

2017 TAB HALL OF HONOR RECIPIENT NOMINATION FORM



CANDIDATE NAME: Jose (Joe) B. Cruz, Jr.

BIOGRAPHY: Jose (Joe) B. Cruz, Jr. co-developed the Comparison Sensitivity Matrix in 1964, now known as the Cruz-Perkins Comparison Sensitivity Matrix, as a tool for insuring the benefits of feedback in multivariable linear and nonlinear systems to reduce the effects of parameter deviations. He co-developed the theory of leader-follower strategies for dynamic systems that include multiple stakeholders in 1973, showing that leader optimization of such hierarchical systems could violate Bellman's principle

of optimality. Dr. Cruz served as Dean of Engineering at Ohio State University, Chair of Electrical and Computer Engineering at the University of California in Irvine, and Associate Head of Electrical and Computer Engineering of the University of Illinois at Urbana-Champaign. He is an Academician, National Academy of Science and Technology (Philippines); and a member, US National Academy of Engineering.

CITATION: For leadership in restructuring TAB and achieving balance in Regional/Divisional representation on the IEEE Board of Directors.

DESCRIPTION OF ACCOMPLISHMENT(S) RELATIVE TO THE CREATION, DEVELOPMENT, OR ADVANCEMENT OF THE TECHNICAL OBJECTIVES OF THE IEEE:

As Chairman of TAB in 1982-1983, Dr. Jose B. Cruz had led the planning for the redistribution of the societies/councils into 10 named divisions. The voting rights of TAB were redefined so that only society/council presidents, the 10 Division Directors, and the Chair of TAB had the right to vote. TAB committees were clustered under three administrative committees, who had no vote. The net effect was to give the 36 society/council presidents more voting power in TAB.

Since the merger of AIEE and IRE, until 1982, IEEE members had been represented on the IEEE Board of Directors through 10 Regional Directors and seven Division Directors. Division Directors represent IEEE Societies/Councils who represent the technical interests of IEEE members. Pressure had been building up for equal representation between geographical and technical entities at the IEEE Board level. Dr. Cruz had led the development of restructuring the IEEE Board of Directors to have 10 Division Directors. Dr. Cruz had campaigned to convince the Regional Directors of the wisdom of the proposed restructuring. All Division Directors and Society/Council Presidents had assisted in convincing members of all major Boards of the wisdom of the restructuring. By July 1983, appropriate By-Laws were approved by the IEEE Board of Directors to effect the restructuring of TAB and the IEEE Board of Directors.

In 1982-1983 three new councils were created: Power Electronics Council, Fiber Optics Council, and Robotics and Automation Council. The Ocean Engineering Council became the Ocean Engineering Society. The Broadcast, Cable, and Consumer Electronics Society was split into two societies: Broadcast Technology Society and Consumer Electronics Society.

For the last 35 years, the balance of the 10 Regional Directors and the 10 Division Directors of the IEEE Board of Directors has remained, providing indication of the wisdom of the restructuring initiated by TAB and led by Dr. Joe Cruz.

Related to the above accomplishments he received the IEEE Richard M. Emberson Award in 1989.

DATE(S) OF ACCOMPLISHMENT(S):

As Chair of TAB 1982 and 1983

RELEVANT IEEE ACTIVITIES:

IEEE Vice President for Technical Activities, 1982 and 1983