Remodeled Computer Facilities Opened

The opening of the new Center for Computer-Aided Design and the new Computer Systems Laboratory was celebrated on September 27, 1984. A special afternoon ceremony on the north patio of the Engineering Building was followed by refreshments and informal tours of the remodeled facilities. The completion of this project coincided with the celebration of the 30th year of engineering education at California State University, Sacramento.

Although enrollment has increased more than 900 percent since the present Engineering Building was constructed in 1960, these new facilities represent the first major facility improvement for the School during this period.

The opening ceremonies featured greetings and introductions by CSUS Provost Sandra Barkdull, opening remarks by CSUS President Donald Gerth, and speeches by Dr. William Vandament, California State University Provost and Vice Chancellor for Academic Affairs, Dr. William Cunningham, Assistant to Governor George Deukmejian for Education, and Lieutenant Governor Leo McCarthy. Awards of appreciation were presented to the members of the Sacramento business and industrial community who donated funds, services, and materials in the $600,000 remodeling project.

One half of the west wing of the Engineering building (approximately 10,000 square feet) was completely renovated to provide facilities for the School's instructional and research programs in computer graphics, engineering design, and computer systems design. Leadership in this project was provided by Joseph Benvenuti, President of JB Company, with Frank and Gregg Luanenbill and Frank McCormack, of Luanenbill Enterprises, general contractors and developers. Other significant contributions were made by architects Gary Sills and Grant Caywood, engineers Cole, Yee, Shubert & Associates, Sanford-Alessi Associates, and Peters Engineering. Subcontractors included Harvey Electric, Luchini & Walkup Drywall, Victor Glass, Pacific Supply, Morris Electric Company, and Ellis Plumbing. CSUS Director of Plant Operations Howard Harris and his staff provided overall coordination and backup support.

At the opening celebration, President Gerth and Provost Barkdull voiced their appreciation to those who contributed to the remodeling project. "This facility puts our campus and community in a leadership position," Barkdull said. "Through the generous contributions of our guests seated here, without the use of taxpayers' funds, we were able to accomplish this great task." Gerth focused on future endeavors with the private sector as the main support. "In the years ahead, the difference between outstanding and average programs is going to come out of the private sector," he said.

Representing CSU Chancellor W. Ann Reynolds was Dr. Vandament, who described the growing percentages of California State University-educated engineers and other high-technology workers in the national market. Dr. Cunningham said that Governor Deukmejian wants to make California the head of the nation in education. He said that since 54 percent of this year's budget is committed to education, a close working relation between the private sector and the CSU is important. Lt. Governor McCarthy addressed the issue of high technology and its rapid expansion throughout the lower Sacramento valley, particularly in Sacramento, Yolo, and Placer counties. "In California, one in 48 jobs are in high tech fields; between now and 1990, there will be 20,000 more of these jobs...that's one in eight," he said. McCarthy also noted that CSUS is training leaders in all areas, but like other...
Message from the Dean

In the last issue of E & CS NEWS, my message contained a welcome to our new President, Dr. Donald Gerth, and a statement of optimism for the future of Engineering and Computer Science at CSUS. At the close of the fall semester, that feeling of optimism is strengthened by concrete evidence of significant progress. The renovated facilities for the Center for Computer-Aided Design and the Computer Systems laboratory are in full operation. That project, valued at $600,000 and funded completely by private industry, is a clear indication of the close working relationship which exists between the School and the industrial community it supports. Additional cooperative efforts being planned, including direct electronic communication between the campus and high-technology firms, will continue to make the University a more integral part of the community.

The state of the School and its relationship to the greater Sacramento area are well expressed in an editorial that appeared in a recent issue of one of the major Sacramento newspapers, the Sacramento Union. That editorial stated, in part:

"CSUS President Donald R. Gerth said Thursday that private funding support will be the margin of difference between an average and an outstanding technical program at the university. It may be the margin of difference between attracting more high-technology industries to the Sacramento area or losing them to other communities. Private industry's gift of the remodeled computer center to CSUS is hard-cash proof that traditional Sacramento-area teamwork can give us the edge in convincing firms to invest here. The importance of Thursday's ceremony at CSUS was not lost on government. "This program is precedent-setting," said William L. Cunningham, Gov. Deukmejian's educational advisor. Lt. Gov. Leo T. McCarthy related the importance of the educational computer center to the Sacramento area, which he said is becoming a high-technology center of its own. . . . This is teamwork that will eventually pay off to students, professors, businessmen, and taxpayers."

After many years of frustration with efforts to obtain State support for a new Engineering and Computer Science facility, we now have plans underway for such a facility, with construction scheduled for the 1986-88 time period.

Faculty salaries for engineering and computer science, which have lagged those offered by other major universities, should improve with the contract between the California State University and the system's faculty unit. This contract offers differential salaries for selected engineering and computer science faculty this year and provides a separate salary schedule for all engineering and computer science faculty as of July 1, 1985. These provisions should help significantly in bringing our faculty salaries in line with those of our colleagues across the nation.

Remodeled Computer Facilities (from p.1)

universities, is losing potential educators in the high technology fields to outside job opportunities. "Because the overall performance of this campus and this center is critical to the state, the trustees of the system, of which I am one, must help remedy the situation that calls away professors in computer science and engineering to the private sector," he said.

President Gerth noted in his remarks that the trustees of the 19-campus California State University have approved a $460,000 appropriation for preliminary plans and working drawings for an additional engineering and computer science building at CSUS. The proposed structure, to be occupied in 1988, would cost $11.2 million and double the space available to the School of Engineering and Computer Science.

Refreshment time—the best part of any ceremony.

Faculty Activities

Dr. Frederick Blackwell, Computer Science, was invited to teach an in-house course on Artificial Intelligence to 35 engineers and scientists at the Lawrence Livermore National Laboratory during June and July, 1984. He also served as a consultant at the Laboratory on the development of pattern-recognition algorithms for computer-controlled alignment of the NOVA, the world's largest laser.

Dr. Ajit Virdee, Civil Engineering, has been elected to the Board of Directors of the nationwide Building Seismic Safety Council for the third consecutive three-year term. The Council is active in the earthquake hazards reduction program.

Francios Cheong-Siat-Moy, Civil Engineering, a member of the American Society of Civil Engineers Committee on Compression Members, participated in the Committee's October meeting in San Francisco. At this meeting plans were made for technical sessions to be held at the 1986 ASCE convention in New Orleans.

Jose Granda, Mechanical Engineering, presented a lecture series on the subject of computer-aided design at the National University of Columbia, Bogota, and at the National Polytechnic School at Quito, Ecuador, during August. Dr. Granda discussed the CAD hardware and software used at CSU, Sacramento. His visit laid the groundwork for faculty exchange programs between these universities and CSUS in the future.

E & CS NEWS is published four times during the academic year to inform our alumni and friends about student, faculty, and alumni activities, curricular developments, research results, and other items of interest. We invite your comments and suggestions. Please address all communications to the Editor,

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1985 Alumni Banquet to be Held in March

Peter Ouchida, President of the Engineering and Computer Science Chapter of the CSUS Alumni Association, has announced that the 1985 Alumni Banquet and Awards Presentation will be held on Friday evening, March 22, at the Holiday Inn Holidiome, near Madison Avenue and Interstate 80 in northeast Sacramento. Plans are being made to bring together alumni, faculty, industry, and students, as was done at last year's very successful banquet. The event will feature the presentation of the 1985 Outstanding Alumni Awards as well as good food and plenty of fun and conversation.

More information will be coming your way soon. Mark your calendar now! Call other alumni and make sure they know about the 1985 Alumni Banquet. With your help this will be the biggest and best banquet ever.

Call the Dean's office at 454-6366 to make reservations.

Students are already putting the new facilities to good use.

Prof. John A. Vreeland Dies

With regret we announce that Professor John A. "Jack" Vreeland died November 26 at the age of 59 after a brief illness. He had been a member of the Department of Electrical & Electronic Engineering since 1969. Jack was a popular teacher, who was noted for his concern for his students. He was the E & EE Department's faculty advisor for minority students and served on the Board of Directors of the School's Electric Power Education Institute. A professional engineer, he taught operators at the Rancho Seco nuclear power plant and was a consultant to the California Energy Commission.

Prior to joining the University, he was manager of the nuclear rocket analysis department in the nuclear rocket program at Aerojet Rocket Company, Sacramento, where he worked for nine years. A native of Orlando, Florida, Jack graduated from Presbyterian College in South Carolina, and received his M.A. and Ph. D. in Mathematics and Physics from the University of Wisconsin. During World War II he was an officer in the U.S. Marine Corps. His professional affiliations included the American Physics Society, the American Nuclear Engineering Society, and the American Institute of Aeronautics and Astronautics.

In remembrance of Prof. Vreeland, the E & EE Department has created a scholarship fund for engineering students. Those wishing to contribute should make checks payable to the CSUS Foundation and mail them to:

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Computer Systems Laboratory

The Computer Systems Laboratory was created in 1972. Its first home was a large closet in the Engineering Building. It was equipped with a single minicomputer with a teletype and a paper tape reader. When a second minicomputer and three microcomputers were acquired, the laboratory moved to a classroom in the Science Building. As the role of the System Laboratory in the Computer Science curriculum expanded and new equipment was obtained, increasing numbers of students crowded into it. The Laboratory has been moved numerous times because of overcrowding before its recent location in the newly remodeled facility.

The Computer System Laboratory currently houses eleven 8-bit microcomputer systems to provide students with hands-on experience in both introductory and advanced courses in microcomputer programming and machine organization. Four 16-bit microcomputer systems, each with a complete complement of peripheral devices and advanced hardware support facilities, are used for instruction in computer operating systems. The School's new Perkin-Elmer minicomputer, located in the Science Building, can also be accessed from the Laboratory for a wide variety of courses and special projects. Another new resource for computer systems education is the Model 64000 Logic Development System, donated by Hewlett-Packard.

Advanced design and development projects are in progress, including a microcomputer file transfer system and a local area network system for interconnecting the various workstations in the Laboratory. This network system will be combined with the University's new telecommunications system to provide a versatile, interactive, dispersed facility for instruction and research in advanced computer systems.
PG&E: Committed to Safe, Reliable, Efficient Energy for Californians

Pacific Gas and Electric Company brings gas and electric service to 10 million residents over 94,000 square miles of Northern and Central California. Headquartered in San Francisco, PG & E is the Nation's largest and most diverse investor-owned gas and electric utility. It employs 28,000 people.

The Company's generating plants utilize five sources of energy to produce an electric capacity of more than 16,000 megawatts. Included in the generation mix are nuclear, natural gas and oil fired plants, an extensive system of hydroelectric plants, and the Geysers geothermal facility. The Geysers is the largest facility of its kind in the world and by 1992 will be producing 1.7 million kilowatts.

In gas service, a majority of the more than 600 million cubic feet of gas delivered each year comes from outside California, requiring creative and highly technical engineering and regulatory efforts. PG & E's 35,000 miles of pipeline transports gas from as far away as the Gulf states and Canada to serve 3 million customers.

PG & E has developed aggressive programs in the areas of energy conservation and energy management, and is pursuing the full utilization of economically feasible alternative energy sources.

The challenges facing PG & E have increased significantly in recent years and the Company is meeting those challenges by actively seeking innovative people.

PG & E does much of its own engineering. Company engineers work on the planning, designing, constructing, and operating of all facilities. Many PG & E employees are graduates of California State University, Sacramento. The Company is supportive of CSUS's School of Engineering and Computer Science. Engineering executives from PG & E's Sacramento Valley Region serve on the School's Industrial Advisory Board. This close working relationship between PG & E and CSUS will be a key ingredient in meeting the company's commitment to a safe, reliable, and efficient energy future for its customers.

Alumni Notes

Daniel W. Smith, Civil Engineering '67, currently Professor at the University of Alberta, was a discussion leader at the Sixth Joint ICE/ASCE/CSCE Conference on Civil Engineering in the Developing Nations, held in September in Montreal, Canada.

R. K. Jain, Civil Engineering '61 and '68, is now Chief of the Environmental Division of the U.S. Army Corps of Engineers at the Construction Research Laboratory, Champaign, Illinois.

John C. Fitzgerald, Mechanical Engineering '64, reports that he is the managing director of the western region for Merrill Lynch's public financing department, responsible for financing public projects with tax exempt bonds and notes, working with states, cities, counties, and special districts in the 12 western states. Although his office is in Los Angeles, his work often brings him to Sacramento.

Ardo A. Kasbrian, Mechanical Engineering '70, is an industrial waste engineer with the City of Los Angeles Sanitation Bureau, responsible for monitoring some 200 industrial waste projects in the city. He expresses interest in making contact with other CSUS graduates in the Los Angeles area.

Richard Bittiker, Civil Engineering '71, has been in private practice since 1981, operating a Civil Engineering and Land Surveying Service in Fresno, California.

Darrell Petray, Construction Engineering Technology '80, was recently promoted by Turner Construction to the position of project engineer for a 27-story high-rise office complex in downtown Oakland.

Douglas Mair, Electrical & Electronic Engineering '74 and '79, has opened his own consulting engineering practice, Mair Associates, Inc., at 9333 Tech Center Drive, Sacramento, specializing in control system engineering.

Dennis E. Davis, Civil Engineering '66, currently Chief of the Contract Administration Branch of the Western Area Office of the U.S. Army Corps of Engineers, Vandenberg AFB, California, was awarded the Department of the Army's Decoration for Meritorious Service. He was cited for "outstanding professional ability, imaginative leadership, and noteworthy initiative" during the construction of the $350 million West Coast Space Shuttle Launch Complex.