added thrill, look up "UASH" in the index. It's not even there. Or look at the Academic Calendar in the front. Hmm—it says when UASH meets! The first day of each term, and two more times during June. It makes no mention of any UASH meetings in the middle of a term. (Ask someone on UASH to explain the differences between these meetings and the others.) And what effort has been made to inform students *currently on leave* that they even exist? If the best Mr. Jeitner can do in defending UASH is refer us to the Caltech Catalog, then we're in more trouble than I thought.

I will make a deal with Mr. Jeitner. I will eagerly profess that most of UASH's cases are well-handled, if he agrees that some of them aren't. I will defend UASH as one of the best institutions of its kind anywhere, if he admits that it could stand some improvements. I will agree that many of the "rumors" about UASH probably aren't true, if he agrees that their persistence indicates a certain mistrust of UASH which should be addressed.



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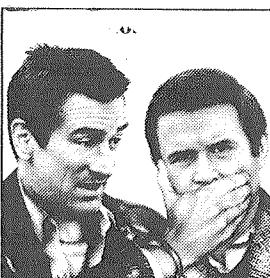
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\$1.50 for others

Next Week:
Say Anything

★ ★ ★ ★ ★	I would like to thank everybody who turned in a review of a class for the CLUE. Over two-thirds of the classes were reviewed, however, many were not. If you would like to write a review of one of the following classes then send it to Scott Kister 41-58	EE 90 EE 114 PS 101 PS 12 SS 201 ME 19b CS 52 Ch 3a AN 22 CS 181 EE 32b Ph 125b Bi 8 Ph 3 L 103b Hum 140a CS 140a Ph 98b Lit 180 sec 4 Aph 131
★ ★ ★ ★ ★	The second term classes not reviewed are in no particular order	
★	Lit 108b Hum 8a sec 1 PS 120 Pl 150 ME 22b Bem 100b Lit 160A Ec 134 EE 91b Ec 121a H 158 Ge 5 H 161 Lit 114b CS 174b L 141b PA 60b Sec 1,2 PA 40b	
★		
★ ★ ★ ★ ★		

ASCIT MINUTES

Present: The ASCIT BOD, Sonny Arcilla, Dwight Berg, Ajay Chheda, Gary Eastvedt, Matt Fields, Mark Huie, Amit Lal, Mike Nassir, Eric Stout, and Emily Wen.

May 1, 1990 10:30 p.m. MOSH's

Parties: There is an GSC/ASCIT dance on May 25 in Dabney Gardens. Bill: "GSC/ASCIT Dance? Grad students suck. Make it the ASCIT/GSC Dance." Aimee is giving \$400 to Rob Welstand for the Tanning Invitational. If you are attending the ASCIT Formal, you should be receiving information in the mail. If not, contact Aimee Smith for info.

International Day: Amit Lal asks for \$1000 from ASCIT for International Day. The BOD feels that giving \$200 to each club for food sample creation is excessive. Dave: "\$200 is a lot of dim sum." The BOD recommended that less money be given to individual clubs, and approved (7-0-0) giving Amit \$500 for International Day. The funding will come out of the ASCIT Social Budget.

Club Stuff: Sonny Arcilla brings up the idea of an Interclub Council. The purpose of this council would be threefold. First, the council would assess the validity of the club, and recognize clubs as official ASCIT clubs. Second, the council would provide club contacts and club mailboxes for all official ASCIT clubs. Third, the council will provide information to clubs on various sources of funding on campus, since there are a lot of organizations willing to provide funding for clubs, but they don't get approached. Most BOD members are receptive to the idea, looking for either the SAC coordinator or the *little t* editor to play a key role in the organization. A concern is that it is unnecessary bureaucracy. Mark Huie: "Only needs one member to do the work." Sonny says the council needs to purchase a mechanical folder to fold papers. Dave: "I saw a folder in the registrar's office. It blew my mind." The Interclub Council needs it own

Ch 6a PA 31b PA 33b Sec 1 PS 122 Lit 150b Psy 12 Mu 35 Hum 8a sec 1 Lit 103a EE 117a EE 78b Ch 5b Ph 118a Ec 126 Hum 11b L 102b Hum 7a PA 60b sec 3 ChE 63b CS 11	EE 90 EE 114 PS 101 PS 12 SS 201 ME 19b CS 52 Ch 3a AN 22 CS 181 EE 32b Ph 125b Bi 8 Ph 3 L 103b Hum 140a CS 140a Ph 98b Lit 180 sec 4 Aph 131
★ ★ ★ ★ ★	
★ ★ ★ ★ ★	
★ ★ ★ ★ ★	
★ ★ ★ ★ ★	

bylaws, so Sonny will write up some and propose them at a future meeting.

ASCIT Teaching Awards: The BOD has received about ten nominations. Keep sending them in and come to the meeting (TBA) where final discussions will be held to lobby for your favorite prof or TA.

ASCIT Copier: Milly wants to keep fixing the copier. About copy cards from Milly, take them to Millikan and get \$2 free on your next card. Bill hasn't charged Millikan yet, because he doesn't understand the procedure and Rich Reid was afraid using the card would wipe out the memory so he never used it.

California Tech Editor Salary: Scott makes a short presentation on the proposed editor salary: \$120 for editors per issue with a bonus of \$15 for every additional four pages. Support Fund of \$25 per issue to be distributed among writers and photographers, with none going to the editors. Sonny has second thoughts about this compensation schedule. Discussion ensues. Bill says "disregardless" about five times. Eric Stout and Jason MacLeod start insulting Sonny incessantly. Sonny mumbles something about smashing Stout's head in. Fed up with it all, Sonny says he will be satisfied with this compensation schedule. Is this compensation schedule retroactive? Pam will check minutes of the previous BOD to see if they had made a decision. The BOD approves (7-1-0) the compensation schedule as proposed.

Other Stuff: The Board of Control is having an open meeting on Wednesday, May 9 at 9 p.m. in the MOSH's office to discuss various ways of improving the Board's methodology. The Vietnamese Students Association sent a thank note for our funding of the human rights speaker. The next meeting of the ASCIT BOD will be Tuesday, May 8 at 10:30 p.m. in the MOSH's office. Free food, drink, sanitized BOD members and gratuitous Sonny-bashing by Jason and Stout for all in attendance.

If someone sent a review of one of these classes to me already, don't worry I probably have it and didn't cross it off the list.

Finally, I will need third term reviews soon. I will be sending out notices after drop day. Everyone is encouraged to send in reviews.

opinion

Question:

Why does a place like Caltech continue to keep a food service like the one in Chandler? I always thought we (or anyone) deserved better. It has become a campus joke. Mr. Gary Hindoyan and the people who work for him give this campus an unsavory feeling. What does it take to change something that it seems the majority is against.

—anonymous

opinion

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EDITORS

Scott Kister
Lindee Goh
Emily Wen

CRIME BEAT EDITOR

Brian Kurkoski

WRITERS

Chris Campo
Chris Dunn
Laura Hernandez
Chris Ho
Neil Humphrey
Roy Lee
Keith McCormick
Jonathan Melvin
Ali Mortazavi
Asim Mughal
Peggy Olsen

PHOTO EDITOR
Michelle Tseng

PRODUCTION
Nick Smith

BUSINESS MANAGER

Sonny Arcilla

OFFICE MANAGER

Gavin Claypool

ELECTRONIC COPY EDITOR

Asim Mughal

CIRCULATION

Peyjen Wu
Ayman Awad

THE CALIFORNIA TECH

40-58 SAC

California Institute of Technology

Pasadena, California 91125

(818) 356-6154

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Haircutters

Caltech Diversified?

by Jonathan D. Melvin

The second campuswide conference on Diversity at Caltech, held on Friday, April 27, 1990, was characterized by focused discussion and general consensus on action items. Four areas of discussion were introduced by the moderator, Carver Farrow (undergraduate and member of the Y Ex-comm). Panelists spoke briefly, and members of the audience added numerous questions, comments, and suggestions.

Foreign/international student issues were discussed first. Panelists Isaac Wong and Liping Yan (graduate students) and Elaine Lindelef (undergraduate) spoke about the need for incoming international students to receive help with English and cultural adjustment before classes start. International students who take TA jobs also need some help with interacting with students in classes. James Lee's recommendation that Caltech fund a summer English session for international students was advocated. The administration has already enhanced remedial English course offerings during the school year, and may try Lee's suggestion on a trial basis.

More support for club and other social activities was also recommended. Members of the audience pointed out that a lot of the social isolation felt by international students is actually felt by all Caltech students.

Minority, ethnic and cultural issues were discussed next. Panelists Jon Melvin (staff) and Clifton Kiser (undergraduate, Senior Class President) spoke about the experience of minority people at Caltech and in the United States. An example of the adverse minority experience in the United States was described: Afro-Americans have been unfairly targeted in the current "drug war" by both law enforcement and media in spite of their statistically lower use of drugs than whites (details appeared in the *L.A. Times*, front page, April 22, 1990).

Also described was the experience of the well-qualified minority student who is told repeatedly by classmates that he/she was admitted only because of being a member of a minority group. The audience expressed a general awareness of pressures on minority students, and expressed support for recruiting a critical mass of minority students and faculty in order to make Caltech a more desirable place for minorities.

Several pitfalls in minority recruiting efforts were mentioned: Many campuses have diluted the recruiting and fund-raising efforts of their allocated personnel by giving these people many other jobs as well (e.g. recruiting women, administrative tasks, etc.). Also, recruiting success or failure for specific under-represented groups can be overlooked when all minorities (and women) are lumped together in statistical summaries.

Caltech's secondary school outreach program was discussed. Several members of the audience urged outreach to students and parents before secondary school: students must focus on a scientific career many years before high school graduation if they are to take enough science and mathematics courses to qualify for admission to Caltech. Several people commented on the present anti-science atmosphere in the United States. For example, at John Muir High School in Pasadena, the number of Chemistry classes has dropped from 20 in 1963 to two at present, and the number of Physics classes has dropped from 18 to zero. Hope was expressed that Lee Browne's

efforts to reach secondary school students will be continued by his successor.

Issues of sexual preference were discussed next. Panelists Annmarie Eldering, Craig Steele and Lucy Regan (graduate students) spoke. They pointed out that homosexuality makes one part of a hidden minority which has both advantages and disadvantages. There is much fear that revealing homosexuality will cause others to avoid social contact or advisors and supervisors to act in a prejudicial fashion. Concern was expressed that the administration has not added the words "sexual preference" to Caltech's non-discrimination policy statement even after seven years of requests (the Graduate Student Council has added these words). Evidently, the administration is concerned that adding these words might admit additional lawsuits, and also asserts that there is no reason to add them because there is no prejudice. The consensus was that the administration should take a strong stand against any discrimination based on sexual preference including the symbolic action of adding these words.

Some students described reaction to announcements of CLAGS (Caltech Lesbian and Gay Society) meetings—there has been some defacing of posters—as concrete evidence of anti-homosexual feeling on campus.

The final topic was affirmative action and gender issues. Panelists Don Archer (Director of Personnel), Gwendolyn Lytle (Director of Employment) and Jon Melvin spoke.

Minorities are well represented in staff hiring, but not in faculty hiring (which is not under the jurisdiction of the Employment Office). No one knew of any effective efforts at Caltech in the faculty recruiting area. Retention of minority staff holding technical jobs has been a problem.

Student recruitment of minorities has improved greatly after admissions was shifted from faculty committees to a professional admissions staff. However, prospective minority students looking at Caltech are often dissuaded by the absence of other students and faculty in their ethnic or racial group. Also, financial considerations are often important. The admissions office tries hard to apply rules for financial aid flexibly so as

to take into account special needs of minority families. There has been much success with this policy. Nevertheless, it may not be possible to attract many good minority candidates from inner cities unless funds are available to provide them with full tuition and living expense support. Special funds for this purpose exist at other universities.

The invalidity of comparing abilities of male, female, and other groups of student applicants on the basis of SAT test scores was discussed: The SAT tests were deliberately altered in 1974 to ensure that women did not get higher grades than men.

Numbers of Caltech students belonging to underrepresented minorities were compared with the numbers of these groups in the U.S. and world population



A group of Caltech SURFers visited General Motors research facility in Detroit Michigan. From left to right are Ari Kaplan, Dr. Terri Cole, Joe Bauch, and Asim Mughal.

SURFers Return from Conference

by Asim Mughal

The Caltech SURF group returned from Schenectady, NY after attending NCUR-90 (National Conference on Undergraduate Research) at Union College. The conference was from April 19 to April 21. All three days were very hectic with everyone trying to decide which talk to go to and which one to skip. They chose from over 800 talks and poster presentations scheduled.

The SURFers had a unique opportunity of not only attending NCUR-90 but also of visiting research labs of General Motors,

Ford, Xerox, Abbot Labs and Amoco. The presentations they gave at those places convinced them of the high quality research being under SURF program. Prior to the conference Terri Cole's group spent a day in Detroit, MI visiting General Motors and Ford. Being at that group, I was amazed at the research being done by those companies. My image of those companies as "assembly plants" changed all together. There is a lot more than just putting the parts together! Not to forget, we had a sneak preview of new model of "scorpio". Actually, we peeked into one of the open door and saw it undergoing tests. Believe me, it is beautiful!

Coming back to the conference, I found myself mostly listening to the talks from other disciplines. "The best thing about the conference was the broad spectrum of sciences it covered, not only math and engineering but social science, performing arts, music etc" as Carolyn Merkel, director of SURF program at Caltech puts it. Most of those research projects were done on individual level, funded by their local depts. It that respect Caltech is very much organized with its SURF program.

Apart from the academic environment, there was entertainment and social activities for the attendees. Even a sober person would end up making tens of friends with

similar interests. A quick cross-section of the students showed that most of them were seniors and uncertain of their future plans. Most of them were hopeful!

When asked about how the Caltech SURFers did at the conference, the comments were "Did a superb job... we were prepared! it showed!" by Joan Spears of SURF office. "Splendid... outstanding... far ahead fo others" as Carolyn Merkel puts it. I would definitely agree with it. Looking from a neutral observers point of view, some of the research work presented there from other schools didn't have that much depth. Those talks looked like "here is the reading/data" with no hypothesis. When asked questions, the person was dumbfounded. This is not the way the research is to be handled. In discussing it with the SURF office, I was told that the only means of judging for entry into the conference was by the abstract of the project.

It is not possible to weed out all of those "high-school level" projects. SURF office intends to scrutinize the projects more carefully when next year the conference NCUR-91 is held at Caltech, emphasized Joan Spears. Carolyn Merkel expects about 1,000 undergrads for the next year.

NCUR-91 will be held from March 21st to the 23rd during Spring Break! See you there!

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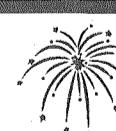
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Starts May 11:

Too Beautiful for You

Environmental News

by Linda Salzhauer
(in conjunction with the CETF)

Every year, Americans throw away enough office and writing paper to build a wall 12 feet high, stretching from Los Angeles to New York City. (from 50 Simple Things You Can Do to Save the Earth)

At last weekend's Earth Day activities, the Caltech Environmental Task Force focused on recycling issues. Many questions were asked about our white paper recycling effort, so we have decided to compile some information about the program as it stands at Caltech.

First, some facts:

- Almost 25 million sheets (about 50 thousand reams) of non-recycled white 8½ x 11 inch paper were bought by the Graphic Arts Facilities in 1989 (GAF buys for most of the campus). They also bought over one million sheets of 8½ x 11 inch paper with three-hole punch, 365,000 business envelopes, and over one-third of a million sheets of 8½ x 14 inch white paper.

- High-quality white 8½ x 11 inch paper made from 50% recycled fibers is available. If the GAF had bought this paper instead of paper made from all new fibers, they would have saved:

-212 trees

- over 50,000 kWh energy (enough to power the average home for over six years or to power Caltech for about eight hours!)

- The Caltech community currently recycles 1500 pounds of white paper per month (but the Graphic Arts Facilities alone buy over 4500 pounds of recyclable paper every month. 80% of office waste (i.e. daytime waste at Caltech) is composed of white paper.

It is important to note that advances are being made on campus. We have what most would consider

a "successful" white paper recycling program, run by the GSC. We are recycling 1500 lbs. per month of white paper, and every ton saves more than 3 cubic yards of landfill space.

What you can do:

The Caltech recycling program is a "grass roots" one. If you see the need for white paper recycling in a certain area, place a box there with a label stating what it's for and the guidelines for what can and cannot go in it as expressed by our white paper recycling contractor.

Recycle these:

- White typing paper
- White photocopy paper
- Computer printout paper
- White writing paper
- White scratch paper
- Tabulating cards
- White index cards

When the box becomes full (or when you personally have white paper to recycle), empty it into the large yellow recycling bins (look like yellow garbage containers). These are at the following locations: between North and South Mudd and Robinson, on the walkway between Bridge and Sloan, behind Kellogg and Sloan, at Downs-Lauritsen, between Firestone and Synchrotron, behind Eu-dora Spalding, between Church and Kerckhoff, next to Braun, behind Noyes, at the Beckman Behavioral Biology building, behind Keck, Watson, the EQL, Lloyd House and Blacker House.

The next general meeting of the CETF is on Wednesday, May 9 at 12 noon in Clubroom 1. Please come and bring your lunch.

Help us organize the recycling center Thursdays from 5-7 pm behind Beckman. Refreshments included (of course).

The resource conservation group meets on Sundays at 7 pm in the SAC Coffeehouse.

The Danger of Global Warming

by Chris Dunn

In Wednesday's SEPP Seminar Mordechai Magaritz, Visiting Professor of Geology (Professor of Chemistry at the Weizmann Institute in Rehovoth, Israel) examined the reasoning behind attempts to prevent the Greenhouse Effect. His conclusions, that the onset and extent of the Greenhouse Effect are largely undeterminable but that accumulation of the popularly-termed "Greenhouse gases" is ineluctable, must disillusion both camps in the global warming debate.

No climatologist denies that concentrations of the gases have increased and, if unchecked, will continue to increase, but many question the evidence of effects. The only ways to predict the effects—computer models and past data—are uncertain.

Magaritz compares computer models to fashion models. Both, he

says, are prettier than nature, and both have better fits. One model presented by Magaritz predicted a global average increase in temperature of 0.2 degrees Celsius by the mid 21st century, but he emphasized that the model was only theoretical.

As for past temperatures, he demonstrated that interpretation of global trends over the last hundred years "depends on how you cut the data" by placing his hand over the only portion of the graph with a decidedly positive slope.

Despite the argument over the severity of the problem, the change in sea level over the past century is unambiguous; although the rise may be part of a natural cycle, the sea has risen.

Models show agreement that if warming does occur, the greatest rise in temperature will be in northern regions. This result, said Magaritz, prompted a Russian

scientist to assert in 1984 that warming may not be so pernicious after all: Siberia may become more fertile. Magaritz contributed his own piquant sanguinity, noting that all mass extinctions have redounded with the evolution of more intelligent species.

Based on the conflicting assessments of broader trends, Magaritz agreed with President Bush's appeal last week to resolve the scientific uncertainty before committing to a remedy.

Magaritz's own beliefs are sobering. Regardless of the consequences of mankind's actions, pollution will continue. Conservation could at best delay the earth's transformation. He urged preparation, like the proposed elevation of dams in the Netherlands. With confidence that the answer is obvious, he asked, "Is mankind above nature, or part of nature?"

Supercomputers and Smog

by Peggy Olsen

The Caltech/JPL Supercomputing Project will hold this month's seminar on Wednesday, May 9, 1990 from noon to 1:00 pm in the JPL von Karman Auditorium. The speaker will be Dr. Gregory J. McRae, Departments of Chemical Engineering and Engineering and Public Policy, Carnegie Mellon University (CMU). The title of Dr. McRae's presentation is "Using Supercomputers to Help Solve the Los Angeles Smog Problem."

Dr. McRae's presentation will discuss how supercomputers have been used to develop the technical basis for key revisions to the Clean Air Act and the Los Angeles Air Quality Management Plan. Given that the nation is currently spending more than \$30 billion per year

on air pollution controls, there is an urgent need to identify new control options. A basic premise of this presentation is that computer-based models of the underlying processes provide the only technically defensible way to guide public policy-making. Supercomputers and emerging parallel architectures can provide the vital link in developing cost effective policy options. Dr. McRae's presentation will include computer-generated displays of smog distribution and discuss what can be done to help improve air quality.

McRae joined CMU in 1983 after receiving a PhD in Environmental Engineering and Science from Caltech. A major focus of Professor McRae's research is understanding the scientific aspects of problems involving pollutant transport and transformation in multimedia environments.

Dr. McRae is the recipient of numerous prizes and awards for his research in environmental science including: the prestigious Presidential Young Investigator Award, the George Tallman Ladd Research Prize, an AAAS Environmental Science Fellowship, and the 1989 SIAM Forefronts of Computational Science Award. He is a member of Sigma Xi, the American Chemical Society, and the American Institute of Chemical Engineers. In addition, he is also on the editorial board of the International Journal of Supercomputer Applications. the advisory committee for the Pittsburgh Supercomputing Center, and several government and White House task forces on environmental issues. He has been a visiting scientist at the National Center for Atmospheric Research and the IBM T.J. Watson Research Center.

Peggy Olsen, JPL extension 4-7359.

DUAL-CAREER COUPLES

A panel discussion representing Caltech alumni, graduate students, faculty, and postdoctoral research associates.

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Noland Award Winners

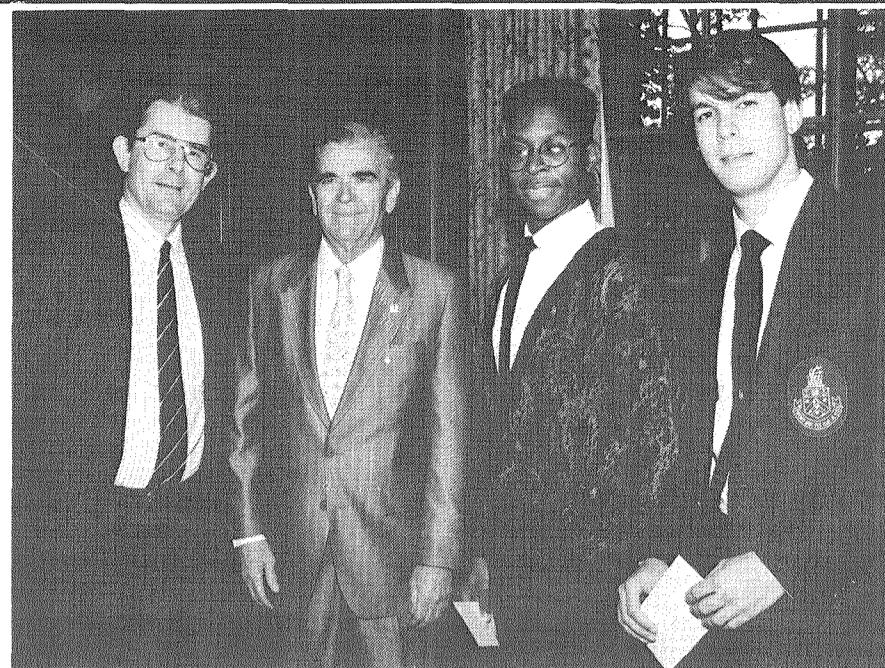
Clifton Kiser and Richard Reid have received the Robert L. Noland Leadership Awards for demonstrating outstanding leadership and assistance to fellow students during their years at Caltech. This award was set up by Ametek in 1978 and carries with it a cash prize of \$2,000.

Cliff Kiser has held a variety of leadership positions on campus at Caltech, including serving as Blacker House President, Junior Class President and Senior Class President. He has taken responsibility for important decisions and has been an excellent negotiator. Cliff is one of Caltech's most energetic students and has often been labeled "the busiest student on

campus."

Rich has served as ASCIT President and President of Ricketts House this year. He has devoted much of his time and energy to improving ASCIT and the services it provides. As President of Ricketts House, Rich demonstrated concern for the well-being of the members and did an excellent job of balancing the needs of the House with those of the broader campus community.

The awards were presented on April 18 at a dinner in The Athenaeum attended by the honorees, Mr. Noland and other representatives from Ametek, and representatives from the Caltech administration.



Chris Brennen, Robert Noland, Cliff Kiser, and Rich Reid attended the Robert Noland Leadership award presentation at the Athenaeum.

Tech Meeting

Today at 12:15 in Clubroom 1 on the second floor of Winnet. Current advertising representatives and anyone who is interested in being an Ad Rep is asked to show up.

There will be free pizza and soft drink for people interested in writing for the *Tech*.

Book Review

by Nick Smith

What do you do if your entire acting career is built almost entirely on two roles? Especially if one is a cop and the other is a starship commander. Well, William Shatner has tried directing (not very well) and has turned to writing.

TekWar, which is still only available in hardbound but will be coming out in paperback later this year, is an odd mixture of genres. The literary device that permits the explanation of the future's oddities is the fact that the main character has just spent four years on ice. Literally. Framed for a crime he says he didn't commit (nobody but his ex-partner believes him), Jake Cardigan is an ex-cop convicted as a drug dealer, and sentenced to fifteen years in suspended animation. His ex-partner pulls strings and gets him out after only four years, paroled to work as a private investigator on a big case.

Shatner tries to create an atmosphere reminiscent of Raymond Chandler detective novels, even setting part of the action in Pasadena, and involving a professor at "SoCalTech". True to the genre, there are no real good guys, the world is a grey and depressing place, and only a tough private eye can save things. He seems to have used devices from several sources, including *Bladerunner* and various

Cyberpunk novels, as inspiration for the basic plot, involving an insidious electronic "drug" called Tek. It is a small, portable device designed to electrically stimulate the memory and pleasure centers of the brain, creating synthetic "good times". By the year 2120, an estimated 18% of the population use illegal forms of sensory/neural stimulation. Just one catch—it's addictive... The problem, of course, centers around the enormous profits for the Tek suppliers. The plot involves kamikaze androids, civil wars in Mexico, and other things too complex to summarize.

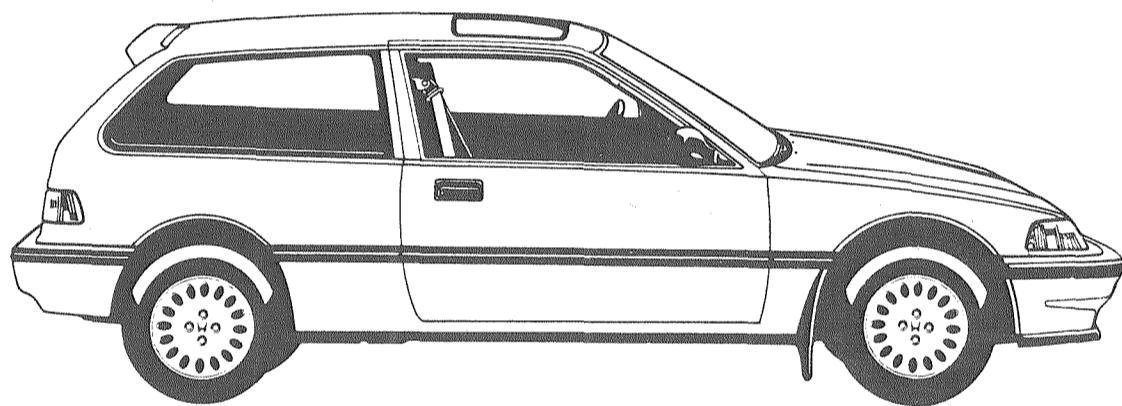
Is it good? Well, sort of. For a first novel, it's not bad, but I would wait for the paperback edition to buy it. It does indicate that William Shatner just might have another career in him, if both Captain Kirk and T.J. Hooker ever admit to reaching retirement age.

Scary note: our glorious FDA has approved, for "medical" use, of course, a small, portable device to create direct electrical stimulation of the brain to produce endorphins. The current version has tremendous potential as a painkilling device for people with chronic problems. It is also remarkably open to abuse, since it produces the end products of drug use without all those messy chemicals. Coming soon to a street corner near you...

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The Inside World

This Week's *Inside World* was written by:
Blacker: Dan Ruzek
Dabney: Robert Hanna
Ricketts: Joe Dadek, Steve Sobelman and Mike Meckler

Blacker	25	18	1	0	5	0	2	8
Dabney	38	18	2	0	1	1	1	5
Fleming	20	18	0	0	3	0	3	
Lloyd	27	13	0	0	3	5	0	8
Page	15	18	1	0	4	0	5	
Ruddock	33	12	0	0	4	0	4	
Ricketts	23	25	3	2	2	2	3	12

Ricketts

[Sappy theme music plays as the viewer looks upon a small theatre. Only the two aisle seats are occupied. As the camera zooms closer, the two occupants turn around and face the viewer.]

Guru: Hi. I'm Physics Guru, social commentator for the Pasadena Sun-Times. **Cap'n:** And I'm Captain Kishka, social commentator for the Pasadena Tribune. **Guru:** Today, we'll be reviewing PCDE and the events of this week that "Pre-CDE'd" it.

[Cut to front of theatre. Guru and Cap'n settle down in their seats, facing each other.]

Guru: Shall we begin with the first event?

Cap'n: That would be brakdrum ringing in Lloyd, Guru. Let's take a peek. [Fade to black. Fade in to Lloyd courtyard. Several freshman stroll in, looking furtive.]

Brakdrum: DING! DING! DING! DING! DING!

[The fresh look around for any sign of activity. Seconds pass]

Brakdrum: DING! DING! DING! DING!

[Still no signs of life.]

Brakdrum: DING! DING! DING! DING!

[The fresh ringing the brakdrum begins to tire. Fade out.]

Cap'n: A valiant attempt on the part of the frosh to elicit a response from the Lloydies. I'm afraid, however, that it wasn't a valid ringing because it wasn't heard in any alleles of Ricketts. All in all, I can't recommend this social event, because it was exceedingly lame!

Guru: Yes, "lame" is certainly the word to use here. In fact, I say that "lame" was the theme of PCDE this year. Taking its cue from last year, this year's PCDE sank to new depths of lameness.

Cap'n: I don't think we should dwell on the lame bit right now. Let's move on to the next event.

Guru: Ah, yes, the Carolling in Dabney. Clearly the high point of the week. **Cap'n:** No, I don't think so.

Guru: Oh, what do you think?

Cap'n: Well, I guess it was slightly better than Picnicking in Fleming, which I enjoyed. But we're getting ahead of ourselves. Let's take a look at Carolling in Dabney.

[Fade to Dabney Courtyard. A death-like silence hangs, palpable, in the air. Then, faintly at first, snatches of song can be heard. Soon, the carollers can be seen.]

Singers: F-*BLEEP*-*BLEEP*-*BLEEP*-Y-O-U /

That's the way we spell *BLEEP* You! /

Raw, raw, our *BLEEP*s are the *BLEEP*est /

Lie right down and *BLEEP* your *BLEEP*s /

And we'll *BLEEP* your *BLEEP*s

[Fade out]

Guru: The best part of this event was when several Darbs came out and joined us in the festivities. The support of our friends in Dabney house was much appreciated.

Cap'n: I enjoyed the singing at this event as well. It's much more fun when you're drunk, though. Still, I would recommend it. Next, we measured Ruddock's windows. This is an event with a long tradition, going back to a time when a Scurve was thrown out of one of Ruddock's windows. Let's take a look at this historic event, captured on film by a bystander.

[Scene of outside Ruddock. Suddenly a body comes hurtling through the darkness.]

Body: AAARRGGH! Ouch!

[Fade out]

Cap'n: Although this year's festivities weren't quite that interesting, they were still eventful. The windows were measured in many different units of length, including "Dick Greysons." It was short, but fun.

Guru: [looks agitated] I completely disagree. Though many measurements were taken, the Rudds just sat there, staring at us. They even continued a pool game. They didn't even throw rolls at us! The only response was on the part

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of a waiter, who gave us another object to measure with. The only word for this is lame.

Cap'n: I can see your point, but still you must admit that the event succeeded on an entertainment level, even if it didn't succeed on an artistic level.

Guru: When we return, we'll have a review of the remaining pre-CDE activities, and, of course, the main event.

Cut to a barren landscape. Two figures are seen far in the distance. Slowly at first, the camera zooms closer, closer, closer. One of the figures appears to be a seven-foot carrot, topped by a flame. The other is very hard to describe. So I won't. But he does look pretty odd.]

Other: Dave Lomax says Steve Farris would have said Flaming Carrot would have said, "UT!"

[Cut back to the theatre.]

Cap'n: Next up is one of my favorites, Whack-a-Mole!

Fade to Hell. Suddenly, a gang of Scurves burst into the alley, running around with rolled-up newspapers in their hands. The hypertense revelers look about the empty alley for signs of life. Suddenly an unsuspecting mole walks around the corner.]

Scurve 1: Look! A Mole!

All: A Mole! A Mole!

All converge as the mole is buried under a pile of frenzied scurves.]

All: whack whack whack whack

Mole: ...ding?

[Cut back to the theatre]

Guru: This event was truly lame. Only one mole of the whole group actually said "DING," and he had to be prompted. Most of them weren't even in their house.

Cap'n: Yes, the moles were lame. But the scurves were lame, too. They went off to whack moles at the ridiculously early hour of ten o'clock! This brings us to our next event, Picketing in Page. The Scurves, convinced that the Page boys were responsible for the defeat of the banana amendment, scurried off to Page house to let the Page Boys know how they felt about this miscarriage of justice.

Guru: [holding a pamphlet] This event was lame. The concept was lame, the execution was lame, it was lame altogether. I certainly support the intent, [he glances down at the paper, then shakes his head] but I think it could have been better accomplished.

Cap'n: I have to agree with you. Previous Page Pre-CDE events have been much more enjoyable, such as the Page Condimint Distribution Event. I can't recommend this one, but perhaps future sequels will be better.

Guru: Now we have your favorite event, the Picnic in Fleming.

Cut to a scene in Fleming courtyard. Several Scurves are innocently enjoying box lunches. Two Flem enter, bringing a hose.]

Flem 1: Let's hose down them Scurves!

Flem 2: Yeah! Ha Ha, you Scurves, you're gonna get it for eating lunch here in our courtyard.

Bill Swanson [sitting with Scurves, to Flem]: Yo! Mellow Out!

Flem RA [to Flem]: Sever the feces!

[Flem departs. Cut to theatre]

Cap'n: Aphid aside, I'd say this was an excellent cap to the Pre-CDE activities. The lunches were actually quite tasty, and the sunny weather was a good change.

Guru: I'll certainly agree that this was a fine event. But I still think that Caroling in Dabney was the most fun of the events.

Cap'n: You're certainly entitled to your opinion, but I preferred the picnic to the carols. We'll be back after this with a review of the main event.

Cut to a scene in the dormitory. A scurve is sitting on a bed, holding a book. Another scurve is sitting on the floor, holding a book. They are both looking at the book. A third scurve is sitting on the floor, holding a book. They are all looking at the book. A fourth scurve is sitting on the floor, holding a book. They are all looking at the book. A fifth scurve is sitting on the floor, holding a book. They are all looking at the book. A sixth scurve is sitting on the floor, holding a book. They are all looking at the book. A seventh scurve is sitting on the floor, holding a book. They are all looking at the book. A eighth scurve is sitting on the floor, holding a book. They are all looking at the book. A ninth scurve is sitting on the floor, holding a book. They are all looking at the book. A tenth scurve is sitting on the floor, holding a book. They are all looking at the book. A eleventh scurve is sitting on the floor, holding a book. They are all looking at the book. 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what goes on

Submit announcements for What Goes On on forms available outside the Tech office (SAC room 40A) and in the copy/mail room (SAC room 37), or use a plain piece of paper. Send announcements to 40-58, or put them in the IN box outside the Tech office. Indicate the date(s) the announcement must run. Announcements for the current issue *must* be received by 5 pm Tuesday and should be shorter than 75 words. Announcements will be published as space becomes available and will be chosen according to size and interest to the Caltech community. Announcements for commercial events unrelated to Caltech will not be published.

Play Bridge

Play bridge at the Caltech Bridge Club this Monday. We meet every Monday at 7:15 pm at the Red Door Cafe in Chandler Dining Hall. No card fee, no membership fee, no partner needed. Undergrads, grads, faculty, etc. welcome.

Gay/Lesbian Discussion Group

On the 1st and 3rd Tuesdays of each month, all students, staff and faculty are invited to an ongoing discussion of Lesbian/Gay topics, from 7:30 to 9:00 pm. After the talk, time is devoted to informal talking, with refreshments provided. This confidential meeting is held in the Health Center Conference Room; call x8331 for further information.

Free Money

In its annual display of generosity, the Caltech Student Investment Fund will be giving over \$4,000 to Caltech clubs and organizations. Money is for capital improvements only. Please submit one page proposals to: SIF Disbursements, 142-58. For more info, call 568-9855. Proposals must be RECEIVED no later than 5:00 May 17.

Fishing For Ideas

The Fishline, a newsletter serving all Christians of the Caltech community, needs material! If you have any ideas, upcoming events, or articles that you would like to share, please submit them (Mac format, if possible) to The Fishline, 126-58. Also welcome are announcements by neighborhood churches, Christian groups and clubs, as well as mailing list additions. Contact Mike Nassir (578-9833) for more information.

Badminton, Anyone?

Badminton is played on Mondays and Fridays in the gym, from 9 am until 11 am. Intermediate players (faculty, staff and students welcome). For information, please call Cherrie Leighton, x4915, Division of Biology.

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SSSSP Tutors Needed!

The Summer Secondary School Science Program will be needing tutors from June 25th through August 9, 1990. The hours are from 9 am to 3:30 pm, Monday through Thursday. Needed are: 4 tutors teaching molecular biology, and 4 teaching chemistry. First preference is seniors, followed by juniors and then sophomores. Applicants may call x6207 or x6208, or visit Lee Browne's office at 107 Winnett Center.

Interested in Sailing?

You too can use the Caltech sailboats. Find out how by joining the Caltech Sailing Club. Contact Axel or Martin at (818) 568-9168. Open to students, faculty and staff.

Don Shepard Essay Contest

The Don Shepard Essay Award contest is open to all freshmen, sophomores, and juniors. Three \$500 prizes will be awarded.

To qualify for one of the prizes you must submit an essay (around 500 words) types, or neatly and legibly written, describing a program for your social and cultural enrichment, whether it by pursuing a new hobby, taking lessons, traveling or sightseeing.

The contest will run until May 14, 1990 and you may bring your essay to the Master's Office until that time. Winners will be announced the week of May 14.

Barbershop Singing

If you enjoy singing harmony, you will love singing with the Barbershoppers. The San Gabriel Chapter of the Society for the Preservation and Encouragement of Barbershop Quartet Singing in America, Inc. meets each Monday at 7:30 pm in the Adult Recreation Center, 324 S. Mission Drive, San Gabriel. For additional information, please call Bob Newton at (818) 446-3424.

Renaissance Pleasure Faire

Tickets are \$10.50 (reg. \$14.50) at the Caltech Y. The Y also has maps for directions. The Faire goes on weekends until June 10, 1990.

Folk Dancing On Campus

The Caltech Folk Dancers invite you to come and join us for folk dancing on Tuesday nights in Dabney Hall Lounge. Dances are taught from 7:30 pm to 9:00 pm, with dancing from 9:00 until 11:30 or midnight. This month's teaching will emphasize Greek dances, with Louise Billmont instructing.

Off-Campus Folkdancing

Join the Pasadena Folkdance Co-op every Friday evening at 7:30 pm at Throop Unitarian Church in Pasadena at the corner of Del Mar and Los Robles. The club offers beginning instruction at 7:45 pm and intermediate at 8:30 pm. Each month the community is invited to participate in line, set and couple dances from all over the world. A \$2.00 contribution is requested of non-members.

Video Artists

Students and professionals are invited to present their work at Pasadena's first annual *Videofair* to be held Saturday, May 19 at Pasadena City College's Forum. All submissions should be broadcast quality and indicate a reasonable command of the medium. Student videos and works-in-progress are also welcome.

Interested parties may obtain information by calling (818) 793-0760. The event is being produced by The Light-Bringer Project, a local non-profit arts corporation.

Arts & Science Fair

Lanae Bach needs Caltech students to help volunteer for the Kids Arts & Science Fair on Saturday, June 9 from 11:00 am to 2:00 pm at Tournament Park. If interested, call her at 792-1513.

Let The Games Begin

Every Friday night, the Caltech Gamers meet to enjoy role-playing and board games. Friday meetings are in Winnett Clubroom 1 at 8:00 pm. Meet others who share your interests. All welcome! Most common Friday games are fantasy role-playing, but it's a good time to find players to share whatever games you like.

Submit To The Totem

An effort is now underway to produce another issue of the *Totem*, the Caltech literary magazine. In the past, the main barrier to publication has been profound apathy (i.e., submissions have been about a tenth that required). This is a plea for all interested students to submit their art, poetry, and short fiction or, at least, to offer suggestions. Please include your name, campus address, and phone number. Submissions to Ben Schaeffer, 1-59, x6173.

Scholarship Listings

The Financial Aid Office has applications and/or information on the following scholarships. All qualified students are encouraged to apply. The office is located at 515 S. Wilson, 2nd floor, phone x6280.

California Council of the Blind is offering a number of awards to applicants who will enter or continue studies at an accredited college or university in either undergraduate or graduate status. Awards will be granted on the basis of academic scholarship and other factors including financial need. Deadline for application, transcripts and records is June 1, 1990.

The American Petroleum Institute will grant scholarships to students with permanent residency in Kern County. Several criteria used are scholastic ability, financial need and level of school and non-school activities. Deadline for a completed application form and up-to-date transcript is May 7, 1990.

The Society of Women Engineers announce their 1990-91 Freshman and Reentry Scholarship Program for all qualified women students who have been accepted into the engineering curriculum. Deadline for applications and supportive materials is May 15, 1990.

The Desk and Derrick Club is offering scholarships to residents of Kern County (but may be attending outside Kern County) pursuing higher education in a petroleum or allied industry-related field. Deadline for submitting an application is August 1, 1990.

Automotive Hall of Fame is offering scholarships for the Outstanding Scholars and Hall of Fame Resume Bank programs and a scholarship from the Hall of Fame's Automotive Educational Fund. Deadline for submitting a complete application is May 31, 1990.

Orville Redenbacher's Second Start Scholarship Program is for students 30 years old or older at the time of application, be enrolled in either an associate, bachelor or graduate degree program at an accredited college or university and can be either full-time or part-time students. Deadline for application is September 1, 1990.

Merit Awards

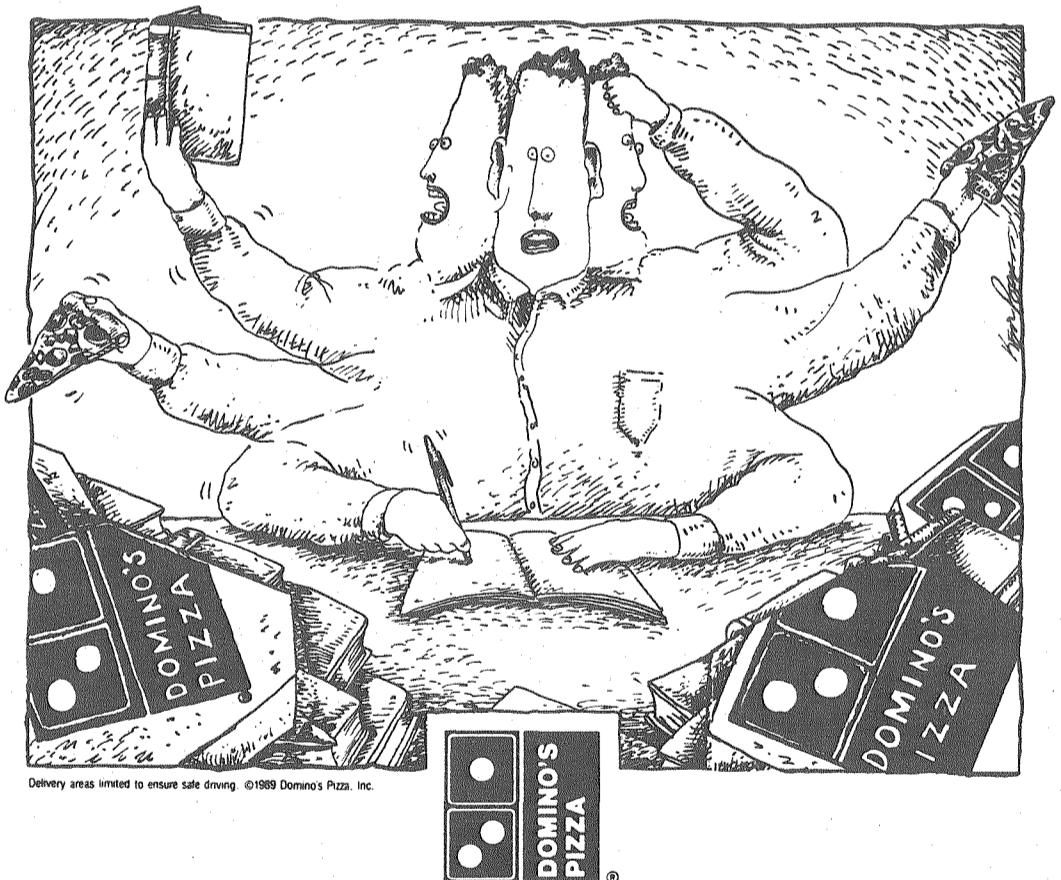
Each year, the Scholarships and Financial Aid Committee awards a number of Merit Awards to the most academically talented of the Institute's sophomores and juniors, and in special circumstances, freshmen. Merit Awards are based on outstanding scholastic achievement as demonstrated by exceptional performance in formal classes and/or in independent research, and not on financial need. Last year, the Committee recommended 32 Merit Awards of full or three-quarters tuition and 18 honorable mention awards of \$3,000 each. The level of awards this year will be determined by the caliber of applicants.

Applications are available in the Financial Aid Office at 515 S. Wilson Ave. The deadline for submitting completed applications to the Financial Aid Office is 5:00 pm today, May 4, 1990.

Ebell of Los Angeles Scholarships

The Ebell of Los Angeles is offering undergraduate scholarships for the 90-91 school year. The amount of the scholarship is \$3,000 per year paid in monthly checks, September through June. In order to apply, students must be U.S. citizens, L.A. county residents, have at least a 3.25 GPA, and be attending an approved college in Los Angeles county. For more specific information on requirements and application materials contact the Financial Aid Office. All applications and materials are due in the Financial Aid Office by 5:00 pm on May 18.

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Universities as Nuclear Powers
On Wednesday, May 9, Professor Karl Hufbauer of U.C. Irving will speak on the subject "Should Universities Operate Weapons Laboratories: the University of California, Livermore and Los Alamos." The talk, part of the "Science, Ethics and Public Policy" series, will be in the Judy Library in Baxter Hall, at 12 noon. Bring your lunch.

Human Genome Talk

Professor James D. Watson, Director of Cold Spring Harbor Laboratory and head of the Human Genome Office, NIH, will speak at 6:30 pm on Wednesday, May 9, on the Human Genome Initiative. The talk,

part of the series on the Human Genome Initiative, will be in Baxter Lecture Hall. Please note special time. There will be a discussion following the talk, which is open to the public.

Unnecessary Violence Night

S.P.E.C.T.R.E. will be having an "Unnecessary Violence" "Full Moon" movie festival on Saturday, May 5. It will be in Rm. 35 of the SAC and will begin at 7:00 pm (note new time and place). First we will throw Mark Looper off Millikan (will he fluoresce?) and then we will watch *Alien*, *Aliens*, and *Predator*. Questions? Call Eric (564-8949) or S.P.E.C.T.R.E. (440-0459). Be seeing you, O my brothers...

Cinco De Mayo

El Centro de Accion Social and the City of Pasadena are sponsoring a Cinco de Mayo celebration at Pasadena's Central Park, 37 E. Del Mar, on May 5 and 6 from 12 noon to 5 pm. There will be performing artists, art exhibitions, entertainment, food, games and rides for the whole family to enjoy.

Bowie Falls To Earth

On Tuesday, May 8 at 7:30 pm, in Rm. 35 of the SAC, S.P.E.C.T.R.E. will begin once again the longer-format business meetings followed by a showing of *The Man Who Fell To Earth*, starring David Bowie. Questions? Call Eric (564-8949). Be seeing you...

Life is a Cabaret!

Sunday, May 20 at 7:30 pm and Saturday, May 26 at 7:30 the musical *Cabaret* will be performed at Keck Theater on the Occidental College campus. Tickets are \$6 (regularly \$10) and available at the Caltech Y.

Environmental Task Force

Wednesday, May 9 from 12 to 1 pm in Clubroom 1, Winnett, the Environmental Task Force will have its monthly meeting. Be there or be recycled!

Folk Concert in Winnett

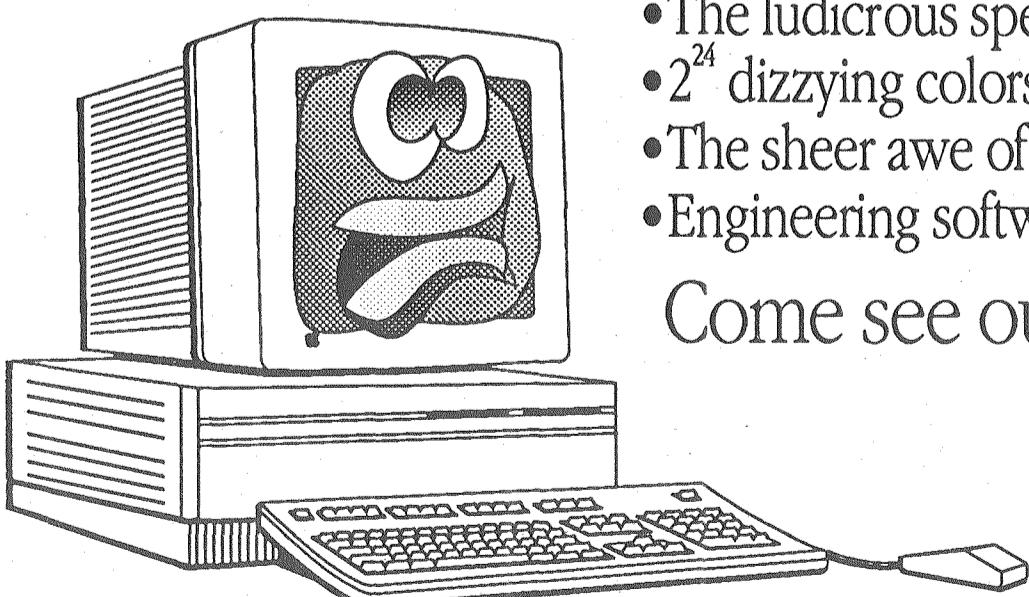
On Saturday, May 5 at 8:00 pm, Canadian singer Margaret Christi will perform, part of the Caltech Folk Music Society concert series. General admission tickets are \$8.00, but Caltech student tickets, in advance or at the door, are only \$4. Call the Caltech Ticket Office for advance reservations or information, 356-4652.

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**Friday, May 4
11 a.m. - 3 p.m.
Winnett Lounge**

sports

First League Victory for Women's Tennis

by Laura Hernandez

In its final league match of the season, the women's tennis team traveled to LaVerne with revenge on their minds. They had lost their home match against LaVerne 5-4 and hadn't won any other league matches all season.

At ten o'clock the six singles matches commenced and two and a half hours later the teams were tied, three-all. Laura Hernandez, playing number one for Caltech, finished her varsity career with a tough three-set victory over Ema Kaiwi, 7-6, 1-6, 6-2. Jennifer "Shades" Low, also in her last match, crushed LaVerne's inconsistent number two, Jamie Hutchinson, 6-4, 6-3.

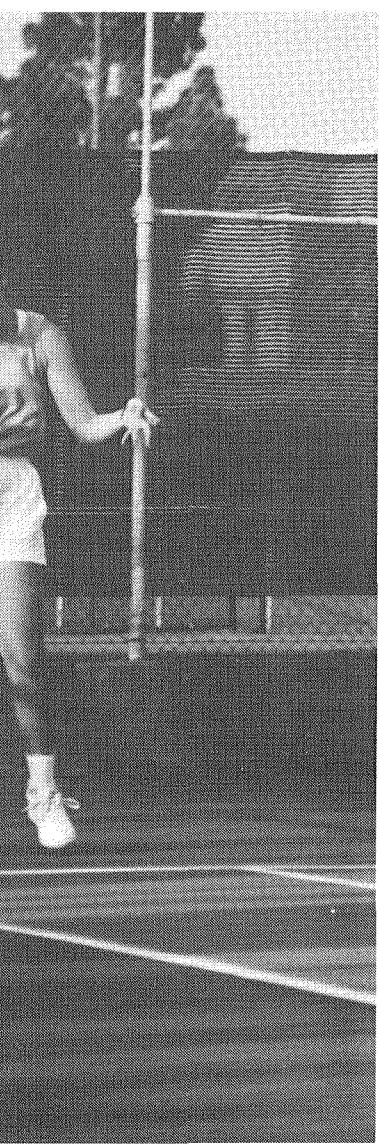
The queen of three-setters, third seed Nancy Hua, did not disappoint anyone Saturday with a two and a half hour singles match. In the end, though, LaVerne's Cindy Soliday capitalized on Nancy's illness and won 3-6, 7-6, 6-3. Number four Miran Rhee, replacing an injured Fiona Lo, had a tough time with Myung Kim's excellent net game and fell 7-5, 6-4. Yu-Chien Kuo, working on a couple of hours of sleep, was too nice to her brace-ridden opponent,

Annette Norris, and went down 6-0, 3-6, 6-4.

Playing in the sixth slot, Diane Wong overwhelmed Michle Williams 6-0, 6-3, and was off the court in less than 45 minutes. In the seventh single, killer lobber Ingrid Choong won her pro-set against Eva Lum, 8-2.

The doubles proved as gut-wrenching as the singles, with the whole match coming down to the final doubles. Yu-Chen and Diane outlasted Lum and Hutchinson in the #3 match, 7-5, 6-4, to give Caltech a 5-3 lead. Then Nancy and Miran, who blame their loss on dogs whining, trains, helicopters and ice cream trucks, gave in to Kim and Norris, 6-3, 6-3. Having split sets, the number one doubles between Hernandez/Low and Kaiwi/Soliday went into set three with an enthusiastic Caltech men's team in attendance. Jennifer and Laura dominated the final set with awesome net play and service returns to win the match 6-4, 1-6, 6-2.

The team would like to dedicate this victory to coach Giny Marum, who is leaving this year to pursue a career in environmental law. Thanks for five great years!



Laura Hernandez, the #1 seed on the Caltech women's tennis team, returns a shot in her final league match against LaVerne.

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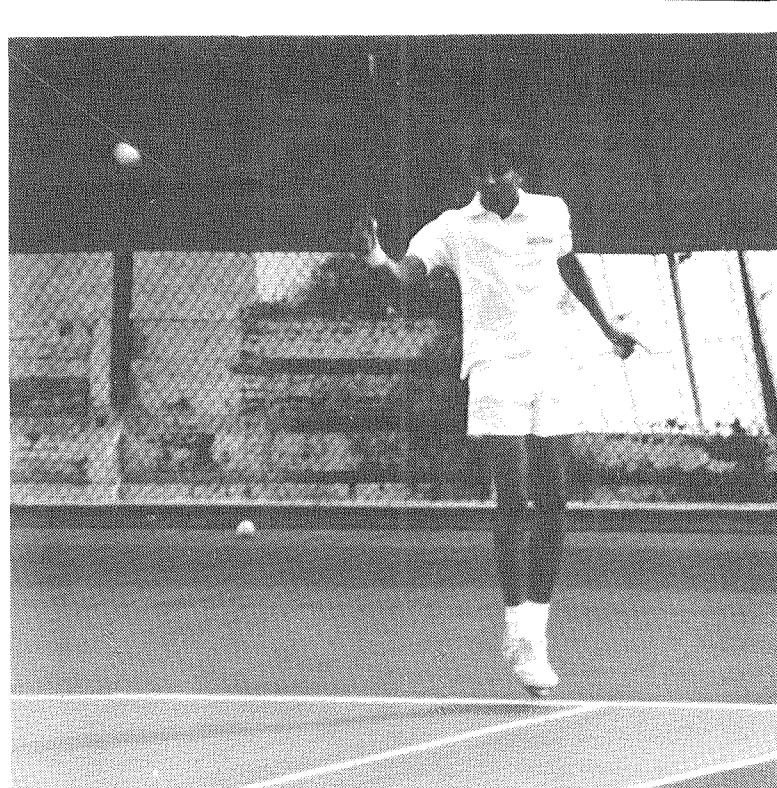


Photo by Chris Ho

Hemant Keny, the #2 seed on the Caltech men's tennis team, returns a shot in the final league match of the year against LaVerne.

Tennis Men Win Two

by ThunderChris

It's been a long, grueling season, but Caltech's men's tennis team finished off the year with two most excellent victories this past week. On Saturday, the battling Beavers travelled away and embarrassed LaVerne 8-1, then returned home, where they soundly blew past Christ College 6-3.

Venturing out in the midday sunshine, Caltech arrived at the opponents' courts with victory in mind. After cheering for Caltech's women's team as they defeated the LaVerne women, the studly men began a dazzling display of awesome power and domination over the home team.

After Coach Mike Jackson's tremendous encouragement and direction of this mighty team, a major thought lays throughout the minds, bodies and souls of his players. In the words of our great philosopher Bappa Mukherji, the major theme is "Just do it!" And do it they did!

Dan Pang, in our top spot, banged his by his opponent, mangling him 6-0, 6-1 with angled ground-strokes and strangling court presence. Hemant Keny, an ominous pillar of strength, pounded LaVerne's number two player with monumental power of epic proportions, winning 3-6, 6-4, 7-5.

Jimmy Ng, playing third, rifled by his foe, firing deadly shots on his way to a 6-4, 6-0 victory. In our fourth spot, however, Bappa "Just Do it" Mukherji just missed his

win, just losing in two tiebreaks.

Greg Wardle and Robert Liu, playing fifth and sixth, gained the team's match win with textbook performances in their singles matchups. Wardle read his opponent well, winning 6-0, 6-1, while Liu highlighted his day winning 6-3, 6-2.

In doubles, Keny and Ng in the first spot overcame split sets and rolled over LaVerne's pair 6-2, 4-6, 6-4. Playing second, Pang and Danny Chu took no pity on their opponents, posting a 6-0, 6-3 win. Kevin Wang, playing consistently, and Chad Roberts, a dominating force, closed out the day 6-2, 6-0.

Back at home Tuesday, the Beaver Tennis Machine sought to end the season with a final victory over Christ College (CC). With a HUGE turnout of enthusiastic spectators numbering maybe in the teens, the men satisfied their fans' greatest tennis desires with buff play and macho action.

Keny, this time playing #1, conceded his first set, but came back with grand determination. Down 5-2 in the second set, just points from elimination, Keny marched back, getting back on serve. With great poise and stamina, he disrupted his opponent's concentration and stature, winning the last five games to win the second set. Having caused his opponent to fall apart before him, Keny easily won the third set, winning his match 0-6, 7-5, 6-3. Noted one

awesome spectator, "I like watching when the other guy spazzes," in reference to the many LOUD and CRUDE outbursts of unsportsmanlike conduct by the CC player.

Pang, however, encountered no such yelling as he controlled his destiny 6-3, 7-5, as his opponent desperately tried to recover. Ng, playing third, just missed the right rhythm, falling in two tough sets.

"Just Do It" Mukherji did just fine, outlasting his man 6-1, 3-6, 6-3. Wardle, playing fifth, walloped CC's player, outlasting him 6-3, 7-6 (7-5). Liu, also playing tough tennis, split sets, but eventually lost in three. Adding to the pure domination by Caltech, Chris Ho returned after three weeks on the injured list and totally embarrassed a really tall guy 6-1, 6-1 in a nice, friendly match at #7.

In doubles, Keny and Ng took on CC's pair. Apparently, the spazzing singles player de-spazzed and got his act together, defeating our men in two sets. But Pang and "J.D.I." Mukherji removed all doubt as to which was the better team, as they squashed their foes 6-3, 6-2. In the last doubles match of the regular season, Wardle and Roberts got together and just enraged their opponents, confusing and frustrating them to no end. After a number of racket-to-ground slamming and cries of disbelief by the CC pair, CIT's doubles team "busted them up" 6-2, 6-0.

It was a wonderful end to a season full of lasting memories. From the team's dominating aura in the Bay area to these last two displays of greatness, this year's young and brave tennis men have so much to be proud of. Today they enter the SCIAC Conference Finals, so wish them the best of luck. But stay tuned next year as every one of your favorites returns for another season full of action!

And the winning and smiles continue...

(player - "Hey, Ho! How'd you mess up your finger? From tennis?"

Ho - "Uh, no."

"Another sport? A fight?"

"Uh, no."

"So what'd you do?"

"Uh, well, you know what happens when you don't get your hand out of the way when you slam your door?"

*** The men's tennis team would like to thank Coach Jackson for everything he's done. See you next year, Coach.

And special thanks to Ginny for letting the guys have some of the cookies you get for your women's team. Best of luck in your career and future. Come visit us sometime. - [from the studly men]

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1990 SCIAC TRACK AND FIELD CHAMPIONSHIPS

by Chris Campo

Caltech's 1990 track and field season was wrapped up Friday and Saturday nights at the University of Redlands on a well-groomed dirt track. The competition was the 1990 SCIAC Track and Field Championships and involved Occidental, Whittier, Pomona-Pitzer, Claremont-Mudd-Scripps, La Verne, and Redlands as well as Caltech.

The final men's results were Oxy 180, Claremont 145, Pomona 118, Redlands 112, Whittier 16, Caltech 15, La Verne 0. The women's results were Occidental 215, CMS 109½, Pomona-Pitzer 87½, Redlands 30, Whittier 22, LaVerne 18, Caltech 4.

The men finished the season with a record of 15-7 and tied for fifth in the conference with Whittier. The women were 13-10 and tied for sixth with LaVerne.

The meet was scored 10 points for a first place, 8 for second, 6 for third, 4 for fourth, 2 for fifth, and 1 point for sixth place in each event. Since the best athletes in the conference are all pushing for a finish in one of the six coveted all-conference placings in each event, it makes capturing one of these six spots a difficult and admirable feat for a Caltech athlete. Thus it is only just to give credit first to the Beavers who were successful in capturing all-conference placings.

Randy Ralph was the outstanding Caltech athlete in the SCIAC meet. In the high jump, he jumped an impressive 6 feet 4 inches to capture second place. Teammate Gary Eastvedt placed sixth in the event with a respectable jump of 6 feet even. Greg Dudey pole-



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vaulted 13 feet even - good for a sixth place. Dudey also competed in the 400 meter hurdles race. Dudey, in fourth place coming off the curve onto the final straight-

way, suffered a frustrating collision with a hurdle and was sent sprawling to the ground. Never one to quit, Dudey got up and pushed in a sixth place finish in 1:02.4.



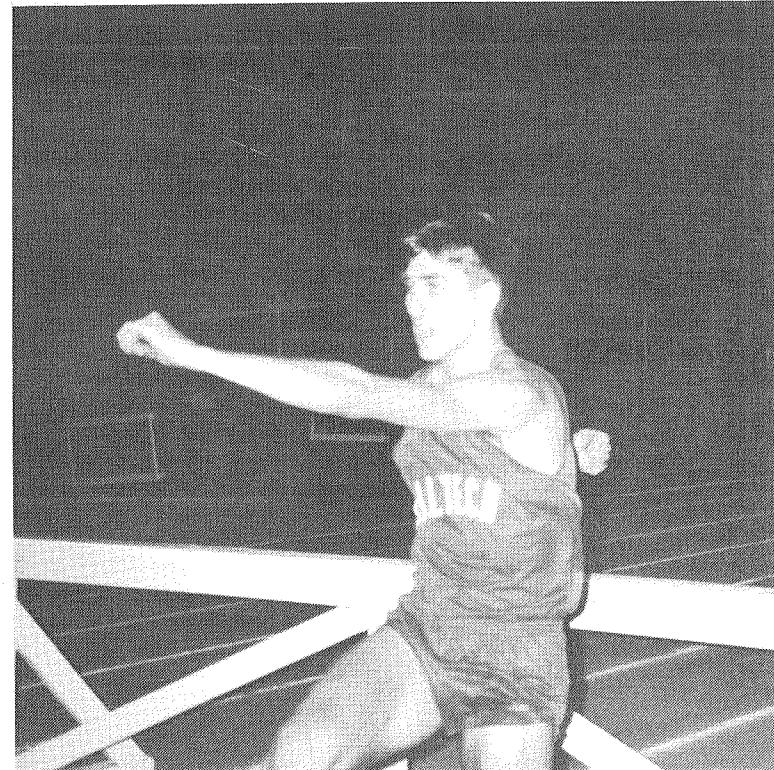
Brady Montz has the early lead in the 400 meter trials at Redlands because of the staggered start. Brady managed to finish seventh in the trials and qualified for the finals.

WEEKLY SPORTS RESULTS

Day	Date	Sport	Opponent	Results
Sat.	4-28	Track (M)	SCIAC Championship	Occidental 180, Claremont-Mudd 145, Pomona-Pitzer 118, Redlands 112, Whittier 16, Caltech 15, LaVerne 0
Sat.	4-28	Track (W)	SCIAC Championship	Occidental 215, CMS 109½, Pomona-Pitzer 87½, Redlands 30, Whittier 22, LaVerne 18, Caltech 4.
Sat.	4-28	Tennis (M)	LaVerne	8-1
Sat.	4-28	Tennis (W)	LaVerne	6-4
Tue.	5-1	Tennis (M)	Christ College	6-3

WEEKLY SPORTS CALENDAR

Day	Date	Time	Sport	Opponent	Location
Fri.	5-4	12 noon	Tennis (M)	SCIAC Tournament	Whittier
Fri.	5-4	12 noon	Tennis (W)	SCIAC Tournament	TBA
Fri.	5-4	3:00 pm	Baseball	Claremont-Mudd	Caltech
Sat.	5-5	All Day	Tennis (M)	SCIAC Tournament	Whittier
Sat.	5-5	All Day	Tennis (W)	SCIAC Tournament	TBA
Sat.	5-5	11:00 am	Baseball (2)	Claremont-Mudd	Claremont
Sat.	5-5	1:00 pm	Track	Northridge Open	Cal State Northridge



Scott Kister clears a barrier on his way to sixth place in the 3000 meter steeplechase. Randy Ralph, Greg Dudey, and Gary Eastvedt also finished all-conference for Caltech in the SCIAC Championship meet at Redlands.

photo by Jim O'Brien

The final individual all-conference placer for Caltech was junior Scott Kister. Kister, in an impressive display of mental toughness and a hell of a lot of guts, ran 10:46 in the 3000 Meter Steeplechase to finish sixth in spite of sparse training during the season. (Kister's performance is all the more remarkable when one considers the fact that he consumed a double cheeseburger and a large chocolate frosty a scant two hours before the event.)

In addition to the Beavers who

captured conference spots, there are other individuals whose performances merit mention. Brady Montz ran 1600 meters total in combined 100, 200, and 400 meter trial races and final races plus relays on Friday and Saturday nights. Brady qualified for the 400 meter final with a time of 52.05 and for the 200 meter final with a time of 23.44. Freshman John Freeman was mere hundredths of a second from placing sixth in the 800 meter final. John's time of 2:00.5 was good for a seventh place.

TEACHERS CLIMB ROCKS

by Neil Humphrey

The super-finals of the Sport Chalet "Rock till you drop" climbing competition were held last Sunday in La Canada. Over 40 finalists advanced from 4 preliminary competitions involving over 250 climbers, which were held previously at other Sport Chalet stores in L.A. and San Diego.

Five Teachers survived the preliminaries to compete on Sunday, including Rudi Hofmeister who qualified by placing 3rd at La Canada the previous week, and Matt Newlin and Remy Sanouillet, who also qualified at La Canada. Also competing were Suzanne Paulson, who placed 2nd at the Beverly Connection and Neil Humphrey, who placed 5th.

Sunday's women's division final was strongly competitive with several climbers having had experience in national competitions. Caltech's Suzanne Paulson fell only inches from the top of the route early in the competition and had to

wait until the last woman (Kelly Penix of Covina) climbed to find out how her high point would stand. Kelly managed to "dyno" the last move to the top for the win, with Suzanne holding on to second place and a \$250 prize.

The larger men's division climbed after the women and the climbers were kept in a closed room to prevent them from previewing the routes. Unlucky contestants like Rudi, who were near the end of the climbing order, had to wait for over 5 hours before climbing. Matt, Remy and Neil plummetted on the first route, although Matt came within inches of "nailing" the top. Rudi, with a nice demonstration of control, was one of 8 to make it to the top, thereby advancing to the next round. Rudi unfortunately didn't survive the next route (figuratively!) and finished in 7th place, an impressive performance in what is already the premiere sport climbing event in Southern California.

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