

## 1996 Engineer of Distinction



### Rafael B. Bustamante

B.S. Civil Engineering, Auburn University, 1960

M.S. Civil Engineering, Tulane University, 1964

Ph.D. Civil Engineering, Oklahoma State, 1968

Director of Environmental Services  
Lockwood Greene Technologies, Inc.  
Oak Ridge, Tennessee

### Citation

Dr. Rafael B. Bustamante, Chairman Emeritus of TTU's Civil and Environmental Engineering Department, is now the Director of Environmental Services of Lockwood Greene Technologies in Oak Ridge, Tennessee. After his retirement from Tennessee Tech in May 1994, he joined LGT as Senior Environmental Consultant and then was appointed Director in January 1995. He directs all environmental efforts of the corporation in various offices throughout the United States.

Dr. Bustamante served as Chairman of the Department of Civil and Environmental Engineering for 21 years. He joined the TTU Civil Engineering faculty in 1967 as an Assistant Professor, was promoted to Associate Professor in 1969, and in 1973 he was promoted to Full Professor and appointed Chairman. Under his leadership, the Department grew to be the largest in its history, showing a student population increase of over 105% from 1989 to 1994. And in 1990, with his leadership, the Department earned full term accreditation from ABET.

In addition to his distinguished service to the University and to engineering education, Dr. Bustamante served as a member of the Tennessee Solid Waste Disposal Control Board for 24 years, 20 of those years as Chairman. In that capacity, he had direct responsibility in the enactment of regulations and in the implementation of the regulatory programs by the State. Through his extensive work with state and federal programs and as Chairman of the TSWDCB, Dr. Bustamante is considered an authority in environmental regulatory matters. From 1980 through 1993, he also served on the Tennessee Water and Wastewater Certification Board.

Dr. Bustamante's contributions to engineering education also include serving as an Evaluator and Visitor for the Accreditation Board for Engineering and Technology (ABET). He was an officer in the Tennessee Tech Engineering Development Foundation from 1976 to 1985, including four years as president. He also served as President of Chapter 111, the Honor Society of Phi Kappa Phi. Dr. Bustamante is a member of the Board of Governors, TTU Link, Order of the Engineer, and serves on the Board of Directors of the Tennessee Tech

Engineering Development Foundation. He was the driving force behind the preparation of the proposal for the TTU Center of Excellence in Water Resources and served as Interim Director from its initial funding in 1984 until a permanent director was appointed in 1985.

Dr. Bustamante is a licensed Professional Engineer in Tennessee and Louisiana. He holds an active DOE 'Q' security clearance. He is a member of a number of scientific and professional societies including the American Society of Civil Engineers, National Society of Professional Engineers, American Water Works Association, Water Environment Federation, American Water Resources Association and several others. In 1989, Dr. Bustamante was the recipient of the TTU Outstanding Faculty Award for Professional Service. Other honors and awards include membership in Phi Beta Phi, Tau Beta Pi, Sigma Pi Sigma, and Chi Epsilon.

Dr. Bustamante received the B.S.C.E. degree from Auburn University in 1960, the M.S. in Civil Engineering from Tulane University, and the Ph.D. in Civil Engineering from Oklahoma State University, where he was a United States Public Health Research Fellow.

His professional career has included extensive consulting experience, including Martin Marietta Energy Systems in Oak Ridge with the Y-12 Development Division, Engineering Division, ORNL Chemical Technology Division since 1972. He has served as consultant to over thirty firms, industries and organizations in the areas of water quality management, industrial waste treatment, radioactive waste management, industrial applications of biological systems and solid and hazardous waste management. He has been author or co-author of numerous publications; as a professor, he taught graduate and undergraduate courses in hazardous waste remediation, solid and hazardous waste management, water supply, water pollution control, natural systems engineering and hydraulics.

Dr. Rafael Bustamante has made exemplary contributions to engineering education, the engineering profession, to the College of Engineering and to Tennessee Technological University.



Rafael Bustamante receives his award from Dean Emeritus James Seay Brown