Khan supports investment in environmental technology

BY VALERIE ANDERSON

Democratic Party candidate Doug Kahn spoke Friday at the last of a series of discussions with 27th district US House of Representatives candidates presented by the Caltech Environmen tal Task Force.

Kahn believes that the government should continue funding research into "environmental technology"—processes and equipment that conserve power and cut pollution. He supports Department of Energy programs that, through tax incentives, encourage private industry to develop technology that will save water and energy. If environ mental research is given enough sup port, he says, the US will develop tech nologies that can be sold to other coun tries. Kahn strongly opposes what he port, he says, the environment meant to them.

Kahn admitted that, because of charge-up time and the need for air-condi tioning, he is not sure whether elec tric vehicles are practical for California at this time. However, Kahn believes people should be encouraged to buy electric vehicles and that research in this area should be continued. He disagrees with recent "backpedaling" on mandates that would require certain percentages of all cars produced to be electric.

When an audience member asked about his position on natural gas vehi cles, Kahn stated that he believes that natural gas technology is "advanced" and that the use of natural gas vehicles should be encouraged. He feels that since natural gas is less energy dense than many other fuels, taxes on it should be lowered.

Kahn is against the completion of the 710 freeway. He believes that the freeway would bring a lot of truck traffic into Pasadena and South Pasadena and that it would turn into a "parking lot" five hours a day, causing significant air pollution in the area. This, he says, would "destroy the tax base" of South Pasadena.

In response to an audience member's question about his position on protected wilderness areas, Kahn stated that he believes that the government needs to set aside large areas of land, not "small islands of habitat," since "we're not smart enough" to know all interdependencies. Also, he feels that certain areas need to be protected from all kinds of vehicles. Kahn described the recent opening of the Alaska pipeline to drilling as "shortsighted." He feels that there is not enough oil in previously protected areas there to make a significant difference in the US oil supply. He believes the pipeline was opened simply because there is enough oil there to mean "big profits" for landowners.

When an audience member asked Kahn to respond to Republican Jim Rogan's view that wetlands need not be protected "for their own sake," Kahn stated that he believes wetlands are worth protecting because of their biodiversity and that he would like a

SURF Talks showcase student research

BY TANIA TICKEL

In every undergraduate class last week, students rushed frantically through the hallways trying to find the perfect way to convey exactly what their ten weeks of extensive summer research meant to them.

Students who took advantage of this opportunity presented through the SURF (Summer Undergraduate Research Fellowships) program shared their work with the rest of the Caltech community on October 19 presentations that lasted from 9 a.m. until the afternoon.

This year, the SURF office helped finance the research of 248 students in fields ranging from engineering to education. The total range of topics enabled many students to do research outside of their own major. Steve Bennett, a biologist, was able to do an engineering SURF. "It was cool because I put together 248 students and I got to use wrenches," he said. "I learned a lot about engineering and how it's different from science because sometimes you work outside the science and it still doesn't work!"

For some, expectations of what would happen differed from the reality of the research, but it still ended in a positive ex perience. "At first I was a little disappointed because [the research] was totally not what I expected to do," I was sup posed to be doing electrochem istry," said Sophomore Kurt Kim, "but I did enjoy what I was doing and I learned a lot from it."

Other students had never

Before been in research. Sopho more Devi Thota said, "You know how at home you'd think about the word 'research' and it think it's like magic; just walk into the lab and it's Whoosh! You've discovered something. It's not really like that."

Although her research was arduous, Thota still enjoyed it, "I walked into work the first day and it was like being in another world. I looked forward to it every day because...I had a chance to work on something that had an effect on the real world."

The reaction of SURF participants to the program was overwhelmingly positive, and perhaps not smart enough" to know all interdependencies. Also, he feels that certain areas need to be protected from all kinds of vehicles. Kahn described the recent opening of the Alaska pipeline to drilling as "shortsighted." He feels that there is not enough oil in previously protected areas there to make a significant difference in the US oil supply. He believes the pipeline was opened simply because there is enough oil there to mean "big profits" for landowners.

When an audience member asked Kahn to respond to Republican Jim Rogan's view that wetlands need not be protected "for their own sake," Kahn stated that he believes wetlands are worth protecting because of their biodiversity and that he would like a see the SURF Office page 2

"500 L of LN, please."

Dabney House will again be holding the annual pumpkin drop at the stroke of midnight October 31st off of Millikan. Come and watch for the elusive blue flash.

TUTORS NEEDED

The Dean of Students Office needs tutors in all areas—especially for the Institute requirements, e.g. Ch 1, Ma 1, Ma 2, Phi, and Ph2. The pay is $7.50 an hour. We are looking for upperclass students with a strong understanding of the subject matter and the ability to communicate well. Please stop by the Deans' Office in 102 Parsons-Gates or contact us at x6351 or sandra_estes@starbase1.caltech.edu for further information.

New! In this issue! schwartz by Gene Plotkin

In this Issue

THE USUAL STUFF

This Week's Features

Bookworm... 8
DELBERT... 5.7
Letters to the Editor... 2
Now Hear This... 6
The Outside World... 2
Y News... 10

Osteoporosis... 3
Review: James Boyk... 3
Schwartz... 9
Big T... 10
Volleyball... 11

See SURF on page 7

SEE SURF ON PAGE 7

review of New Adventures in Hi-Fi.
Cats in Avery dispute stemmed from misunder­standings, not malice

To the Tech Editors and all Caltech Undergraduates,

Thank you for printing information about the off-campus pet cat policy in the October 11 issue. While I usually do not write to correct informa­tion, I feel the need to do so this time. The statement regarding the student who indicated we had told her only 3 days before she moved in was misleading. The Residence Life Office is not responsible for the distribution of the housing pet policy. I can only assume that, in trying to answer a student’s question, our office led her to believe that we distribute the policy and were negligent in doing so earlier. This is not the case.

In reality, this is not an issue of late notification or insensitivity. It is of misunderstandings and assumptions made by all parties involved. Housing and Residence Life staff believed the pet policy in Avery would be like all other off-campus housing facilities; students apparently believed it would be like the seven on-campus houses. It was not until shortly before students moved in that anyone realized that people had different perceptions on this issue. Once we realized what had happened, efforts were made to rectify the situation. No one is trying to make students’ lives miserable, nor is anyone deliberately misleading students about important information.

I know this was an important issue to the residents of Avery, especially those who had cats. There are numerous other issues we are or should be dealing with that affect under­graduate life and Avery House. Let’s work on those together!

Ken D. West
DIRECTOR OF RESIDENCE LIFE

Note from the Editors:

We, the editors, would like to apologize for any offense given to our readership in the satirical fake advertis­ement placed in the September 27th Tech; the Caltech community is as dynamic as the research done here, and we felt that there was no necessary at times for the editors to be able to restate their au­sence in order for the paper to be able to best serve its readership.
Welcome to Dabney Lounge...  

BY PUBLIC RELATIONS

For almost 50 years, the Paco A. Lagerstrom Chamber Music Concerts at Dabney Lounge have offered intimate programs to chamber music lovers from Caltech and the community. These concerts feature artists of international repute as well as promising young performers.

Located in Dabney Hall, south of Beckman Auditorium on the Caltech campus in Pasadena, the lounge, with its Spanish Renaissance architecture, exquisitely acoustics, large expanse of hardwood floors, and magnificent French doors that open onto the garden, has made a welcoming and elegant setting for these chamber music concerts.

All concerts are held on Sunday at 3:30 p.m. Admission is free.

PACO A. LAGERSTROM CHAMBER MUSIC CONCERTS at Dabney Lounge forty-seventh Season 1996–1997

October 27, 1996 CON GIOIA  
Works for baroque oboe, baroque cello, and harpsichord, including Bach: Sonata in G minor for oboe and obligato harpsichord Telemann: Sonata in B-flat Major for oboe, obligato harpsichord, and basso continuo Vivaldi: Sonata No. 4 in B-flat Major for violin and basso continuo Forenianist and harpsichordist Preethi de Silva, violoncellist Mark Chaitfeld, and baroque oboist Gonzalo Ruiz will perform this concert by early-music ensemble Con Gia, this year celebrating its thirteenth season of concerts. Since its debut in 1982, the ensemble has provided Southern Californian audiences with outstanding performances on period instruments.

November 17, 1996 JAMES WILSON and JOANNE LIEB Cellist and Piano Duo Falla: Suite Populaire Espagnole Martinu: Sonata No. 3 Brahms: Sonata in F Major, Op. 99 Chopin: Polonaise Brillante in C Major, Op. 3 Cellist James Wilson is a member of the Shanghai String Quartet. Pianist Joanna Kong, a member of the faculty at Virginia Commonwealth University, is no stranger to Caltech, as both her sister Kathleen and her brother Mike were students here. Both artists bring distinguished and diverse backgrounds to their musical partnership, with a wide repertoire ranging from the baroque to new works written especially for them.

January 12, 1997 ARLEKIN STRING QUARTET  
Mozart: Quartet in B-flat Major, Op. 10, No. 3 ("Hunt")  
Shostakovich: Quartet No. 7 in F-sharp minor, Op. 108  
Beethoven: Quartet in E minor, Op. 59, No. 2 ("Razumovsky")  
In 1983, four young musicians at the Moscow Conservatory of Music, who were studying under the world-renowned Borodin String Quartet, joined together and became the Arlekin String Quartet. Latvian Eugene Chukhlov and Ukrainian Dmitri Glovko (violinists), Tatar Rem Djemilev (violist), and Russian Sergei Riabtchenko (cellist) have toured extensively throughout Europe and the former Soviet Union.

February 2, 1997 VOXFIRE with MICHAEL EAGAN, lute  
A program of medieval and renaissance music. Voxfire, L.A.'s newest vocal trio, is the collaboration of three of the area's most highly regarded interpreters of early and contemporary vocal music: Samela Aird Beasom, Christopher Herman, and Susan Judy. The three sopranos have melded their talents as a means of presenting the distinctive works of these eras with their own musical style and dramatic flair.

March 2, 1997 LOS ANGELES PIANO TRIO with guest artist ALLAN VOGEL, oboe  
Works by Schumann, French, and Beethoven. This ensemble of internationally renowned musicians has been assembled especially for the 1996-97 season. Featured will be violinist Clayton Haslup, cellist Timothy Landauer, pianist Joanne Pierce Martin, and, as guest artist, oboist Allan Vogel. The program will include a newly-commissioned piece by Tania Gabrielle French.

For more information, contact the Caltech Ticket Office: 
WWW: http://www.caltech.edu/tickets/ email: tickets@caltech.edu
PHONE: (818) 795-4652 — FAX: (818) 795-1378

For the American College of Sports Medicine (ACSM) says osteoporosis affects more than 20 million American women. Osteoporosis is known as the "silent" disease because many women do not know that have it until they break a bone. Fortunately, weight training exercises to increase bone density aid in the prevention of osteoporosis. Aside from the other benefits of weight training, such as strengthening and toning muscles, you can really make a difference in your health and life with a reasonable input of time and energy. The Caltech Braun Athletic Center has a wonderful weight training facility. The weight machines are adjustable to all body types and can be used to strengthen many individual muscles. They are offering a special weight training program for women interested in learning how to use the machines to build up strength and stave off the all-too-common bone loss which leads to osteoporosis. You are cordially invited to attend a one-time workshop to learn about the Caltech weight room and what you can do to help yourself stay more fit and energetic. We have designed this program for adult women interested in adding weight training to their lives. The program will fit into a single lunch hour. This program will meet in the Braun Athletic Center's locker room on Tuesday, October 22. The program will include meeting with a trainer who will explain about osteoporosis and weight training. She will show us how to use the machines and will help us select particular machines to maximize our time in the gym. Bring loose fitting clothes and sneakers to change into in the women's locker room. We will break a sweat is not likely, but there will be time to change and return to work before 1 p.m.

Please join us on: Tuesday, October 22nd at noon in the Braun Athletic Center locker room. The program begins at 12:10 p.m. and will end by 1:25 p.m. Bring your ID card. You are automatically a member of the gym during the academic year so there will be no paper work. Please RSVP so we can plan the program properly. At x3221 email: kschatwee@starbase.caltech.edu

MORGAN STANLEY
Information Technology Division Graduate Associate Position

We are seeking the nation's top CS, Engineering and Math graduates and undergraduates to bring their talents to technology projects of worldwide scope. Benefit from a dynamic, highly creative environment which uses the most advanced technologies available anywhere. Some of the technologies you will work with include:

Parallel Processing • Object-Oriented Database/Languages
GUI Development • Real-Time Data Distribution
Document Architectures • Distributed Computing
Genetic Algorithms • Mainframe Systems
State-Of-The-Art Trades Processing Systems

You are cordially invited to attend our presentation on:

Monday, November 4, 1996
Room 13, Student Activity Center
4–6 P.M.

Morgan Stanley contact:
Jean Ellen Murphy (212) 762-2559
murphyje@ms.com

Morgan Stanley Is An Equal Opportunity Employer
PIGs to Improve Administrative Processes

BY MATTHEW SULLIVAN

With the growth of Caltech, the administration's duties have grown as well. The processes developed in isolated systems to handle such areas as personnel and acquisition were not integrated campus-wide. As the bureaucracy grows, these systems are becoming inefective and inefficient. In order to help overcome this deficiency, a new group has been formed to help streamline the administration's duties. This group is called the Process Integration Group (PIG) and is lead by Earl J. Friese. The group is made up of four teams working on similar problems in different areas of administration: personnel, accounting, purchasing, and student affairs.

"It's all about getting from A to B efficiently," says leader Friese. The main thrust of this program will be to change records and daily business from hard copy to email. The first step will take place in late November or early December, when software vendors place bids on software that will be the backbone of the project. Right now, the time line for total integration of the new processes is October 1, 1999.

The changes that will most directly affect the undergraduate population will be in areas where students interact with the administration. Possible results include easier registration, electronic access to grades and transcripts, and improved communication between administrators and students. A great deal of the work of PIG will not directly affect the student population, but will have indirect effects. Reduction in time required for administration and paperwork will have more than just administrative benefits. Friese notes, "Streamlined processes will allow more time for students or research."

Friese is enthusiastic about the process engineering project and assures that the Caltech culture won't be destroyed. He encourages input from all members of the Caltech Community. The Process Integration Group can be reached at apro@cco.caltech.edu or through the APE office at MC 226-81, ext. 3315.

Why Vote?

BY GEORGE STEPHANOPOULOS

How are you paying for college? Perhaps your parents are giving you a hand. Or, more likely, you're financing your education yourself through part-time jobs and student loans. President Clinton's reform of the student loan system, with the introduction of direct lending, has made college more affordable for millions. Now students can bypass the big banks and middlemen and borrow directly from the federal government through their campus aid office. These loans have been calculated as 20% less expensive than guaranteed loans.

Then there's AmeriCorps, which offers students and young people to earn money for college while working to improve their communities. At the end of this year, AmeriCorps will have provided educational opportunities for over 45,000 young people. In President Clinton's second term, this initiative, along with a $10,000 education tax deduction, the HOPE Scholarship program, expanded Pell Grants, and a merit-based scholarship, would increase the number of Americans educated at the college level.

Of course, at some point you will pay back your college loans. The good news is that when you leave college you'll be looking for work in a society which has seen strong economic growth and falling levels of unemployment. Perhaps you'll be applying for one of the ten million new jobs created under this administration, particularly one of the four million in high-wage industries. The minimum wage has increased and real hourly wages are rising for the first time in a decade. And as you pay off your debts, President Clinton's tax cuts for 15 million working families and 90% of small businesses will help soften the blow.

And where do you plan to live? Can you be confident that your neighborhood will be a safe environment for you at your family? The President understands our desire for a better quality of life, as well as the opportunities we need to succeed. That's why he cleaned up as many toxic waste sites in three years under twelve years of Bush and Reagan. That's why he fought extreme Republican measures to roll back years of environmental protection. And that's why he is working to ensure that you and your children have cleaner, safer water and air that's fit for breathing.

President Clinton is working to create responsible, caring communities by confronting the gun lobby, working to keep assault weapons off streets and preventing more than 60,000 felons from purchasing handguns. He has cured the highest level of home ownership in fifty years and put 100,000 cops on our streets. President Clinton's second administration will work with your community to create a safer, healthier world.

No other President has done more to address the concerns of young voters. President Clinton plans to maintain his pro-youth, pro-facts agenda in his second term, talk to President Clinton everyday about your concerns, know he's pushing to create more educational opportunities, safer environments, more unified communities, and stronger workplaces.

Community, opportunity, responsibility. These are the cornerstones of President Clinton and Vice President Gore's campaign. On November 5th, I'm asking you to help us build a bridge to the 21st century. Vote for President Clinton and Vice President Gore.

George Stephanopoulos is senior Advisor to the Press for Policy and Strategy. He is a graduate of Columbia University and a former Rho Scholar.

Spring Garden Chinese Restauraurs

Mandarin & Szechwan Cuisine-Best in Town

Party Tray To Go - $5.00 per lbs (Min. 25 People)

Orange Chicken Vegetable Noodles
Fork Fried Rice Kung Pao Beef

Great for meetings, parties, etc.

5% discount with Caltech ID

CATERING & FOOD TO GO
Beer-Wine-Banquets

Lunch Special:
Monday-Sunday 11:30-3:00

(818) 796-2531
187 N. Sierra Madre Blvd.
Pasadena, CA 91107
1. I invented a new data encryption program called P. H. B. which stands for Pointhead Boss.

2. I'm only a lucky intern, but I see an obscure solution to your problem.

3. Just click here... clear your buffers and initialize the line... now use this code patch for the memory leak.

4. This is funny if you consider that your salary is twice as much as mine.

5. I'm laughing on the inside.

6. It turns out that you could have built the unit at half the cost with just one minor change.

7. Is it true I can win awards for this sort of thing?

8. Pitch the intern!

9. The brain is an amazing thing.

10. So the salesperson made an idiotic promise to our customer. Now it's my job to fix it.

11. Are you saying that if I use the untyped power of my brain, there's a solution?

12. No, then I'll give your parents this pamphlet on contraception.

13. I'm going to use bad grammar, more often.

14. My leadership will change the language through the principle of common usage.

15. And I won't stop until the entire language is reduced to grunting and pointing! Oh, wait... I really got ripped off by that dog obedience school.

16. I've become one of those people who misinterprets everything you say. Why?

17. I hear you're becoming an annoying person who misinterprets everything.

18. I said annoying, not assertive.

19. Whatever you do, don't climb in this clothes dryer.

20. Yeah, it does look cozy in there.

---

**The Boston Consulting Group**

**CASE INTERVIEW WORKSHOP**

Are you a graduating senior or a PhD graduate interested in learning how a "case interview" works? If so, please join us for an informal session given by The Boston Consulting Group on the "case interview" experience.

**Monday, November 18**

4:00-6:00pm

Beckman Institute Auditorium

Hosted by

Susan Moffet (BCG Los Angeles)

---

**Office Locations**

AMSTERDAM    BRUSSELS    FRANKFURT    KUALA LUMPUR    MELBOURNE

ATLANTA    BUCHEM     HAMBURG    LISBON       MURRI (MEXICO)    SHANGHAI

AUCKLAND    CHICAGO    HELSINKI    LONDON     NEW YORK       SINGAPORE

BANGKOK    DALLAS     HONG KONG    LOS ANGELES    MOSCOW     SÃO PAULO

BOSTON    DUBUQUE     JAKARTA     MADRID     MUNICH     STOCKHOLM

---

**Case Interview Workshop**

Are you a graduating senior or a PhD graduate interested in learning how a "case interview" works? If so, please join us for an informal session given by The Boston Consulting Group on the "case interview" experience.

**Monday, November 18**

4:00-6:00pm

Beckman Institute Auditorium

Hosted by

Susan Moffet (BCG Los Angeles)
Features

Powerful performance of Prokofiev’s “War Sonatas”

by Ron Dolette

New Adventures in Hi-Fi

R.E.M.’s newest album in two years, New Adventures in Hi-Fi, combines the hard gritty elements of 1994’s Monster release with the more mellower, yet critically acclaimed Automatic For The People.

Though combining two distinctly different albums does not always result in the best of both worlds, New Adventures may provide a bridge for those who were fans of one album but not the other. The album features the usual R.E.M. mix of love, hate, and politics; and while many songs on New Adventures, such as the current single, “E-Bow the Letter,” and the instrumental, “Zither,” are reminiscent of 1992’s Automatic, the new album appears to be more of a complete spectrum of R.E.M.’s dynamic styles.

“We Wake Up Bomb” and “Departure” are perhaps the album’s two hardest tracks, while “Leave” has a very hypnotic guitar in the background, which gives them only a few degrees of separation from Monster. The overall impression, however, is that New Adventures could reflect a newer, louder R.E.M. than what many have come to expect of the Athens, Georgia, band. If you prefer R.E.M.’s recent “What’s the Frequency, Kenneth?” style, you’d better stick to Monster. Basically, every song on New Adventures in Hi-Fi sounds like an Automatic hit.

The album features the usual R.E.M. mix of love, hate, and politics.

On Friday, October 18, Caltech’s pianist-in-residence James Boyk gave a concert in Dabney Lounge of three piano sonatas by composer Sergei Prokofiev (1891-1953).

Called the “War Sonatas” by the composer because he wrote them in Russia in the midst of World War II, the Sixth, Seventh, and Eighth Sonatas are among Prokofiev’s latest enduring works. Although the sonatas, like Prokofiev’s other music, make use of sharp dissonances and complicated harmonies, they also contain clear, melodies and musical themes, such that even a novice listener can understand and enjoy them.

Opening the concert was the Sixth Sonata. The first movement was exciting and opened the concert well. Boyk’s performance of the two middle movements held me completely entranced. They were lyrical and somewhat light in tone, yet still contained the rich harmonic texture and underlying force that is so characteristic of Prokofiev. The faster fourth movement started out complex and exciting, slowed down in the middle, but finished well.

After the first intermission, Boyk took on the monumental Seventh Sonata. The first movement is one of the most powerful and disturbing pieces of music I have ever heard. It expresses Prokofiev’s deepest emotions regarding the war in Russia. Sometimes thunderously angry, and sometimes dazed and aimless, Boyk’s performance brought me close to tears as I listened.

The lyrical melancholy of the second movement was a welcome relief. Although that movement has its tense moments as well, the concluding reprise seemed to invoke past happiness and perhaps hope for the future.

By the time Boyk reached the Seventh’s swiftnig conclusion, he appeared tired. In fact, he had to sit and start over again about thirty seconds into the movement, and for a while seemed that he was just trying to keep up. But he caught a second wind halfway through and he finished the piece with a truly moving strongly and with much passionate, lyrical playing.

Mostly because of Boyk’s fatigue, at partly because any piece of music might seem following the powerful at dramatic Seventh, Boyk’s performance of the Eight Sonata sounded rather lackluster.

The lyrical second movement was quite pleasant, and the other two movements had some very strong moments, especially the third. But it seemed that, on his comeback concert, Boyk simply did not have the stamina to take on two hour worth of a composer as demanding as Prokofiev.

Although the concert had its difficult moments Boyk’s skill as a musician made it well worthwhile. I enjoyed myself immensely during the recital moments when he was at his top of his game, and the other times had their bright spots as well. I wish Jane Boyk a warm welcome back to the concert stage, and look forward to more concerts from him in the future.

Caltech Officially Approved
Most professional, courteous, economical and efficient service for your official and personal travel needs.

Free service to you. We deliver.

Airlines, Cruises, Tours, Hotels, Car Rentals.
Individual, Commercial, Groups.

(818) 577-8200
468 S Sierra Madre Blvd. • Pasadena

PARIAN TRAVEL

10% off entire bill with Caltech ID.

RADHIKA’S

Created in India
Invites you for a treat of your lifetime and an office special that will suit your budget for only $525

(818) 570-4970
701 E Main St Alhambra, CA 91801

TECHNOLOGY

ATTENTION

Table of Contents

COMPUTER SCIENCE and BUSINESS INFORMATION SYSTEMS GRADUATING SENIORS:

Check Out PLATINUM technology, inc.
We will be at campus interviewing on Wednesday, November 6th • 9am-5pm

Go to the Career Planning Center and check us out! Or better yet, visit our Web site at http://www.platinum.com to see what we have to offer!

It’s time to enter the “real world.” Instead of getting your feet wet at some “entry-level” job, we suggest diving into something a little deeper and more challenging. And rewarding!!! We’ll show you how you can start on an exciting career—using your unique ideas and talents.

We are looking for graduates who would be interested in developing and supporting leading-edge software products. Come check us out and see if you have the qualifications necessary to become a part of this dynamic and innovative company.

We not only have exceptional benefits (medical, dental, vision, life, matching 401(k), stock options) but we also offer tuition reimbursement, flexible hours AND a casual dress environment.

If you are unavailable November 6th, you can send your resume directly to us at:

PLATINUM TECHNOLOGY

Attn: Lisa-CALT/11-96
2 N. Second Street • Suite 1000 • San Jose, CA 95113
Fax: (408) 494-7395 • e-mail: staffing@platinum.com

PLATINUM is an affirmative action, equal opportunity employer.

PARIAN TRAVEL

Caltech Officially Approved
Most professional, courteous, economical and efficient service for your official and personal travel needs.

Free service to you. We deliver.

Airlines, Cruises, Tours, Hotels, Car Rentals.
Individual, Commercial, Groups.

(818) 577-8200
468 S Sierra Madre Blvd. • Pasadena

10% off entire bill with Caltech ID.

RADHIKA’S

Created in India
Invites you for a treat of your lifetime and an office special that will suit your budget for only $525

(818) 570-4970
701 E Main St Alhambra, CA 91801
SURF: Learning through research

CONTINUED FROM PAGE 1
of working with technology that is near and dear to their hearts.

Last November, a project that was started in 1988 and continued by successive teams of students was completed with the launch of an experimental communications satellite. The satellite, called SURFSAT was designed, engineered, and tested by undergraduate students, and completed with a budget of three million dollars.

In addition to Caltech and JPL, SURFs there are industry SURFs, which involve working with someone at a local company as well as a Caltech faculty member. Said Merkel, “This gives the student a different type of problem to solve — one with a deliverable needed at the end.” Industry SURFs give students an opportunity to see what kind of work is available in the business world.

Obadiah Manley, a senior, worked for Logicon this summer and said, “I definitely saw how things are more product-oriented. I was trying to see how to do a particular task as opposed to seeing if I could understand something thoroughly. I’m definitely glad to have worked there.”

SURF has grown since 1979 from a program with eighteen students and a total budget of $36,000 to a 248 student program with a budget of $890,000. Masella Bomall, a member of the SURF board for nearly 10 years said, “I’m amazed at how this program has advanced since it started. The quality of the students’ projects has gone up so tremendously; I mean it was good very good, but now it’s excellent.”

The stipend, too has gone up in order to remain competitive with comparable summer research jobs within and outside of Caltech. SURFSAC (SURF Student Advisory Council), a ten-member committee will be printing student-authored research papers in a new publication called the Caltech Undergraduate Research Journal (CURJ), which will be out in a couple of weeks.

CURJ was started last year by SURFSAC. Carolyn Merkel, director of the SURF program, said, “We wanted the students’ technical papers to be as important as the oral presentations so they developed the journal to give that same visibility to the technical journals. This (publication) is unique in the country in that it is led by, done, and published for the students.”

Part of the reason for SURF seminar day is to find semifinalists for the Doris S. Perpall SURF Speaking Awards which will then be narrowed down to a group of finalists, three of which will win the award. Twenty-nine semifinalists have already been chosen, and will begin presentations on November 11. The presentations are open to viewing by anyone, and will end on November 15. This years semifinalists are Saurabh Saha, Lisa Ngo, Priya Rai, Neil Jones, Julius Su, Matthew Barnet, Fay Peng, Sudipta Bardhan, Barry Shapiro, Chris Chang, Johanna Yao, Jason Roth, Edwin Soedarmadji, Victoria Tansheva, Emily Chiu, Nicholas Choly, Obadiah Manley, Steve Chase, Steve Bennett, Mathew Tiscanero, David Tytell, Samantha Foster, Alana Lawrence, Dave Relyea, Paul Storaasli, Dave Bacon, David D’Urso, Sebastien Maurer, and David Farnham.

Students wishing to find more information about SURFS should contact the SURF office: 137 Beckman Institute, Fax 449-9649, phone x2885.
by Daisy James

***** A truly wonderful work of art
**** Slightly imperfect
**** Well written but not enjoyable
*** Fun to read, poorly written
** Bad writing, no fun
* Birdcage liner

Lord Peter Views the Body by Dorothy L. Sayers

I had been told several times that I should try this series, and at one point I started one. I never made it all the way through the book, so a few weeks ago I decided to give it another try. I’m glad that I did because this book put Sayers on my list of favorites.

It is a collection of short stories, set in nineteen-twenties and thirties England, about Lord Peter Wimsey. He is a sleuth more in the style of Holmes than Poirot, but with fewer of the incredible deductions that sometimes make Doyle’s stories a bit hard to believe.

Which is not to say that reading this book does not require a healthy suspension of disbelief. The stories also feature Wimsey’s faithful manservant, Bunter; the Egots’ Club, where you can talk about yourself as much as you like (Wimsey is a member) and various other characters and places, all presented in a delightful style. One of the things that I enjoyed most about this book was that Sayers managed to get a fair amount of humor into it without losing the suspense. Overall, I’m glad that I gave these a second try and I might mention that I tried the other book again and enjoyed it very much.

Mossflower by Brian Jacques

I read this book thinking that it was a children’s book, but when I went to buy the sequel I found it in the fantasy section. I think that it could be classified as either, though it might be a bit too violent for some younger readers. Mossflower is technically the second book of the Redwall series, but as it is the prequel I read it first. The story is about a group of animals who live in Mossflower Wood and their rebellion against a despotic queen. What impressed me most about this book is the very accurate account of the fall of a monarchy, similar to what I’ve read time after time in history classes.

It also includes several battle scenes, a quest, and many descriptions of food (have something on hand to eat while you read this.) It is an exciting book, definitely light reading. My only complaint is that things seem a bit out of proportion, i.e. a mouse, however heavily armed, could not fight a wildcat.

Pelican at Blandings by P.G. Wodehouse

I don’t think that Wodehouse wrote a book that I would not give a six to. Certainly not a Blandings Castle story. Blandings is the ancestral home of Clarence, ninth Earl of Emsworth, a scatterbrained man whose only true interest is his prize pig, the Empress of Blandings.

Clarence, ninth Earl of Emsworth, [is] a scatterbrained man whose only true interest is his prize pig, the Empress of Blandings.

Although that is more or less a description of any of Wodehouse’s books (some have three or four love affairs) it doesn’t make any of them less worth reading. He writes with wonderful humor and doesn’t bother you with anything like social commentary.

Altera Corporation, located in the heart of Silicon Valley in beautiful Northern California, has set the pace from the start in high-performance, high-density programmable logic devices and associated computer-aided engineering (CAE) logic development tools. Our team of professionals is among the best in the business, and we’ve made a solid commitment to continue to grow and expand with only the best.

For the past three years, we have consistently produced record sales results, going from $140 million to over $400 million. As you can see, we set aggressive goals and achieve them.

The Ball’s in Your Court

The time has never been better than now to join an All-Star team of professionals setting league records at a consistent pace. The ball is in your court. We will be interviewing on campus November 4. For interview consideration, please sign up at your Career Planning and Placement Office.

Positions Available:
- Software Engineers
- Product/Test Engineers
- Design Engineers
- Applications Engineers
- Sales Engineers
- Technical Writers
- Finance, MIS….and more!

If you can’t visit us on campus, send your resume to: Altera Corporation, Human Resources, Attn: Heelie Drury, College Recruiter, 2610 Orchard Parkway, San Jose, CA 95134-2020; fax: 408-435-5065; e-mail: hdrury@altera.com. To learn more about Altera, see our home page at http://www.altera.com

We are an Equal Opportunity Employer.

ACADEMY BARBER SHOP
27 N. Catalina Ave., Pasadena
Open Tues.-Sat. 7 A.M.-4 P.M.
(818) 449-1681

PARIS $195
MEXICO $139

20% OFF ALL USED CDs
choose from over 15,000
with this coupon only!
expires 1/1/97

MUSIC EXCHANGE
818.240.6539
Colorado St. Glendale between Brand & Garfield

FLEX 10F 10X 20F 20X 30F 30X 40F 40X

A LEADER in Programmable Logic.
PhD Graduates interested in
Strategy Consulting: Please join us
for an informal reception and
briefing to learn more about our
Associate Program
THURSDAY
November 7, 1996
Beckman Institute Auditorium
4:00-6:00pm
The Caltech Y will be having a Halloween-themed Haunted Mini-Decompression next Thursday on Hal­loween. Come to relax, eat snacks, and watch scary move­ies. It’s your chance to escape the stress of midterms, if only for a few hours.

There is a mountain biking trip this afternoon - stop by the Y to find out the de­tails. The trip is your chance to take your spiffy mountain bike somewhere it’s never been - the mountains!

The second in our bi-weekly series of Weekend Y-Hikes will occur this Sat­urday, 10/26; it will leave from the Y at noon, so show up with a lunch and your hiking boots. The Weekend Y-Hikes offer you the opportunity to get away from the smog­filled L.A. basin and into the San Gabriel or San Bernadino mountains. If you’ve never been hiking be­fore, you’ll like it, so show up on Saturday.

As always, we can use volunteers for several area programs. If you’re a work­study student, you’ll receive $12/hr while participating in a worthwhile activity. See Chris at the Y (x6163) or email sundbergc@starbasea1.

EXERCISE REGULARLY AND YOU COULD LIVE LONGER. INVEST REGULARLY SO YOU CAN AFFORD TO.

A mericans are living longer than ever. So it’s quite possible you’ll spend 20 or 50 years or more in retirement. Can you afford it? Unless you’re indepen­dently wealthy, chances are you’ll need more than your pension and Social Security to support the kind of lifestyle you want.

How can you help ensure that you’ll be in good financial shape? Sign up for TIAA-CREF SRAs — tax-deferred annuities available only to people in education or research.

SRAs are easy. No pain, no sweat. The best way to build strength — physical or fiscal — is to start at a level that’s comfortable and add to your regimen as you go along.

With TIAA-CREF SRAs, you conveniently contribute through your employer’s payroll system. You can start with a modest amount and increase your contribution as your salary grows. The important thing is to start now. Delaying for even a year or two can have a big impact on the amount of income you’ll have when you retire.

TIAA-CREF: Your fiscal fitness program.

TIAA-CREF is the nation’s largest retirement system, managing over $50 billion in assets for more than 9 million people. We offer a wide range of SRA allocation choices, long-term investment expertise, and remarkably low expenses.1 Call 1 800 842-2776 for an SRA Enrollment Kit or our interactive SRA Enrollment Software. Or visit us on the Internet at golphite/tiaa-cref.org, or http://www.tiaa-cref.org.

The best way to build strength — physical or fiscal — is to start at a level that’s comfortable and add to your regimen as you go along.

With TIAA-CREF SRAs, you conveniently contribute through your employer’s payroll system. You can start with a modest amount and increase your contribution as your salary grows. The important thing is to start now. Delaying for even a year or two can have a big impact on the amount of income you’ll have when you retire.

TIAA-CREF: Your fiscal fitness program.

TIAA-CREF is the nation’s largest retirement system, managing over $50 billion in assets for more than 9 million people. We offer a wide range of SRA allocation choices, long-term investment expertise, and remarkably low expenses.1 Call 1 800 842-2776 for an SRA Enrollment Kit or our interactive SRA Enrollment Software. Or visit us on the Internet at golphite/tiaa-cref.org, or http://www.tiaa-cref.org.

1. Standard of Poor’s Insurance Rating Analysis, 1996. Lipper Analytical Services, Inc., Lipper/Standard & Poor’s (Quarterly). For more complete information, including fees and expenses, all mutual funds and variable contracts, call 1-800-842-2776 or write for prospectus. Read the prospectus carefully before you invest or send money. TIAA-CREF Individual & Institutional Services, Inc., distributor TIAA-CREF certificate.

CLASSIFIED ADS

SERVICES–

INTERNATIONAL STUDENTS
Local graduate student available to tutor in English, written and verbal. I have a B.A. in linguistics and a background in a writer’s career. Reasonable rates. (818) 259-9534.

VACUUM PUMP SERVICES–

VACUUM PUMP REPAIR SERVICE CO. Service To Our Business. (818) 472-7777 the service most brands of pumps, including complete remanufacturing. All metal parts are reutilized where needed. Pick-up and delivery available.

ON-CAMPUS VACUUM PUMP REPAIR Your pump never leaves campus. Pick-up and delivery anywhere on campus. Any paperwork/ payment by internal Caltech processing. Call Caltech shop. We look forward to serving you.

RATES ……….. $4.00 for first 30 words… $1.00 for each additional word. Send written ad with payment to 80-06 Deadline is 6 p.m., Monday before issue. No charge for on-campus text & header.

OCEAN CORAL

RESTAURANT

** Award Winner **

Mandarin Cuisine & Seafood
Cocktail Lounge

Lunch Specials $4.95 11:30-3 p.m.
Early Bird Specials $5 3-7 p.m.
Classic Dinners 3-10 p.m.

Food To Go Welcome OPEN 7 DAYS

Tel: 449-8018
2475 E. Colorado • Pasadena
between Sierra Madre Blvd & Altadena Dr.

Free Parking In House
**Womens' Volleyball places fourth in tournament**

BY AMANDA SCHAFFER

The Caltech women's volleyball team finished fourth out of seven teams at the tournament held last Saturday at Braun Gymnasium.

The team's 3-3 record in round robin play was good enough to advance them to the playoff round. Caltech lost to the College of Notre Dame in the semifinals, then lost an extremely close consolation match, 15-7, 15-13, to LIFE Bible College. Pacific Christian College won the tournament with a victory over Notre Dame in the final. Caltech's performance was highlighted by the play of Grace Yang and Janet Sun, who earned All Tournament First and Second Team Honors, respectively. The two were backed by a solid team effort that included contributions from many subs. Coach Maureen Burl said that everyone played well throughout the tournament, and pointed out that the losses during pool play came in close games.
Mints

denotes a new announcement.

Bain & Company
cordially invites the Cal Tech students
to a presentation on career opportunities
in Global Strategy Consulting.

Tuesday, October 29
4:30 PM

PASADENA
(818) 568-3598
A member of Ricketts House infiltrated and sabotaged a Dabney House wilderness mission to reintroduce spotted owls into their native habitat. After succeeding in destroying 12 prefabricated Teflon "Hooter Home" brand owl nests, Josh Adams brutally attacked Dabney resident associate Markus Ehrengruber while shocked Darbs looked on. While Ehrengruber was purifying a potential water hole, Adams clubbed him in the back of the head with a small tree. Ehrengruber fell into the frigid waters of the 'fishbowls,' nearly drowning due to multiple lacerations, splinters, and shock at the lack of LOVE. He was saved by loyal Darbs who braved the water to drag his unconscious body ashore. "And he isn't even a fish," said one wet Dar at the scene. Subsequently, sobbing Darbs carried his body out over 50 miles of abandoned logging roads. Unfortunately, they were forced to leave all twelve of the now homeless owls behind. "I was shocked, simply outraged," said Seth LaForge. "To think that such peaceful purpose could be responded to with absolute brutality is at odds with my loving upbringing in Dabney."

Geoffrey Matters, Dabney’s Nuclear Free Africa consultant to the UN, speculated that the incident was a response to Dabney’s pot rescue mission, which had taken place the previous week. The fact that Ricketts was disturbed by Dabney’s Los Angeles area “make it green, make it keen” urban beautification project is at odds with my loving upbringing in Dabney.”

Last weekend’s outrage was not entirely unprecedented. Three days earlier, Ricketts members had clubbed baby harp seals at their new home in Dabney’s public aquarium (inappropriately referred to as the “hot tub”). The “Luv dem Pups” display had been open free to the Pasadena public for most of the summer. The exhibit is now closed until the blood is scrubbed from the bricks of the courtyard.

Other Scurve atrocities include slash and burn agricultural techniques in the rain forests of Brazil to fuel “the pot” as well as unprecedented oil drilling in the Antarctic for manufacture of such air pollutants as “the acetone bomb”. Such mindless destruction has never been seen before. The pattern of escalation becomes more apparent by the week, while uncomprehending Darbs ask, “Where’s the LOVE, man?”

While their wounded R.A. recovers in an intensive care unit at Huntington Hospit..t, Darbs are planning a tie-dye party in protest of the brutality seen last weekend. Activities will begin around 1 p.m. on Saturday the 26th in the Dabney courtyard. All are welcome, including any Scurves who have realized the error of their ways.
FUCK THE DARBS...