

**Jose B. Cruz Jr., Dedicated Engineering Educator,
to Receive 2009 IEEE James H. Mulligan Jr. Education Medal**

Innovative Teaching Methods and Post-Graduation Mentoring Inspires Students

PISCATAWAY, N.J. – 22 June 2009 Jose B. Cruz Jr., a professor and researcher whose creative approach to engineering education has guided and inspired both students and faculty, is being honored by IEEE with the 2009 IEEE James H. Mulligan Jr., Education Medal. IEEE is the world's largest technical professional association.

The award, sponsored by The Mathworks, Inc., Pearson Prentice Hall, National Instruments Foundation and the IEEE Life Members Committee, recognizes Cruz for excellence in engineering education through creative leadership, innovative textbooks, inspirational mentoring and research contributions to circuits, controls and systems. The medal will be presented on 25 June 2009 at the IEEE Honors Ceremony in Los Angeles, Calif. For the first time, the IEEE Honors Ceremony will be broadcast live on the Web through IEEE.tv (www.ieee.tv).

Cruz has educated generations of undergraduate and graduate students over his 45-year career. Instilling the qualities of technical excellence in research and teaching and inspired professional service, many of Cruz's graduates have attained national status, becoming academic leaders or holding prominent positions in industry. An illustration of Cruz's commitment to his students and junior colleagues, Cruz has provided mentoring, encouragement, and moral support to many as they progress through their careers.

Cruz's innovations in engineering education include experimenting with new organization and presentation of material for a course on circuit theory leading to a textbook published in 1967 in collaboration with M.E. Van Valkenburg, while at the University of Illinois. At that time, progress in integrated circuits, widespread availability of computers and increased emphasis on circuits as signal processors influenced the development of concepts with lasting significance and broad implications. In collaboration with W.R. Perkins, Cruz developed an undergraduate course on dynamic systems at Illinois that was control oriented and unique in that it used a themed example (attitude control of a spacecraft) throughout the course. This led to a textbook that was published in 1969. Both of these textbooks contained novel and pioneering methods for introducing advanced concepts at an elementary level.

While at the University of California, Irvine, from 1986 to 1992, in collaboration with James H. Mulligan Jr., Cruz established strong ties with industry in developing manufacturing systems research, particularly in applications of dynamic hierarchical scheduling. The pair jointly supervised Ph.D. students, incorporating feedback from industry. At Irvine in 1986 and Ohio State University in 1994, Cruz was instrumental in revitalizing the engineering curriculum and

stimulating the creation of an identifiable program in computer engineering, leading to the departments being renamed "Electrical and Computer Engineering." He also was an advocate for the National Science Foundation's GATEWAY program, an engineering education coalition of 10 universities (including the Ohio State University) resulting from a restructuring of the freshman engineering curriculum. As a consultant on the Engineering and Science Education Project of the Philippine Department of Science and Technology from 1993-1998, he helped to establish a practice-oriented Master of Engineering Degree Program in several Philippine universities, which focused on an industry-linked project instead of thesis research.

An IEEE Life Fellow and Fellow of the American Society for Engineering Education (ASEE), Cruz has received numerous awards, including the IEEE Richard M. Emberson Award (1989), the ASEE Curtis W. McGraw Research Award (1972), and the Richard E. Bellman Control Heritage Award (1994) from the American Automatic Control Council. He was elected as a member of the National Academy of Engineering in 1980 and as a corresponding member of the National Academy of Science and Technology (of the Philippines) in 2003. He received his bachelor's degree from the University of the Philippines, Quezon City; master's degree from the Massachusetts Institute of Technology, Cambridge; and doctorate from the University of Illinois, Urbana-Champaign, all in electrical engineering. Cruz is currently a Distinguished Professor of Engineering at the Ohio State University, Columbus, where he previously served as dean of the College of Engineering.

About IEEE

IEEE, the world's largest technical professional association, is commemorating its 125th anniversary in 2009 by Celebrating 125 Years of Engineering the Future around the globe. Through its more than 375,000 members in 160 countries, IEEE is a leading authority on a wide variety of areas ranging from aerospace systems, computers and telecommunications to biomedical engineering, electric power and consumer electronics. Dedicated to the advancement of technology, IEEE publishes 30 percent of the world's literature in the electrical and electronics engineering and computer science fields, and has developed nearly 900 active industry standards. The organization annually sponsors more than 900 conferences worldwide. Additional information about IEEE can be found at <http://www.ieee.org>.