



DOI: 10.32604/cmescs.2021.019500

EDITORIAL

Celebrating the 95th birthday of Professor Karl S. Pister

Supplements

Received: 27 September 2021 Accepted: 28 September 2021

Professor Karl Pister and Mrs Rita - Wedding, St Leo church, Oakland, Nov 1950



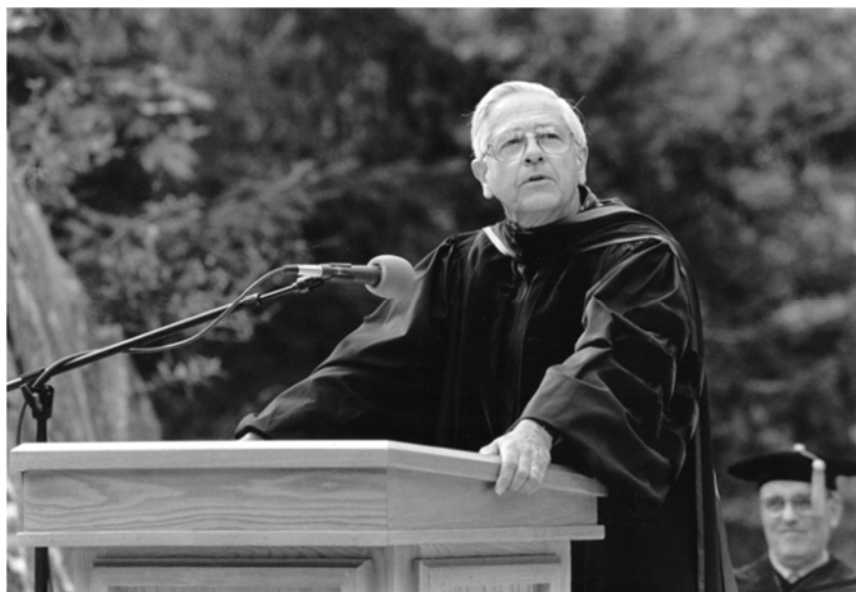
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Young Pister family in 1965



Professor and Mrs Pister with children: Francis (2nd from right), Therese, Anita, Jacinta, Claire, Kris.

University of California at Santa Cruz Chancellor Karl Pister



UC-Santa-Cruz-Chancellor Karl Pister wearing pearls



Retirement party for Ms. Billie Greene by UCSC Chancellor Pister and Mrs Rita Pister in 1996.

On the inset photo, Ms. Bille Greene wrote:

“In spite of the long hours and demands of administrative work, Karl Pister could (and did) have fun. One of my favorite images of him is from a dinner hosted by Chancellor and Mrs. Pister in my honor in 1996. Chancellor Pister was a “good sport” and had a wonderful sense of humor. He (and all the guests) was wearing a strand of pearls and pearl earrings in recognition of the “iconic” pearls I was famous for wearing.”



Grade 3 students from [Aromas Elementary School](#) (40 min south-east of UC Santa Cruz) interviewing UC Santa Cruz Chancellor Karl Pister on 1996 Apr 19.

First flight of a tumbling large-deformable spaghetti



The late **Professor Juan Simo** (then a postdoc) and Professor Loc Vu-Quoc (then a PhD candidate) in 1985 after Loc successfully simulated the flying spaghetti (geometrically-exact beam) the night before. On the monitor was Fig.4 “The flying spaghetti” (in color) in Simo & Vu-Quoc 1986, “[On the dynamics of flexible beams under large overall motions](https://doi.org/10.1115/1.3171871)”, <https://doi.org/10.1115/1.3171871>.¹



Professor Juan Simo (on a knee chair), Professor Robert (Bob) Taylor (3rd from left), Professor Woody Ju (right), Professor Loc Vu-Quoc (left), at Bob’s house, circa 1985.

¹ This photo was taken in Professor Robert Taylor’s office on the 7th floor in [Davis Hall](#).

Professor Alexander Humer



“The photo shows me on the mountain pass of the '[Großglockner-Hochalpenstraße](#)', which I climbed by bike (from both sides) in summer 2020.

The jersey was from 2007, which was about when my interest in road cycling grew and, at the same time, I first came in contact with Karl Pister’s work.”

Editor’s note: Alex’ bike cost like a Ferrari of bicycles. LVQ

Professors Hans Irschik and Alexander Humer



Discussing the *Lu-Pister* multiplicative decomposition in thermoelasticity and the *Simo-Pister* material law during the pandemic in May 2021 to contribute a paper in the Karl Pister special issue.

In particular, they connected the works of the Austrian school on thermal stresses, represented by Ernst Melan, Heinz Parkus and Franz Ziegler, and the *Lu-Pister* multiplicative decomposition.

The resulting material law was implemented in a 2-D geometrically-exact beam (see the above flying spaghetti that started an industry of simulating flying large-deformable structures), and in a beam formed by 3-D solid elements for comparison.

Professor Izuru Takewaki

Professor Takewaki, his wife and son, at Professor Pister's home, Lafayette, California, in July 1990.



Professor Takewaki and Professor Pister, [Davis Hall](#), Berkeley, on 2017 Sep 11.

Dr. Sheila Humphreys



At a graduation ceremony in 1987 on the Berkeley campus.



Dean Shankar Shastry, Professor Karl Pister, Dr. Sheila Humphreys, Dr. Gary May, son of former Dean Ernest Kuh, Sutardja Dai Hall, UC Berkeley, March 2017.

Dr. Sheila Humphreys and Dr. Gary May receiving Mentorship Award from President Obama

Dr. Sheila Humphreys (blue jacket in front), along with alumnus Gary May (PhD '91, gray suit in the center), receiving the [2015 Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring](#) (Internet archived on 2021.06.09) from President Obama (Official White House Photo by Pete Souza)

Chancellor Gary S. May leading UC Davis “To boldly go where no man has gone before!”

[Hoping Gary May Will 'Boldly Go'](#) (Internet archived on 2021.04.19) - (credit Josh Meister/Georgia Tech Alumni Magazine)

Dr. Paula Hawthorn



Dr. Paula Hawthorn (right) of the Lawrence Berkeley Lab, and Marina Mann of the Federal Reserve Bank (left), Women in Engineering Conference, UC Berkeley in 1984. Credit: Peg Skorpinski

Ms. Billie Greene, Dean Pister, Dr. Sheila Humphreys



A retirement party at the Faculty Club on the Berkeley campus in the 1980s.

Professor Ekkehard Ramm

Dr. Ramm, working as a postdoc in his cubicle in [Davis Hall](#) in July 1973.



Professor Karl S. Pister presenting a picture award during his dinner speech at a conference in Bregenz, Austria, in May 2001 on the occasion of Professor Ramm's 60th birthday.



Professor Pister and Professor Ramm on a field trip to the Golden Gate Bridge in July 2013.

Professor Constance Lütolf-Carroll



Professor Lütolf-Carroll (2nd from left) and her Berkeley study-group friends, left to right: Dan Chitty (Valedictorian of her class of 1977, who later earned a MS degree in Civil Engineering at Berkeley), Patty McNamee (her best friend and vice president of the Society of Women Engineers, when she was president), Alan Hernried (who later earned a Berkeley PhD degree in Civil Engineering).



Professor Lütolf-Carroll and her study group at the graduation ceremony in the Greek Theater.



Prof. Lütolf-Carroll in a turnaround shift on the pipestill unit at the Exxon Benicia refinery in 1980.

Professor Alice Agogino



Dean Karl Pister was looking at Professor Agogino hooning her first PhD student, Pramod Jain, in May 1989 at the Greek Theater on the Berkeley campus.

Pramod Jain's dissertation was titled: "A Vector Quantization Multistart Method for Global Optimization".



Professor Agogino signed Corie Lynn Cobb's doctoral dissertation in 2008 with title: "Case-based Reasoning for MEMS Design Synthesis"



Professor Alice Agogino and her graduate students and undergraduate researchers, circa 2016

University-of-the-Pacific President Pamela Eibeck, Inauguration Ceremony, Mar 2010



Chair-of-the-Board Tom Zuckerman (left), Pam Eibeck, Karl Pister, Stanford President Hennessy.

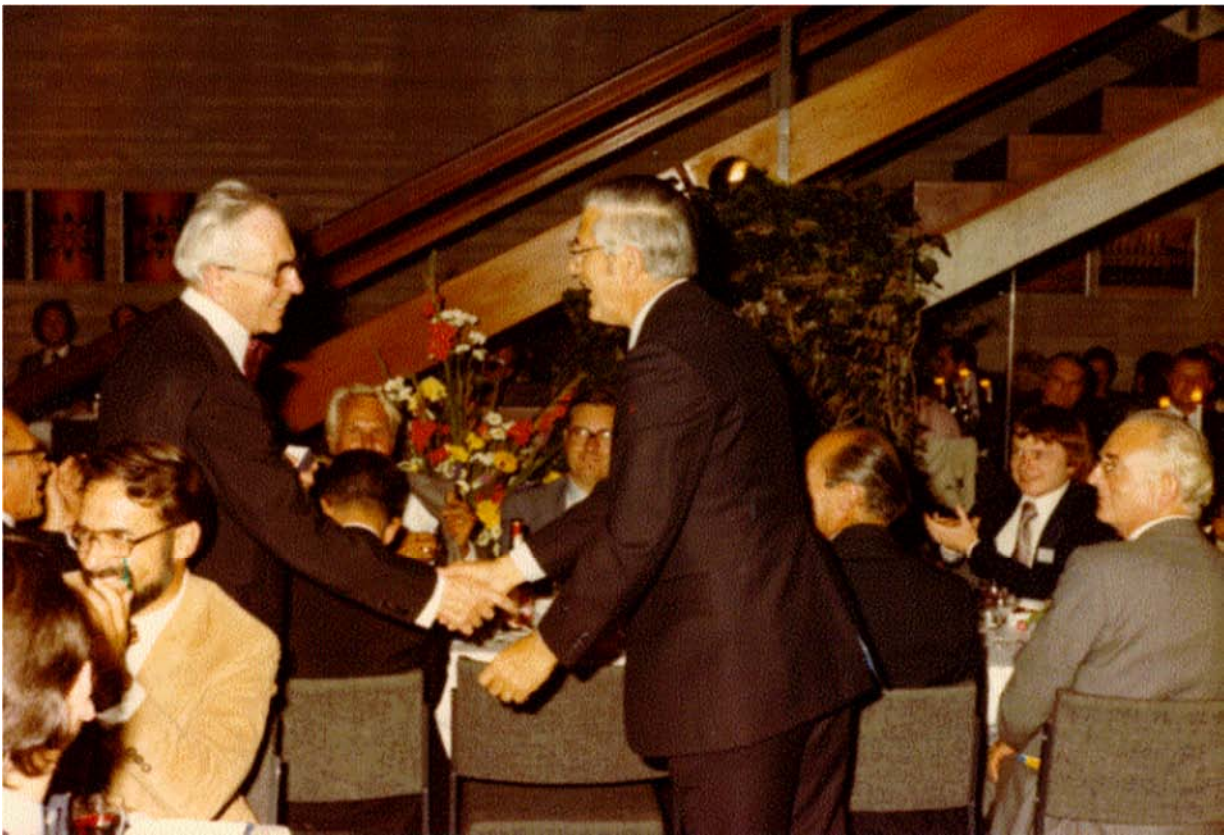


Karl Pister speaking at Pam Eibeck's Inauguration Ceremony, Mar 2010, Stockton, California.



President Eibeck's Inauguration (left to right): Pam Eibeck, Karl Pister, John Hennessy (President of Stanford), Bob Corkern (Regent), Morrison England (Regent), and Connie Callahan (Regent).

FENOMECH 1978



The 65th birthday celebration for the late Professor John Argyris (left), seen shaking hands with Professor Pister, with Professor Thomas Hughes (sitting second from right, clapping hands), the late Professor Ray Clough (far left, at the edge of the photo, behind Argyris, in partial profile, clapping hands), the late Professor O.C. Zienkiewicz (gray hair, between Argyris and the flowers, with his lower face hidden behind the backhead of someone sitting in front).

Historical interaction between Clough and Zienkiewicz: “When Clough presented the first paper using the finite element terminology in 1960 it attracted the attention of his friend, Professor O. C. Zienkiewicz, who was then on the faculty at Northwestern University. A few weeks after the presentation of the paper Zienkiewicz invited Clough to present a seminar on the finite element method to his students. Zienkiewicz was considered one of the world’s experts on the application of the finite difference method to the solution of continuum mechanics problems in Civil Engineering; therefore, Clough was prepared to debate the relative merits of the two methods. However, after a few penetrating questions about the finite element method, Zienkiewicz was almost an instant convert to the method.”
 Ref: R.W. Clough and E.L. Wilson, [Early Finite Element Research at Berkeley](#), Fifth U.S. National Conference on Computational Mechanics, Aug. 4-6, 1999, ([Internet archived on 2020.10.27](#)), where there was a description of how Professor Pister participated in the development of the FEM. A photo Prof. Clough is in the Biographical timeline. A photo of Prof. Zienkiewicz is on p.26 of R.L. Taylor “[My fifty years with finite elements](#)”, Venice, Italy, Jun 2008 ([Internet archived 2021.06.07](#)).

Professors Thomas Hughes, Robert Taylor, Ted Belytchko


Editor's note: The origin of "On friendship: Our secret regret of growing old".

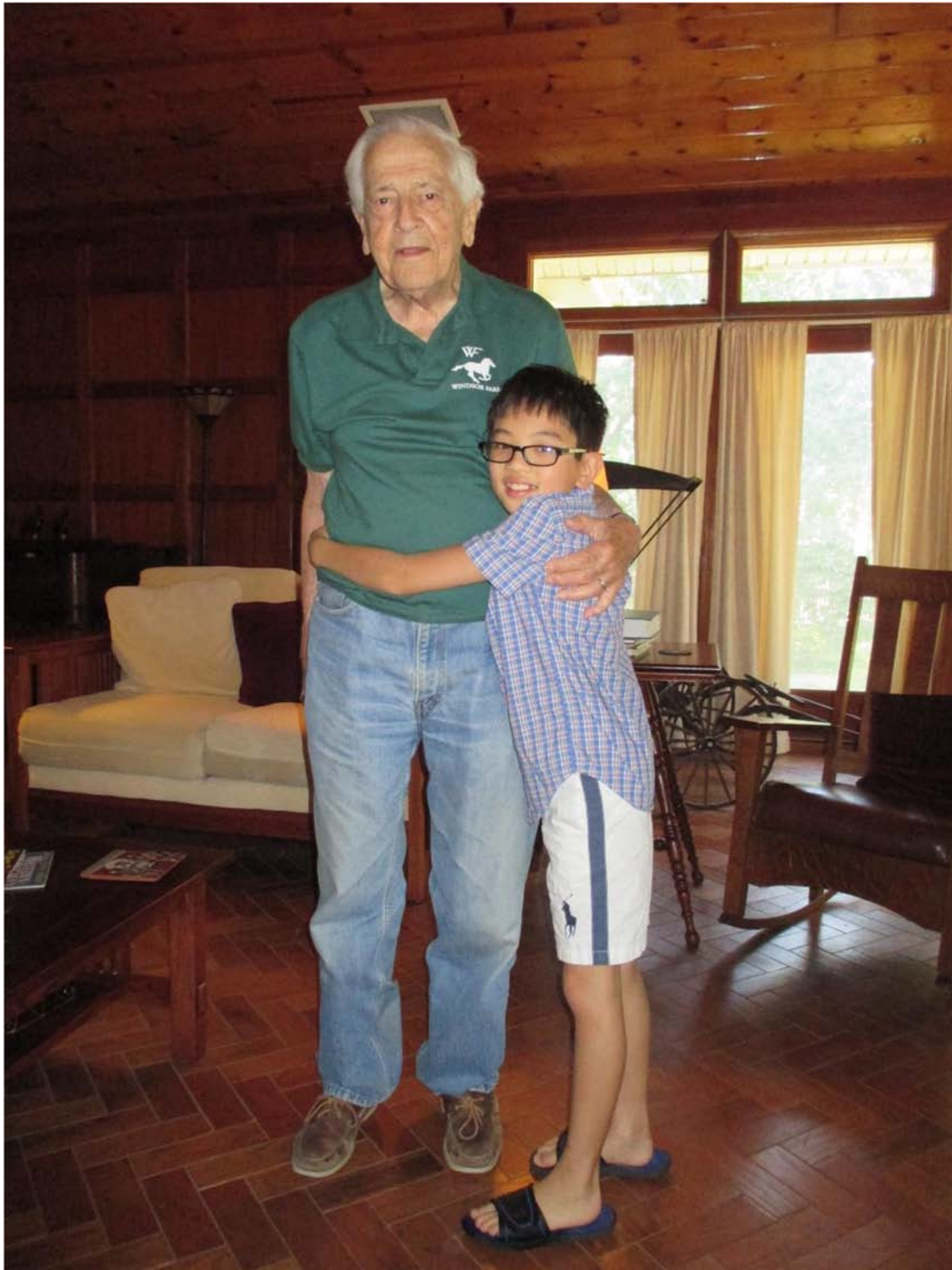
When we started the Karl Pister special issue, I was looking for Professor Ted Belytschko to invite him, and instead found an obituary for Ted, who had passed away some six years prior, in 2014, after a long illness. I then told Professor Shaofan Li that Professor Tom Hughes would miss Ted a lot, since they were very close friends.

Later, I was looking for photos of old Berkeley engineering buildings for possible use, and found those photos in Professor Robert (Bob) Taylor's talk slides "[My fifty years with finite elements](#)", Venice, Italy, Jun 2008 ([Internet archived 2021.06.07](#)). The real bonus was, however, a portion of the above photo and the beginning of Tom's 1975 lecture notes (see the Memory-lane section).

When I later used a photo of Tom (above left), cropped from a photo in Bob's talk slides, as an example to ask participants for their old photos, Tom said his photo came from a photo with Bob (middle) and Ted (right) at the FENOMECH 1978 conference. The friendship of Tom and Ted reminded me of the passage in St Exupéry's *Wind, Sand and Stars*, where friendship was described as a garden, the gate to which was "forever locked against us" after the friend had "slipped away", as quoted in "On friendship", which I first shared with Tom and Shaofan.

Some ten months later, on Professor Pister's birthday, 2021 Jun 27, I searched the Web, but did not find the photo using different combinations of the three names (Tom, Bob, Ted) and FENOMECH 1978 until I looked for "[tom hughes ted belytschko](#)" and found the photo in [Ted Belytschko. A Single Point of Integration](#). ■ LVQ

The two Karls: Karl Pister and Karl Vu



Stockton, California, Summer 2017