

Dr. Shuxia Bu



Dr. Shuxia Bu is a senior engineer at China Ship Scientific Research Center. She also got her MS and Ph.D. degrees from CSSRC. Currently, Dr. Bu is the representative of North and West Asia of ITTC stability in waves committee. The major research area of Dr. Bu is ship seakeeping and stability in waves including intact and damage stability, nonlinear large-amplitude motion and green water, and so on. She is supported by the Young Elite Scientists Sponsorship Program.

Dr. Bu studies different stability failure modes of intact ships in waves based on the three-dimensional time-domain panel method and experimental tests, especially the phenomena of parametric rolling and excessive acceleration. Dr. Bu once studied at Hamburg University of Technology in Germany as a visiting scholar for the development of the nonlinear three-dimensional panel method and worked with Prof. Moustafa Abdel-Maksoud.

Dr. Bu investigated the hydrodynamics of floodwater and its effects on the damaged ship motions based on a unified viscous and potential prediction method that combines CFD and the three-dimensional time-domain panel method. Currently, she focuses on the flooding dynamics of damaged ships in waves, with emphasis on the development of numerical simulation methods.