UC efforts help create a new university in quake-torn Armenia

On December 7, 1988, an earthquake measuring 6.9 on the Richter scale, followed by a 5.8 aftershock, struck the Soviet Republic of Armenia, killing more than 25,000 people, leaving 500,000 homeless, and dealing a staggering blow to Armenia’s economy. However, the seed of an idea from the rubble of that quake has grown into a new institution that may help the republic rebound from its calamity.

The University of California will assist in developing the American University of Armenia (AUA), a private, U.S.-based university of technology and business located near the Armenian capital. The UC Board of Regents approved the plan at its July meeting, after more than two years of work by advocates in the U.S. academic and Armenian-American community.

“This university would be the most important step to help Armenia’s economy as it is trying to rebuild from the earthquake devastation, which was enormous,” said Armen Der Kiurghian, professor of civil engineering at Berkeley and one of the proponents of the proposal to UC. He added that the university would be a regional institution offering advanced education to people throughout the Caucasus, the region between the Black and Caspian Seas in the USSR and neighboring states.

“We hope this proposal will lead not only to a new university to serve the people of Armenia and the Soviet Union, but also to an ongoing student exchange, academic collaboration, and cooperation program between UC and the new university,” said R. Frazier, UC senior vice president for academic affairs and the head of a UC task force that traveled to Armenia and studied the proposal.

“The proposal would enhance the learning, research, and teaching at both universities.”

UC’s involvement in the new university will include training Armenian students through UC’s normal graduate education process; developing a curriculum and an administrative plan; designing the campus; and developing a program of cooperation between UC and the new university. UC will be compensated for all services provided.

The new university will be funded by the Republic of Armenia and the Armenian General Benevolent Union (AGBU), a philanthropic organization based in the U.S.

The idea for the new school was born when Berkeley’s Der Kiurghian traveled to Armenia soon after the 1988 earthquake. He and several of his academic colleagues, along with many fellow Armenia-Americans, nurtured the idea’s growth.

As a member of a National Academy of Sciences team, Der Kiurghian visited Armenia eight after the quake, and he returned in February 1989 as part of an international delegation invited by the Soviet government to discuss reconstruction efforts. During that second visit, the delegates surveyed the ruins of the technical college in Leninakan. Later in the visit, the director of the polytechnic college brought up the possibility of starting an American technical university in Armenia. Searching for a way to help, Der Kiurghian embraced the idea.

Working with fellow delegate Michael Azhian, chair of the civil engineering department at the University of Southern California and one of the proponents of the proposal, Dr. Kiurghian then turned his idea into a proposal. He sent the plan to congressional representatives, government officials, and Armenian-American organizations, including the AGBU.

Der Kiurghian also discussed the idea with Karl S. Pister, then Dean of Berkeley’s College of Engineering. Pister suggested exploring the proposal with UC President David P. Gardner. With the assistance of Stephen Karamardian, former dean of the Graduate School of Management at UC Riverside, the plan was presented to Gardner. The president responded by appointing the task force, headed by Frazier and including Pister and Der Kiurghian, to examine the possibility of providing educational and administrative support. The committee reported to Armenia in July 1990.

Task force members were impressed with the country’s rich human and cultural resources. Primary and secondary education for Armenian students was already well-established, and financial support was available. The task force recommended that UC develop a university in Armenia.

Former Dean leads UC Santa Cruz

Karl S. Pister, former Dean of Berkeley’s College of Engineering, assumed the post of Interim Chancellor of the University of California campus at Santa Cruz on August 1.

His nomination was approved by the UC Board of Regents at their May meeting.

The former Dean will serve a two-year term, until a permanent Chancellor is named for the campus. He is charged with continuing the campus’s thrust into the information age.

The campus was originally organized as a cluster of residential “villages,” and Pister plans to change this focus on undergraduate education.

For many years, Santa Cruz students were given written evaluations but no grades.

Pister believes that the basic structure of the school is sound, having been reviewed in recent years, and revisions are expected. For example, while 90 percent of the campus’s 10,000 students are enrolled in bachelor’s degree programs, the number of graduate programs is on the rise.

In another change, Santa Cruz is expected to offer an engineering curriculum in the future.

Pister joined the civil engineering faculty at Berkeley in 1952 and served as Dean of engineering from 1985-90. At Santa Cruz, he replaces Robert B. Stevens, who retired after four years as Chancellor to join London law firm.

Billie L. Greene, who was Assistant to the Dean during Pister’s term at Berkeley, also joins Santa Cruz. She will serve in the office of the new Chancellor as special assistant to the new Chancellor.

Shank

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security and prosperity.

The alumni society citation recognizes Shank for his “pioneering research in cortical roles and layers and his leadership in administering vital medical research.”

At the EAC dinner, the award was presented to EAC President John T. Chaudhuri, who is Shank’s professor at Cal. “It is no secret that we professors learn much from our students as they do from us,” he said, “and that is certainly true in Chaudhuri’s case.”

Shank responded that he was pleased to win the award and honored to receive it from Whinnery.

Composer gives Kennedy Lecture

Berkeley’s Center for New Music and Audio Technologies, in cooperation with the Interdisciplinary Studies Program in the College of Engineering, brought French composer Jean-Claude Risset to campus this spring for a lecture and concert.

Risset’s talk, “Trends toward Integration in Computer Music,” and his concert the following day were presented as part of the College’s Kennedy Lecture Series. Supported by the H. Dene Weber Foundation and the Geza Dricoll Kennedy Endowment Fund, the series was established at Berkeley to explore and strengthen the connection between engineering and the arts.

Risset worked at Bell Laboratories to develop the real-time resources of computer sound synthesis, and he is currently research director at the Centre National de la Recherche Scientifique in Marseilles.
Two Cal profs join ranks of National Academy

Two Berkeley civil engineering professors will be inducted this fall into the National Academy of Engineering (NAE), the highest professional honor for an American engineer.

The new Berkeley members are Richard E. Goodman in geotechnical engineering, and Robert L. Taylor in structural mechanics, both in the Department of Civil Engineering.

Their election brings the total Berkeley faculty membership in the Academy to 61, among academic institutions, Berkeley has one of the highest representation in the Academy, with about seven percent of the total members being Berkeley faculty or alumni.

Prof. Goodman was recognized for contributions to engineering education and research to geological engineering and rock mechanics. He joined the Berkeley faculty in 1964.

In 1984, the U.S. National Commission for UNESCO honored him with its Basic Research Award.

Cal Engineer
hosts convention, reaps awards

The UC student magazine California Engineer hosted the 1991 annual Engineering College Magazines Association (ECMA) Convention in Berkeley, and the publication took the lion's share of awards for students.

Nineteen college engineering publications entered the competition conducted by ECMA, a national organization dedicated to improving engineering communication.

Cal Engineer's attractive covers earned the magazine two national honors, for both best single cover and best cover in all issues.

The UC magazine won second place awards in categories for all-around magazine, editorial, layout, and art direction. It also won a second place award for the best non-technical article.

Third place prizes were awarded to Cal Engineer for art photography in a single issue and for an article for readers with a general science background. An honorable mention was awarded for the best technical article.

The magazine is headquartered at Berkeley and published to serve engineering departments on UC campuses at Berkeley, Davis, Irvine, Los Angeles, San Diego, Santa Cruz, and San Francisco. The members of Berkeley's Engineering Alumni Society (EAS) receive the publication by mail free of charge.

Thirty delegates from college engineering publications around the country took part in the convention.

Participants attended morning workshops led by Berkeley engineering faculty members and then took part in an afternoon forum on successful production methods.

Dean David A. Hedges welcomed the delegates at the start of the convention activities. Guest dinner speaker was former astronaut James van Holten, senior vice president at Boeing International and a member of the EAS board.

Partial support for the convention was provided by the College of Engineering and by the Engineers Joint

In addition, he received the E. B. Burwell Award from the Geological Society of America in 1977, the Rock Mechanics Award from AIME in 1976, and a Guggenheim fellowship in 1972. He has also served as president of the Geological Engineering Foundation.

Robert L. Taylor
Research Council Visiting Fellow in Britain in 1976.

He became a Special Fellow of the National Academy of Engineering in 1964.

Taylor, who joined the Berkeley faculty in 1963, was honored for his research and applications of finite element methods in structural mechanics and other areas. He was also cited for educational leadership in this field.

Taylor specializes in computational mechanics, computer software, and algorithms for solutions of algebraic problems.

He was named an Honorary Fellow of the University of Wales in 1988, and he was a visiting professor at University College in Swansea, Wales, as a Honorary Fellow of London Royal Society in 1984. Prof. Taylor also served as a Science

Abu Zayyad

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He went to work at IBM in 1962, rising through the ranks to top positions, including president of its General Products Division, where he was responsible for 15,000 employees, occupying 10.5 million square feet of space, and producing some 50 different product lines. In 1967, IBM appointed him president of ROM Corporation. After negotiating the recent sale of ROM to Siemens, Abu Zayyad stayed on as president and CEO.

This past summer he returned to IBM as vice president and president of the Storage Systems Division, headquartered in New York. In the new post, he oversees worldwide development and American manufacture of IBM storage products, high end processors, and related software.

Abu Zayyad's professional success is equated by the positive impact he has had as an advocate for engineering education and research in California. He serves on campus advisory committees at Cal Poly, San Jose State, Santa Clara Stanford, and in Berkeley's College of Engineering.

In addition, he is a guiding force in the Technology Center of Silicon Valley, which encourages young people to study science and technology and works to improve scientific and technological literacy in the general public.

Abu Zayyad played a significant role in helping the center raise $5 million, used to initiate a teacher training program last summer and a science and technology learning center opening this fall in San Jose.

Warren Baker, president of Cal Poly at San Luis Obispo, has said, "There are a number of people who bring special engineering insight into U.S. industries. They are hardworking, intellectually honest, innovative, and humble. But few possess all of these qualities and have the sincere interest that Ray does in developing our educational institutions."

The EAS award cites Abu Zayyad for his "accomplishments in technical management and his dedicated service to the professional engineering community."

Accepting the award, Abu Zayyad said the EAS honor is "one of the highlights of my entire career." He added, "There is a recipe for winning_treat people with dignity and respect_ and you will receive the dividend of others' support."

He noted that education at all levels is the key to the future technological success of the United States.

"We talk a lot about competitiveness and I am convinced that the only way to accomplish it is through education and through alliances with industry, communities, and schools," he said. He said engineers need to work with people in the business world to be able to deliver the message that "science and engineering are the key ingredients for success."<br>

Gerwick

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After earning his bachelor's degree in civil engineering from Cal in 1940, he spent five years in the Navy, serving as commanding officer of the USS Scania from 1944-45. After the war, he entered construction engineering practice, first with Ben C. Gerwick, Inc., and later as executive vice president of Santa Fe-Pomroy, a firm engaged in interdisciplinary construction.

For the past 20 years he has been remarkably energetic and resourceful.

When Gerwick enlisted to join the faculty in 1971, he brought with him a practical knowledge of problems and people that has made his contributions to the success of his program unmatchable.

By presenting his students with real-life problems, he helps them understand the "people side" of engineering and the need for interdisciplinary cooperation and creativity in the profession.

A prolific researcher, he is the author of three books on construction.

For his work, Gerwick was elected to the National Academy of Engineering and to honorary membership in several professional societies in Norway, Sweden, Germany, France, and Britain.

He holds the highest honors from ACEC and the American Concrete Institute, of which he is a past president. In his retirement, he and his wife, University last year, Gerwick was awarded the Berkeley Citation, the campus' highest honor.

Gerwick was honored by EAS for his "development of creative techniques for concrete construction, particularly for offshore structures, and his contributions as an engineering educator."

Gerwick told the EAS gathering that he is "proud to join the outstanding group of past recipients of this award and to proud to be a member of this society." He said EAS activities help integrate industry and academia, for the benefit of both.

This organization is doing an extremely significant part in helping our society, recognizing the importance of the engineer," he added.

Three engineers named AAAS Fellows

Three professors in the College of Engineering, among seven others from Berkeley, have been elected as Fellows of the American Association for the Advancement of Science (AAAS), giving Berkeley the most honors of any institution this year.

Those honored from the College of Engineering are Van P. Carey of mechanical engineering and Susan L. Graham and Richard Karp, both of computer science.

With more than 132,000 members, AAAS is regarded as the nation's leading scientific organization. A Fellow is one "whose efforts on behalf of the advancement of science or its applications are scientifically or socially distinguished."

A total of 280 Fellows were elected this year.