

If a teacher is measured by the attainments and professional standing of his former students, the name of David Mathias Wilson of the University of Southern California must be counted one of the greats on the civil engineering scene of Southern California. The names of his class lists of 20, 30 and 40 years ago read like a "Who's Who in Civil Engineering" of the Pacific Southwest. Roy G. Johnston, President of the California Board of Registration for Professional Engineer; Rodney P. Lundin, President of Koebig & Koebig, Inc. and a past national president of Chi Epsilon Fraternity (civil engineering honor fraternity); George E. Brandow, Past President, Los Angeles Section, American Society of Civil Engineers, and Engineer of the Year, Institute for the Advancement of Engineering, 1971; and Harvey T. Brand, Los Angeles County Engineer, will suffice for examples.

If, in addition, a teacher is measured in some way by the reverence and affection his former students hold for him, then Dave Wilson has got to be one of the all-time greats, in any field of education and in any place. So great was the fondness and esteem felt for Dave Wilson by his students and former students that they banded together on May 28, 1958 to form the *David M. Wilson Associates* support group. I have a membership plaque on my wall, and it reads, "Formed in honor of David Mathias Wilson, devoted educator, outstanding engineer, understanding counselor and friend." The Wilson Associates was formed in order to support civil engineering at USC. Today, fifteen years after Professor Wilson's death, it continues to thrive, counting its memberships in the hundreds. It remains the only support group — among a great many at USC — named after a single professor.

There has got to be a message there, somewhere.

The message is simple and one which applied to Dave Wilson every day of his life: "Students are the first priority of the true teacher." I never had the pleasure of taking a class from Dave Wilson but I have talked with countless alumni who remember one occasion or another where he went out of his way to help them. It was not that Prof. Wilson was a spellbinding orator in the classroom, or that he cracked jokes so as to make his classes entertaining



DAVE WILSON OF USC

... "One of the all time greats in any field of education and in any place."

THE ENGINEER AND SOCIETY

Dave Wilson of USC: Students Were His First Priority

By ALFRED C. INGERSOLL, P.E.

Associate Dean, Continuing Education
UCLA School of Engineering and Applied Science
President, IAE College of Fellows



and popular. We all know teachers who and good at these things, but such is not the stuff which inspires students and alumni to dig into their pockets to join support groups.

No, students were inspired not by the outward teaching of David Wilson but by the person who showed through the teaching. They *knew* that they were his first priority, that if they had some kind of problem they could count on help from him. Their problems might be anything from a tough nut to crack in the next day's assignment, getting a job or a promotion, running for student office, or even a personal problem with family or girl friend. They knew he would put aside other things to help them in every way he knew how. And he would do it *every* time. When that kind of dedication is displayed over a teaching career of 35 years one can see the makings of something like the Wilson Associates. It is little surprise that this organization is still in a class by itself.

Let me not discount the teaching genius that David Wilson revealed in the classroom. "He could take the most extraordinarily complex situation," recounts one former student, "and break it into parts that one could understand. Each element was developed and explained fully, until we were ready to go to the next. When we found that we could follow this same procedure, even without his guidance, we began to feel confidence in our technical competence. We were becoming professionals!"

Long before the term "continuing education" was in vogue Dave Wilson practiced it. In cooperation with the American Concrete Institute, the American Institute of Steel Construction, and similar organizations, he prepared and gave extensive series of lectures and seminars, bringing to the Southern California structural engineering community the latest methods of calculating indeterminate structures: moment distribution, slope deflection and theory of elasticity. His own research was rather limited, mainly for lack of available laboratory facilities, but he scoured the literature to see that he was giving the best and most modern treatment of structural analysis and design that could be found anywhere. Like the students of Bob Knapp's at Caltech (of whom I wrote a couple of months ago), those of David Wilson, felt themselves to be "out in

front."

This was not always an advantage. A former city engineer of Manhattan Beach recalled designing a bent by the indeterminate structure methods he had learned from David Wilson. He took the drawings proudly to the Los Angeles County Office for checking. "I don't understand what you've got there," said the checker. "Why don't you just design it as a simple beam and throw in some extra reinforcing for the negative moment?" Deflating, maybe, but not for long. The engineer soon realized that he was indeed out in front. In time, the rest of the engineering world would catch up.

David Wilson was the product of America's heartland. Born in Belleville, Michigan before the turn of the century, he received the B.S. and Civil Engineer degrees from the University of Michigan. From 1920 to 1924 he taught mechanics and structural engineering at the University of Wisconsin. For the next five years he worked in Puerto Rico, as assistant engineer with the Central Aguirre Sugar Company. In 1929 he came to USC, as Assistant Professor of Civil Engineering, and was promoted to Associate Professor in 1931 and Professor in 1937. From 1930 to 1947 he was head of the General Engineering Department at USC (during which years USC gave a degree in General Engineering) and from 1945 until his death in 1961 he was head of the Civil Engineering Department.

Although Chi Epsilon had been established on the USC campus since 1924, the fourth chapter in the nation, it was not until 1947 that Tau Beta Pi established its California Delta chapter at USC. Dave Wilson was the chief instigator of this action, and he always had some kind of benefit in mind for the student who demonstrated superiority and dedication to his studies. I can recall, in particular, that Dave was very keen on establishing a study room that would be for the exclusive use of Tau Beta Pi members. "If we mean what we say about encouraging scholarship," he would declaim, "let's back it up with something concrete. If we provide a study room for Tau Beta Pi, students will be inspired to work harder, get the grades and gain this privilege for themselves."

Is it any wonder that Tau Beta Pi, on October 18, 1962, dedicated a memorial

Continued on page 28

SAN DIEGO FEED BACK

by
MARK BAGLEY
President
Instrument Society
of America
San Diego Section



This November issue of the Engineer of Southern California will be my last column in this series. The column will continue, but will provide more coverage from the San Diego Area from other newly recognized Professional Disciplines which have agreed to take part. The December issue will feature news concerning the activities of the American Nuclear Society, San Diego Chapter and will be written by their President, Chris J. Hamilton.

Chris Hamilton is employed as a Registered Professional Nuclear Engineer by the General Atomic Co. and was influential in establishing the recognition of the Discipline in the State of California. His address is P.O. Box 81608, San Diego, California 92138, and telephone number: 714-445-2258. My best wishes to Chris on his series of columns for the Engineer. The column will continue with the Status of newly registered Professionals as always. A multi-professional activity on Nuclear Energy will take place in San Diego in April or May of 1976, just prior to the election concerning the nuclear issue. The speaker will be Dr. Edward Teller of the Lawrence Livermore Laboratory.

This event will be hosted by the Instrument Society of America, San Diego Section, and supported by various other San Diego Professional Societies. It is expected to take place on a weekend evening. Whatever your present feelings may be concerning the Nuclear Initiative, plan on attending this informative event prior to going to the polls — you owe it to your country — yourself — and future generations.

Our Program Chairman for this event is Raymond Klapka, and may be contacted at General Atomic Co., P.O. Box 81608, San Diego, CA 92138 or telephone 714-455-2499.

STATE OF CALIFORNIA PROFESSIONAL ENGINEER REGISTRATION STATUS REPORT

	Registered	Denied
TF	26	2
QL	131	
MF	47	
CS	54	1
FP	27	3
CR	68	
NC	29	
AG	10	
SF	38	
	430	6

The Engineer and Society —

Continued from page 5

monument (a bronze bent set in black granite) to professor David M. Wilson in the Archimedes Quadrangle behind the old Engineering Building at USC?

I have asked Dave's former students whether they recall much in the way of a sense of humor that he displayed in his teaching. He was apparently rather quiet in this way. The most prevalent recollection of his teaching personality is that he was never sarcastic, and he never put down a student for asking an irrelevant or nonsensical question. On one occasion, recalls a devoted alumnus, Prof. Wilson included in a structural engineering exam one problem in which all the equations for indeterminate solution canceled out. Different approaches yielded the same result: zero equals zero. One can just see David Wilson, with a twinkle in his eye, watching "his boys" sweat out the solution of a *simple beam* problem that he had included in the exam, just to see if they would catch it.

In 1921 David Wilson married Dorothy Ream, and they had two children, Shirley and John. Through the 40 years of their married life Dorothy shared David's love for his students, not infrequently sacrificing family plans, I am certain, in favor of some student-centered activity. She continues to live in Southern California, where the Wilson Associates can keep in close touch with her.

On March 29, 1957 Chi Epsilon organized a testimonial dinner honoring David Wilson. The Supreme Council of Chi Epsilon sent a framed letter, presented by their president, one A. C. Ingersoll, which stated, "David M. Wilson, by precept and example, has strengthened the dignity and usefulness of the civil engineering profession in Southern California and in the country as a whole. We send hearty congratulations on this occasion to an esteemed engineer, beloved teacher and loyal brother in Chi Epsilon, and a warm personal friend."

I wish to acknowledge assistance in preparation of this article from two special sources, USC alumnus Jack R. Newville and Dean Emeritus Robert E. Vivian who presented the eulogy at the services for David M. Wilson.

ASM Seminar November 5

American Society for Metals, Los Angeles Chapter, announces a one-time, one day seminar, "Recent Advancements in Heat Treating and Processing Ferrous and Non-Ferrous Alloys" on Friday, November 5, 1975 from 8 a.m. to 5 p.m. at the Los Angeles Convention Center.

This one day seminar is being offered to acquaint heat treaters, process engineers, and design engineers with the latest available information relating to heat treating and processing ferrous and non-ferrous alloys. Chairman and Overview speaker of the first session will be W. W. Scheel, Western Regional Technical Sales, Republic Steel. This session will be from 8:30 a.m. to 10:30 a.m. Chairman and Overview speaker of the second session — R. Brockett, Rockwell International, B-1 Division. This session is from 1:15 p.m. to 3:30 p.m.

Telephone reservations are required by calling the ASM office, (213) 284-8590. The cost to ASM members and guests is \$10.00, which includes luncheon and coffee. Make checks payable to ASM and mail to ASM Office, PO Box 109, Alhambra, CA 91802.

IEEE Course November 21 - 22

A two-day short course on Electronic Information Processing is being offered by the Institute of Electrical and Electronics Engineers, Inc. at the Rodger Young Center in Los Angeles. The course, co-sponsored by the Institute's Los Angeles Council, will be held on November 21 - 22.

These sessions are intended for engineers who seek insight into present semiconductor integrated technology underlying much of the sustained growth of information processing. The possible technological futures will also be explored.

The lecturer will be Dr. William V. Smith, Manager of Technological Assessment for military and control systems at IBM. The registration fee is \$105 for IEEE members, \$55 for IEEE Student members, and \$125 for non-members. These fees include a copy of the course material and lunch.

For further information and/or registration forms, write: IEEE Educational Registrar, 445 Hoes Lane, Piscataway, New Jersey 08854.

TORK-MASTER ELECTRIC VALVE ACTUATORS

- Since 1947 -

FACTORY and SALES OFFICE

1550 E. McFadden

Santa Ana, California 92705

Phone (714) 835-0326

HEADQUARTERS

for

Fans, Blowers and Motors

Wholesale & Industrial
FOR EVERY APPLICATION OUR SALES
ENGINEERS ARE AT YOUR SERVICE



Since 1919
1120 South Main Street
Los Angeles 90015, (213) 747-0221, Telex #67-7680