Vice President Quayle Tours CSUS Human Engineering Lab

Vice President Dan Quayle toured the School of Engineering and Computer Science's Human Engineering Laboratory on January 15.

During the tour, Quayle viewed demonstrations on wheelchair design and testing, computer-aided circuit and equipment design, and carpal tunnel syndrome diagnosis and detection techniques. Engineering student Dan Batchelor performed a wheelchair treadmill test as a computer monitored the torque and force he applied to the chair's rims. After the demonstration, Quayle jokingly said, "Good work - you pass."

Following Batchelor's exhibition, wheelchair Olympian Bob Gibson demonstrated a race simulator that tests muscular endurance. Gibson was so excited by Quayle's visit that he pushed his chair to 19.6 miles per hour, a personal record. "I was really impressed at how relaxed, open and down-to-earth he seemed," said Gibson, who said that he had had insomnia for three nights before the visit.

Professor Rory A. Cooper, lab director and Biomedical Engineering professor, said he was pleased with the vice president's visit. "I was impressed with how the students and faculty pulled together for the visit," said Cooper, himself a wheelchair Olympian. "I think it showed what we can do for Sacramento and the University."

Established in Fall 1990 as part of the School's Rehabilitation Engineering Program, the Human Engineering Lab is recognized internationally for its research on the science of wheelchair design, construction and use, particularly in athletics. The lab has helped attract the Wheelchair Olympic spring training camps to CSUS for the past two years. During the camps, the lab conducts endurance, fitness and performance studies on the participating athletes. Sponsored by the U.S. Olympic Sports Equipment Technology Committee and the National Wheelchair Athletic Association, the camp will return to CSUS on April 11-19 in preparation for the 1992 Summer Olympics in Barcelona, Spain.

"The CSUS Human Engineering Lab is doing first-rate research in wheelchair mobility and athletic performance," CSUS President Donald R. Gerth said. "Disabled peoples all over the globe are reaping tremendous benefits".

Marty Ball, left, Colleen Ward and Dr. Rory A. Cooper demonstrate a computer in the Human Engineering Laboratory to Vice President Dan Quayle. Quayle toured the H.E. Laboratory on January 15.
From the Dean’s Desk

Planning for Success

During this period when our nation faces an economic recession and the State of California battles budget deficits, it is understandable why some in public education become very conservative and believe that cutting operations is the only prudent short-term solution to the dilemma they face. What these individuals fail to see is that these are the times when innovative, long-term planning is needed.

Over the past several years, those of us affiliated with the School of Engineering and Computer Science at California State University, Sacramento have worked diligently to establish programs which provide resources to supplement the ever-shrinking state budget. As a result of initiatives such as the Investment in Tomorrow fund development campaign taken in healthier financial times, the School of Engineering and Computer Science is able to continue to offer a high-quality education to its more than 2,500 students. We are not satisfied, however, with our position and plan to continue our innovative approach despite the fiscal contractions that surround us.

To continue the momentum, the School recently launched a new effort: the Industrial Partners Program. The objective of this program is to form mutually advantageous alliances in which Sacramento-based companies provide funds for our academic programs in exchange for access to the School’s human and material resources. We should expect to provide something to companies in exchange for their philanthropy, and we intend to meet these objectives through the Industrial Partners Program.

As has been reported in earlier publications, the School recently completed a $5.5 million fund-raising program against a $5 million goal. The only major fund development effort ever launched at CSUS, this successful venture gave birth to many friendships in the alumni and local communities. It also set the tone for the School’s future fund-raising efforts. The School of Engineering and Computer Science has recently hired the first professional fund-raiser dedicated to a school at CSUS. In so doing, the School is able to augment its declining state budgets with private funds so that our instructional, research and special programs can continue to flourish.

Our innovative approach to higher education precedes the Investment in Tomorrow campaign and the Industrial Partners Program. In the early 1970s, the School initiated a program to prepare and encourage students from historically underrepresented ethnic groups to pursue higher education in technically based disciplines. The result, the Capitol Area Mathematics, Science, Engineering Achievement (MESA) Center, has become the largest center in California and currently serves more than 3,000 students. The Sacramento chapter of the American Electronics Association (AEA) recently chose MESA as a model for a new program to assist and encourage students from Sacramento area schools, regardless of ethnicity, to pursue mathematic and science educations. Through generous support from the private sector, our School has been able to develop programs which address needs of various targeted groups. These programs are now becoming models for similar programs to assist all our students.

Many of our graduates attended CSUS during times of economic prosperity. Unfortunately, those times are gone and are not expected to return in the near future. As engineers and computer scientists, our graduates realize how important their education has been to their professional and personal accomplishments. Only through bold planning and innovative developments can we hope to provide quality education for our future students. The Industrial Partners Program, along with support from our alumni and friends, will permit us to maintain high-quality educational programs designed to build toward a better tomorrow.

Important School Phone Numbers

(Area Code: 916)

Dean's Office 278-6366
Civil Engineering 278-6982
Construction Management 278-6616
Computer Science 278-6834
Computer Engineering 278-6916
EE Engineering 278-6873
Biomedical Engineering 278-6916
Mechanical Engineering 278-6624
ME Technology 278-7081
ECS Computing Services 278-7350
MEP Program 278-6699
Project Success 278-5468
Cooperative Education 278-7234
Assistive Device Center 278-6422
Women's Programs 278-7877
MESA 923-0844
Career Development Office 278-7091
ECS Alumni Office 278-6629
CSUS Alumni Office 278-6295
A Place Where 500 Miracles Happened

One of the University’s best-kept secrets achieved a milestone during the Fall semester. The Assistive Device Center, one of Northern California’s leading rehabilitative technology centers, served its 500th client.

Frank Humberd, a Sacramento man with cerebral palsy, could not speak. In search of help, Humberd came to the ADC. The Center evaluated Humberd and designed a computer system that allows him to type words or select symbols that produce an entire phrase or group of sentences.

“His system works well for Frank because he can spell quite a bit,” said ADC Speech Pathologist Sheridan Whinnery. “He does a lot with the system, which also includes a printer.”

Established in 1978, the ADC offers client services, pre-service education, in-service training, consultation and research to disabled individuals. In its first several years, the Center served only 10 to 15 clients per year. Now more than 100 clients per year seek the Center’s help.

Biomedical Engineering Professor Al Cook, co-director of the ADC, said that the Center tries to assist disabled people to become more independent by increasing their abilities to interact with the environments in their homes, schools, offices and communities.

Located in the new Engineering and Computer Science Building, the Center’s services include augmentative communication, computer access, seating and mobility, and work- and home-site evaluations. Professors from within the School and other academic disciplines like speech pathology, occupational therapy and human development collaborate to assist clients. These clients include individuals like Humberd with cerebral palsy and others with brain injuries, spinal cord injuries, neuromuscular disorders and developmental delays.

Frank Humberd, who has cerebral palsy, was the Assistive Device Center’s 500th client. The ADC celebrated this milestone by holding a reception for Mr. Humberd.
News You Can Use: Job Hunting JETS Into the Future

When starting job searches, many alumni and current students have no idea where to begin looking. Uncovering hidden job vacancies requires a great deal of time and effort, particularly in a recession.

To assist individuals in finding career opportunities and to help employers locate and hire qualified applicants, the School’s Career Development Office has implemented a computer system, the Job Environment Tracking System, to automate the posting of job listings. JETS allows job seekers to peruse its job postings from any CSUS terminal or by modem from home or work. Companies have reported receiving calls from as far away as New York from alumni wishing to return to California. Positions on the system range from student- and entry-level openings to jobs requiring substantial experience. Professional association meetings and job fairs for technical professionals are also posted on the system when received. JETS contains all of the necessary contact information including a job description, job requirements and method of applying.

“Job listings are logged as soon as they are placed with my office,” said Cici Mattiuzzi, director of the Career Development Office. “To stay current, the job announcements get updated or deleted from the system as the circumstances change. The system contains hundreds of positions at any given time.”

Developed as a senior project under the direction of Professors Martin Meyers and Don Warner, JETS has greatly simplified the process by which employers can tap into the pool of available job candidates. With fax machines, E-mail and JETS, linking candidates with companies has been reduced from days and weeks to minutes and hours.

Alumni and students also benefit by the system’s ability to track employment trends, Mattiuzzi said. By tracking demand for the School’s majors and analyzing growth by industry, the system generates reports that detail factors such as occupation, academic major, industry and location to further increase job hunters’ knowledge as they conduct their job searches.

JETS also tracks current labor market conditions and identifies emerging trends. As a result of this analysis, Mattiuzzi predicts that areas of major growth in jobs for technical graduates will occur in the environmental, transportation, healthcare and telecommunications fields, accompanied by a decline in the defense industry.

Mattiuzzi said that civil engineering, computer science, and computer engineering majors have weathered the recession well since demand has remained fairly robust. As expected, fewer job opportunities are available in the mechanical and electronics areas due to contraction in the government, manufacturing, computer and defense sectors.

“Engineering grads from all areas are finding good jobs,” Mattiuzzi said. “It’s just taking longer in some cases, and a more well organized and intensive approach is required to find a career position.”

For more information about JETS, contact Mattiuzzi at (916) 278-7091.

How to Use JETS By Modem

You can use JETS from home or work if you have a modem and communications software. Some communications packages are available free from local bulletin boards.

JETS expects to see a DEC VT100 terminal, and some communications software will allow you to emulate this terminal. If you can’t emulate a VT100, you can still use the system, but your function keys won’t work properly. Trial and error will help you get around. Good luck finding a job!

1. Dial the CSUS system at 456-1441.
2. Type `csus` (note lowercase) at “Welcome to the CSUS ISN Network – SIGNON?” prompt.
3. Hit <ENTER> at the “Password:” prompt.
4. Type `insrv` (note lowercase) at the “Welcome to the CSUS Information System Network – DIAL:” prompt.
5. Hit <ENTER>, <ENTER>, <ENTER> at the “Ringing... Answered.” prompt.
6. Type `c `ccvax4` (note space) at the “Port 17608 1.1 ... NO CONNEC- TION Xr_command.” prompt.
7. Type `engjobs` at the “Welcome to CCVAX4 (8820) of CSUS Computer Center VAX Cluster – USERNAME:” prompt.
8. Type `money` at the “PASSWORD:” prompt.
9. Smile when the machine says “Welcome to the VAX Node...”

If you would like to post a job listing with JETS, please FAX it to (916) 278-5949 or send it to:

Cici Mattiuzzi
CSUS School of Engineering and Computer Science
6000 J Street
Sacramento, California 95819-6023
Student Project Lets Athletes Push Their Limits

Biomedical Engineering graduate student Kimberly Asato recently received national recognition from the U.S. Olympic Committee for her innovative design of testing equipment for wheelchair athletes.

Asato’s project, called SMART-Wheels, measures the exertion of force on a wheelchair’s push- rim. “When a user pushes on the wheel, one parameter we can measure is front-to-rear force to see if the user is hindering his forward motion by holding onto the rim for too long,” Asato said. According to Asato, another version of SMART-Wheels allows for measurement of side-to-side exertion. The analyzed data is used to optimize an athlete’s performance, and also to develop techniques to prevent injuries sometimes sustained by the athletes during training and competition.

Asato developed the project based on prior research by Biomedical Engineering Professor Rory A. Cooper, who assisted her on SMART-Wheels. The wheel has three measuring beams, which look like additional spokes, attached to electronic sensors that detect imperfections in a user’s push stroke. After the sensors collect the data, a computer analyzes the measurements and determines a user’s stroke tendencies. With the help of video analysis, the computer data allows trainers to maximize a wheelchair athlete’s stroke potential.

Asato’s research project was one of five selected from a field of 37 entries in a recent U.S. Olympic Committee sports equipment design contest. Finalists were chosen on the basis of the project’s relationship to an Olympic sport, with the goal of creating better equipment to improve athletic performance. The only project concentrating on wheelchair athletes, SMART-Wheels earned Asato honorable mention in the competition. Asato, a Hawaiian native, was the only finalist selected from a California university.

After earning her bachelor’s degree in biology from the University of Hawaii, Asato completed a second bachelor’s degree in Electrical and Electronic Engineering at CSUS. She plans to continue her work with a research and development center or university after she completes her master’s degree.

In Memoriam: Professor Vivek D. Wagle

Professor Vivek D. Wagle died January 10 in an accident while he was visiting family and friends near Bombay, India. The accident also claimed his 5-year-old son, Ninad.

Dr. Wagle joined the School’s faculty in September 1984 after earning his doctorate in civil engineering from Texas A&M University. While at CSUS, he taught classes in Civil Engineering and Construction Management. He received the CSUS Meritorious Performance and Professional Promise Award for superior contribution to instruction in May 1988 and the Tau Beta Pi Outstanding Civil Engineering Faculty Award in 1986.

A registered professional engineer, Dr. Wagle’s scholarly interests included structural mechanics, bridge engineering, earthquake engineering, structural optimization and computer-aided structural analysis and design.

Dr. Wagle is survived by his wife, Seema, and 8-year-old daughter, Shruti.
**Lennanes Donate $100,000 to School of Engineering and Computer Science**

Former Sacramentans James and Susan Lennane donated $100,000 to the School of Engineering and Computer Science for the acquisition of the next generation of computer equipment.

The contribution follows a $275,000 gift which the Lennanes made last April. Both donations are being used to support programs and provide equipment for the School’s new building.

“We are educating tomorrow’s engineers and computer scientists today,” Dean Donald H. Gillott said. “The Lennanes recognize that and, through their gifts, are helping us remain on the leading edge of technology.”

CSUS President Donald R. Gerth said the Lennane’s gift is a significant contribution to the School’s mission.

“To maintain its leadership in education, the School must continue to effectively anticipate and serve the demands of a forward-looking society,” Gerth said.

James Lennane founded Systems Integrators, a Sacramento-based company that makes computer systems for newspapers. After selling the firm in 1988, the Lennanes moved to Naples, Fla., and founded Lennane Turbine Vessels.

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**Industrial Partners Program Heads School’s Fund-Raising Efforts**

The School of Engineering and Computer Science is continuing its fund-raising efforts by establishing an Industrial Partners Program. The Industrial Partners Program will provide a jointly advantageous alliance between the School and Sacramento-area corporations through direct interaction with CSUS faculty, students and facilities.

Since member companies will pay an annual entry fee to join, the program will also provide revenue for the School. “This program will help us deal with the significant budget cuts we face,” said Assistant Dean Larry A. Hill. “Without help from non-state funding sources, the School will have to find painful ways to compensate for budget decreases, which could mean program cutbacks and enrollment caps.”

Funds raised from the Industrial Partners Program will provide for graduate fellowships, faculty development, equipment acquisition, staff development and capital improvements. Curriculum innovation efforts and pre-college outreach programs such as the Mathematics, Engineering, Science Achievement program will also benefit.

In return for their support of the School, member companies will have access to and use of School and University facilities, including the School’s electron microscope, CAD center and microcomputer facilities. Companies also will receive placement services, professional development opportunities for their employees, and faculty access, including consulting and company site visits. “I’m excited about this prospect because it is a new way for businesses and the School of Engineering and Computer Science to mutually support one another where business gets so much in return,” said Sharon Margetts, immediate past-president of the Sacramento Chamber of Commerce.

“Through partnerships with industry, the School will assist the School in graduating top engineering and computer science students capable of addressing the concerns of today’s engineers and of anticipating tomorrow’s opportunities,” Gillott said.

“The state can provide funds for an adequate engineering and computer science education, but adequate just isn’t good enough.”
Program Notes

Project Success

Project Success held its first year-end board meeting on December 13, 1991, at Aerojet corporate headquarters in Folsom, Calif. Benjamin Montoya, Senior Vice President of Pacific Gas & Electric Co., chaired the meeting of industry sponsors and student fellows. Project Success matches underrepresented engineering and computer science students with full-time, paid internships during summers and school breaks plus one or two cooperative education assignments. The program reduces a student's graduation time from an average of eight years to an average of five years by providing students with financial support. For more information, contact Jaime White, Project Success coordinator, at (916) 278-5468.

Minority Engineering Program and MESA

MEP and MESA will hold a golf tournament on Friday, April 10, at Sunset Whitney Country Club in Rocklin, Calif. Proceeds from the tournament will provide science enrichment activities and scholarships for the CSUS MEP and MESA programs, which serve more than 3,000 collegiate, high school and elementary science students in the Sacramento region. The $125 per person donation includes green fee, cart, prizes and a banquet. A banquet-only ticket is $20. For more information or an enrollment form, contact Dean Donald H. Gillott at (916) 278-6366 or MEP Director Madeleine Fish at (916) 278-6699.

Office of Women's Programs

The Office of Women's Programs is coordinating a statewide effort by 24 high school and community college programs to provide technical hands-on activities and industry partnerships to women. The Office of Women's Programs also offers a variety of services, including tours, seminars and speakers for women enrolled in the School and potential female students. For more information, contact Louise Chiatovich, director of the Office of Women's Programs, at (916) 278-7877.

School Honors Outstanding Alumni

Four of the School's outstanding alumni were honored at the Annual Alumni Honors Luncheon on October 22, 1991.

The Civil Engineering Department honored DENNIS N. ATHAYDE, who earned his bachelor's and master's degrees in 1973 and 1974. Upon completing his education, Athayde joined the U.S. Environmental Protection Agency. While at the EPA, Athayde served as chief of the urban non-point source section and coordinated a nation-wide urban storm water run-off program. In 1990, he returned to California and began working as a civil engineer for the Amador County Department of Water Resources.

MARTIN MEYERS received the Computer Science Department's award as its outstanding alumnus. Meyers, who received a bachelor's degree in political science from the University of Florida in 1967, earned a master's degree from CSUS in 1983, graduating with a 4.0 GPA. In Fall 1984, Meyers began teaching in the CSUS Computer Science Department. A two-time Outstanding Professor of the Year, Meyers' primary area of interest is the analysis and design of large-scale software products.

The Electrical and Electronic Engineering Department named MICHAEL J. FUJITA as its outstanding alumnus. Fujita, who received a bachelor's degree in 1989, is working on a master's degree in EEE at CSUS with an interest in optical engineering. He wants to research the integration of fiber optics and lasers into U.S. Air Force aircraft. In addition to his studies, Fujita works at McClellan Air Force Base on the Operational Flight Program for the F-111 fighter plane.

JIMMY GUTIERREZ, the 1991-92 president of the Engineering and Computer Science Alumni Chapter, received the Mechanical Engineering Department's outstanding alumnus award. Gutierrez received his bachelor's degree in 1985 and earned a master's degree in structural mechanics from the University of California, Davis in 1991. He is currently working toward a doctorate at Davis, where he has received a two-year engineering fellowship. Gutierrez has worked as a senior engineer with the Aerojet Propulsion Division since 1985.

Office of Water Programs

The Office of Water Programs sold 49,849 training manuals for operators of drinking water and wastewater facilities to colleges, universities, utility agencies, consulting engineers and operator certification boards during 1991. More than 12,000 students enrolled in the field study training program and 7,761 persons successfully completed the program.
Faculty News

Professors STEVEN E. de HAAS AND JAMES G. SIMES, EEE, received a National Science Foundation Undergraduate Faculty Enhancement Grant to provide two summer workshops on “Using and Teaching the GPIB in the EE Curriculum.” These workshops will bring 32 faculty from across the United States to work for a week in the School’s GPIB laboratory. The laboratory was constructed with funding for the School’s new building and an NSF grant.

Professor TREvor B. DAVEY, BME and ME, was reappointed to a three-year term on the research committee of the Sutter Institute for Medical Research, a division of the Sutter Hospitals.


Professor JAMES W. KHO, CSC, recently presented three papers: “Performance Issues for Message-Passing MIMD Machines” at the Fifth SIAM Conference on Parallel Processing for Scientific Computing in Houston; “Parallel Implementation of Branch and Bound Techniques for MIMD Computers” at the DLSU Computer Conference ’90 in Manila, Philippines; and “Parallelizing Combinatorial Search Algorithms for Optimization Problems” at the National IPSC Users Group in Irvine, Calif.

Professor S.K. RAMESH, EEE, recently completed a feasibility study on optical distance measurement systems for the California Department of Transportation. Dr. Ramesh also will teach a new laboratory course, funded by a grant from the National Science Foundation, on Fiber Optics during the Spring ’92 semester.

Professor RORY A. COOPER, BME and EEE, recently received the CSUS President’s Award for Outstanding Research. Berkeley Press also recently published a book by Dr. Cooper, Signals and Linear Systems.

Professor JOHN CLEVenger, CSC, recently presented an invited paper, “TUGS – A Tool for Teaching Computer Graphics,” at SIGGRAPH ’91, the annual conference of the ACM Special Interest Group in Computer Graphics. Developed at CSUS, TUGS reflects Dr. Cleverenger’s interest in developing tools for teaching computer science.

Professor KEN KERRI, CE, gave a talk on Environmental Pollution in Taiwan before the Ambassadors Club of Sacramento on January 20, 1992.

Professor JAMES L. POST, CE, presented a paper entitled “Beidellite From the Black Jack Trade Dollar Mine and Nearby DeLamar Silver Mine” at the 28th Annual Meeting of the Clay Mineral Society in Houston. He also has presented a discussion on “Stabilizing Compacted Clay Against Chemical Attack” for the April 1992 Journal of Geotechnical Engineering, a publication of the American Society of Civil Engineers.

Professor KATHERINE FERRARA, EEE, has been invited to join the Technical Program Committee of the IEEE Ultrasonics, Ferroelectrics and Frequency Control (UFFC) Society. This committee organizes the annual IEEE Ultrasonics Symposium. In March, Dr. Ferrara will present an invited paper entitled “Maximum Likelihood & Maximum Entropy Color Flow Techniques” at the American Institute of Ultrasound in Medicine meeting in San Diego. A member of the UFFC administrative committee, Dr. Ferrara chairs the IEEE UFFC committee on membership and chapters.

Professor NIKROUZ FAROUGHI, CSC, published a paper entitled “A Pattern Programmable Memory System for Parallel Processing” in the proceedings of the 22nd Modeling and Simulation Conference, May 1991. Dr. Faroughi is currently researching testability issues of VLSI Computing Machines and the Symbolic Numerical Processor.


Professor B.P. LATHI, EEE, recently had a book, Linear Systems and Signals, published by Berkeley-Cambridge Press.

Professor CAROLE MCNAMEE, CSC, recently coauthored a paper entitled “An Overview of Compiler Optimization of Interprocess Communication and Synchronization Mechanisms.” The paper was presented at the 1991 International Conference on Parallel Processing in St. Charles, Ill.

Professor JOAN AL-KAZILY, CE,
is working with Professors CYRUS ARYANI, RALPH B. HWANG and LESTER GABRIEL to develop a practical guide for restoration of highway drainage culverts. The project is funded by the California Department of Transportation and the Federal Highway Administration.

1991-92 Faculty and Staff Grants

Professor RALPH B. HWANG, CE, received a $10,000 grant from the Governor's Office of Emergency Services to conduct dam inundation mapping studies. Dr. Hwang also presented an inundation mapping seminar for the OES in June 1991 at CSUS and published a booklet entitled Revised Sequence of Steps in Inundation Map Preparation for the OES in August 1991.

Professor RORY A. COOPER, EEE and BME, received an $11,900 grant from Quickie Designs, Inc. to develop the hardware and software necessary to test the concept of using a force-sensing joystick to control a powered wheelchair.

MADELEINE FISH, director of Minority Engineering Programs, received a $37,900 grant from the University of California, Berkeley, MEP Office to financially assist the CSUS MEP effort. Ms. Fish also recently received a $50,000 grant from the ARCO Foundation to support a retention counselor and Academic Excellence workshop coordinator.

Professor Emeritus LESTER GABRIEL, CE, received a $1,600 grant from Pacific Corrugated Pipe Co. of Southern California to conduct parallel plate tests on new composite pipe. Dr. Gabriel also received a $3,000 grant from Pacific Roller Die Co. to conduct stiffness tests on "bellows" pipe and a $17,200 grant from Scepter Manufacturing Co. to compare the erosion properties of ULTRA-RIB PVC pipe with those of unreinforced concrete pipe of the same diameter.

Professor CYRUS ARYANI, CE, received an $8,900 grant from the California Department of Transportation to present a class for CALTRANS engineers on the applications of basic statistics.

JIM HAROLD, director of Mathematics, Engineering, Science Achievement, received a $39,600 grant from the Department of Energy to conduct a 5-week commuter pre-freshman engineering research enrichment program for 50 students who became research scholars in 1991.

JAIME WHITE, Project Success Coordin- nator, received a $6,000 grant from the Department of the Interior to support the Project Success program.

Professor KATHERINE FERRARA, EEE, received a $68,500 grant from the National Science Foundation to study wideband velocity mapping strategies in ultrasonic imaging.

Professor FREDERICK H. REARDON, ME, received a $2,500 grant from Cleveland State University to support the development of the Ghorashi-design circular combustor.

Professor ROBIN BANDY, ME, received an $18,400 grant from the Department of Transportation to study the effects of cold and hot work on pitting corrosion of a number of steels with varying carbon concentrations.

E&CS Alumni Chapter News

During 1992, the Engineering and Computer Science Alumni Chapter is focusing on providing better services to the School's alumni.

"We'd really like to bring CSUS and the School of Engineering and Computer Science back to the forefront of alumni's minds," said Jim Obermaier, the School's director of alumni and development. "We're planning to present seminars, hold social events and conduct community service activities to bring alumni back to the School."

The Chapter will sponsor an Alumni Forum on California Water Resource Issues from 8:30 a.m. until noon on March 14 in room 1015 in the School's new building. The Forum, arranged by Dan Hinrichs, CE'69, will feature water resource experts from government and regional agencies, including Don Maughan, Chair of the State Water Resources Control Board.

"In addition to the Water Resources Forum, the Chapter plans to hold periodic seminars on engineering and computer science issues at local companies where we have E&CS alumni," Obermaier said. "Watch your mailboxes for more information on the March 14 event and future activities."

If you would like to participate in the Chapter's activities, contact Obermaier at (916) 278-6629, the Dean's Office at (916) 278-6366, the CSUS Alumni Association at (916) 278-6295 or (800) SAC-GRAD (in California only).
Alumni Notes

The ’60s

DANIEL K. BARBER, CE’67, is Manager of Environmental Engineering for A. Teichert & Son, a Sacramento-based construction and aggregates firm. Before joining Teichert 15 years ago, Barber worked in the construction industry in the Middle East. A registered professional engineer, Barber earned a master’s degree in civil engineering in 1972 from Stanford University.

AUGUST J. BODHAINE, CE’60, is Engineering Manager for the County of Sacramento. He oversees the operation, maintenance and safety of all aspects of the county’s traffic system, including traffic lights, road striping and bridges. He is a registered traffic engineer as well as a registered civil engineer.

LELAND J. HILL, CE’68 and ’69, recently retired as Supervisory Civil Engineer in charge of surveying and construction for the El Dorado National Forest. Hill plans to offer his services as a consultant and to travel extensively. His daughter, Ellen, is currently working toward a biology degree at CSUS.

GARY E. SWEDBERG, EEE’68, owns Energy Design Associates in Auburn, Calif. His firm works with architects to design projects such as hospitals, schools and retail facilities. Swedberg started the firm in 1979.

The ’70s

KENNETH BUTLER, ME’75, is Vice President of Nimbus, Inc., a Rancho Cordova-based medical device manufacturer.

GARY CARLTON, CE’74, is Chief Executive Officer for U.S. operations for the Rancho Cordova-based McLaren/Hart Environmental Engineering Corp. Carlton was instrumental in the startup and expansion of McLaren/Hart in 1977.

AUGUSTINE “JAY” FREDRICH, CE’72, is Chair of the Engineering Technology Division at the University of Southern Indiana in Evansville. Before joining USI in 1979, Fredrich held positions with the U.S. Army Corps of Engineers, where he directed the Institute for Water Resources. In 1989, Fredrich published Sons of Martha, an anthology of readings for young people interested in the civil engineering profession.


PAUL R. PRAZAK, EEE’71, is Vice President of Engineering for Monolith Technologies Corp. in Tucson, Ariz. Prior to joining Monolith, Prazak spent nearly 18 years at the Burr-Brown Corp. as a design engineer, design manager and director of world-wide component marketing. He received a master’s degree in electrical engineering in 1973 from the University of Arizona.

WILLIAM B. SCOTT, EEE’72, is Senior Engineering Editor for Aviation Week & Space Technology. He recently coauthored a book entitled Inside the Stealth Bomber: The B2 Story, which was published by McGraw-Hill.

JIM SEQUEIRA, CE’75, is Assistant Director of the Utilities Department for the City of Sacramento.

The ’80s

DOUGLAS T. BELL, EEE’82, received a master’s degree in telecommunications from UCLA after leaving CSUS. He currently works for Hughes Aircraft Co. in Los Angeles.

RICHARD J. CLIFFORD, ME’89, is a Senior Design Engineer at Parker-Hannifin Corp. in Cleveland, Ohio, where he designs fuel nozzles for gas turbine engines. He is also pursuing a master’s degree in business administration from Case Western Reserve Univ.

JAMES L. HAUG, ME’82, works for Engineering Services, Inc. in Concord, Calif.

ROB J. HEIMBUCH, ME’84, is Project Manager of Robotic Welding Equipment for Dimetrics Technical Services, an El Dorado Hills, Calif., company.

GREGORY S. HICKS, CE’85, is Assistant Engineer for the South Lake Tahoe, Calif., Public Works Department.

JOHN R. KLEIN, CSC’87, is a Software Engineer developing tools for specialized target machines for Symbol Technologies, Inc. in Costa Mesa, Calif.

ROGER D. LINDER, CSC’85, is a Systems Software Specialist for the California Department of Water Resources, where he heads the Communications Development Group.

GREGORY E. SCHAFER, ME’89, recently received a master’s degree in mechanical engineering from the Univ. of Michigan. He works for the Advanced Powertrain Engineering Division of Ford Motor Co. in Allen Park, Mich.
What's new with you?

What are you doing now? What do you think about this newsletter? What articles would you like to see? After all, this news is for you, so if you’d like to share some information with your former classmates and us, just fill out the following survey. Thanks for your help, and we appreciate your donation of a stamp and envelope!

Name ____________________________ Sex □ M □ F
First MI Last (Maiden)
Name while attending CSUS, if different ____________________________
Degree □ BS □ MS Received Fall _______ Spring _______ 19 __ Major _______
Home Address ____________________________ Social Security ____________________________
Street Apt. City State ZIP
Home Telephone ____________________________ Title ____________________________
Employer ____________________________ Work Address ____________________________
Work Address ____________________________ Social Security ____________________________
Street Apt. City State ZIP
Work Telephone ____________________________
Comments: ____________________________

Please send this to: Alumni Office
CSUS School of Engineering and Computer Science
6000 J Street
Sacramento, CA 95819-2694

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Yes, I want to be involved in the CSUS Alumni Association Engineering and Computer Science Chapter!

Name ____________________________
Name at graduation, if different ____________________________
Street Address ____________________________
City/State/ZIP ____________________________
Employer ____________________________
Employer Address ____________________________
Title ____________________________
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Class Year _______ Degree ____________________________ Major ____________________________

Categories of membership (check one):
□ $35 Annual Individual
□ $45 Annual Joint Spouse
□ $350 Life Individual
□ $400 Life Joint Spouse
□ $40 Annual Friend Individual
□ $50 Annual Friend Joint Spouse

Thanks for your membership!
Please mail this form and your check to:
CSUS Alumni Association
6000 J Street, Adm. 203
Sacramento, CA 95819-6024

or call (916) 278-6295 or 1-800-SAC-GRAD
School Completes Successful Fund-Raising Campaign

The School of Engineering and Computer Science closed its $5.5 million fund-raising effort, the Investment in Tomorrow campaign, on October 30, 1991.

Originally slated to raise $5 million, the campaign provided funding for School programs in robotics, computer-aided design, construction and automated manufacturing. Scores of prominent alumni, friends and corporations supported the effort.

"It is clear that we must look beyond the state for the support that a top-flight engineering and computer science program requires," said Dean Donald H. Gillott. "By participating in this campaign, our donors have become true partners in educating the engineers and computer scientists of the next century."

The campaign’s largest gift, $3.2 million in computer equipment, came from AT&T. The gift included 189 workstations and established an AT&T Presentation and Development Facility, located in the new building, to showcase AT&T’s latest technology.

Other major contributors included NEC Electronics, the ARCO Foundation, the Westinghouse Foundation and the Pacific Telesis Foundation.

James and Susan Lennane, formerly of Sacramento, gave $275,000 to the campaign. James Lennane founded Systems Integrators, a Sacramento company that he sold in 1988. The Lennanes recently gave $100,000 to the School to begin acquiring a new generation of computers.

Timothy D. Taron, a partner in the Sacramento law firm of Hefner, Stark and Marois, was general chairman of the campaign. Other members of the campaign cabinet included Stirling Price Jr., Dr. Gene Amdahl, Kay Backer, Robert Bell, George M. Crandell, David Dawson, CSUS President Donald R. Gerth, Thomas H. Hobday, Edward L. Lammerding, Dorothy Lombard, Rick McBurnett, Peter McCuen, Norman J. Phillips and Ronald W. Smith.

Assistant Dean Larry A. Hill, left, campaign cabinet member Norman J. Phillips and CSUS President Donald R. Gerth enjoy a quiet moment during the Investment in Tomorrow closing ceremony on October 30, 1991.