



*Bernard A Vallega*

# BERNARD A. VALLERGA

1921–2013

Elected in 1987

*“For unique achievements and novel applications in asphalt technology: pavement design, rehabilitation, and recycling; hydraulic revetments; membranes; and soil stabilization.”*

BY FRED FINN AND CARL MONISMITH

**B**ERNARD (Barney) VALLERGA was born on December 11, 1921, and died at age 91 on January 5, 2013. He contributed in significant ways to his chosen profession and was a devoted mentor to many young engineers. His NAE citation describes his work as “unique” and, in addition to his professional achievements, the man himself was unique in many ways—in his personal charisma, in his service to his country, and as a loyal friend. He was a perennial optimist who never saw a problem he could not solve. He had an endless number of stories and was known for a firm hand shake.

After graduating from Fremont High School in Oakland, California, where he was elected student body president, he earned BS and MS degrees in civil engineering at the University of California, Berkeley. He was elected to Chi Epsilon and Tau Beta Pi, both scholastic engineering honorary societies, while at Berkeley. He advanced from Second Lieutenant to Captain in an Ordinance unit of the US Third Army in Europe during World War II, landing a few days after D-Day.

Barney began his engineering career as an assistant professor in civil engineering at Berkeley, where he taught and conducted research until 1953. Based on his research in asphalt technology and his communication skills he was offered a position with the Asphalt Institute as managing engineer for its

Pacific Coast Division, covering California, Arizona, Nevada, Oregon, and Washington branch offices in key locations in each state.

In 1956 he established, with the assistance of F.N. Hveem, materials engineer with the California Division of Highways, the Pacific Coast Conference on Asphalt Specifications. This was the forerunner of such conferences in other sections of the country that together resulted in uniform asphalt specifications with improved physical properties to the benefit of both users and producers of asphalt on a national scale.

In 1962 Barney was hired as vice president of Golden Bear Oil Company in Bakersfield, California, where he was in charge of marketing and research of the company's specialty products for use in the paving industry. He remained with Golden Bear until 1964, when he joined Fred Finn and Fritz Rostler to establish the consulting firm of Materials Research and Development Inc. (MR&D) in Oakland. In time MR&D joined with Woodward, Clyde Consultants, and Barney served as a vice president. In 1972 he started his own highly successful private consulting firm until he retired at the age of 77. Actually, Barney never really retired as he remained in contact with friends, colleagues, and associates until his health prevented him from further interaction.

Barney was honored by virtually every organization in which he was a member. He was designated an honorary member of the American Society of Civil Engineers and the Association of Asphalt Paving Technologists, and elected to the NAE and the Roll of Honor of the Asphalt Institute. He was a founding member of the International Society for Asphalt Pavements, and served on the National Research Council Committee for the Study of the Regulation of Weights, Lengths, and Widths of Commercial Vehicles; Panel for the Project to Develop an Asphalt Handbook; and Panel on Peer Review of Applications for the University Transportation Centers Program.

As evidenced by his NAE citation Barney contributed to a broad range of research and development in the field of asphalt technology and recognized the importance of early implementation. He applied research for the use of asphalt

membranes for canal linings, use of rejuvenating emulsions for maintenance of asphalt pavements, application of asphalt mixes for offshore oil drilling, and studies to improve specifications of virgin asphalt for mixtures to increase the service life of pavements.

Because of our close ties with Barney professionally and personally, we offer here a few remarks about his role in our lives.

I (Fred Finn) first met Barney in 1947 when I returned from WWII and enrolled at Berkeley as a graduate student and teaching assistant in civil engineering. He was my boss then and became my personal guide and counselor for at least 40 years, during which I transferred, changed employment, or went into private practice as a consultant. Barney provided guidance in each of these decisions, counseling not only as a colleague but mainly as a friend, for which I and my family are, and always will be, grateful. I know of many other young engineers whose successful careers can be attributed to Barney's professional guidance and personal advice. The quality of his teaching, guidance, and encouragement is not included in his NAE citation, maybe it should be. It was certainly an important virtue that made him "unique" to me.

Like Fred, I (Carl Monismith) wish to add that I was fortunate to meet Barney and gain knowledge, insight, and experience while working with him over the years. I also likely would not have developed my close friendship with Fred Finn as well as a number of other outstanding engineers.

The four Vallerga children were born and raised in the Bay Area. It is rare in these days, when families tend to disperse, that they remained close, in both place and heart, which is a compliment to Barney and Doris, his wife of 68 years.