



GILBERTO FRANCISCO MARTHA DE SOUZA

PSAM12 Speaker Bio

USE OF RELIABILITY CONCEPTS TO SUPPORT PAS 55 STANDARD APPLICATION TO IMPROVE HYDRO POWER GENERATOR AVAILABILITY

Short Statement: Leader author

BIOGRAPHY

Dr. Souza has a bachelor degree in Marine and Naval Engineering from Polytechnic School, University of São Paulo (USP), Brazil in 1985; a Master degree in Marine and Naval Engineering from Polytechnic School, USP, in 1989; and a Doctor of Engineer title obtained at the Department of Mechanical Engineering from Polytechnic School, USP, in 1994. From May 1999 to May 2000 he developed post-doctoral studies at Center of Technology and Systems Management from University of Maryland, College Park. From 1992 to 2001, he worked as an assistant professor at the Department of Mechanical Engineering and since 2001 he has been working as an associate professor at the Department of Mechatronics and Mechanical Systems, where he is responsible post-graduate courses in Electro-Mechanical System Reliability, Maintainability and Risk Analysis Evaluation. He has supervised six Doctor Students and forty Master students since 1995. He also concluded the supervision of two post-doctoral fellows. This page can include a short CV but should not exceed one page.



Dr. Souza's research interests include electro-mechanical systems reliability analysis, uncertainty quantification in mechanical design, optimization under uncertainties and risk and safety analysis. Dr. Souza has authored or co-authored 12 papers in peer-reviewed international journals, has edited one book and has written two book chapters on reliability analysis and mechanical design under uncertainties. Dr. Souza is particularly interested in life-cycle cost optimization of electro-mechanical systems, including power generation systems and natural gas maritime terminals, and in the effects of the expected costs of failure in optimum design.

Dr. Souza has active international collaborations with the University of Maryland, USA, and University of Antioquia, Colombia.