

Modern Trends in RF Measurement Range Design

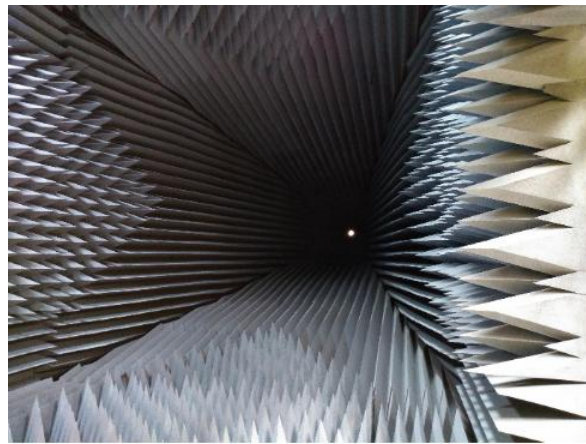
Abstract:

Part 1: Modern chamber design techniques enable the optimization of anechoic environments required for high fidelity RF radiation testing. In this workshop, we discuss several topics on innovative designs of anechoic chambers, including tapered, which are the preferred solution for many low frequency test requirements. Proper design techniques for optimum performance and several recent examples are presented.

Part 2: Another current trend is the application of special absorber load boxes for the testing of phased array antennas, covering X to V-band. The design approach and practical examples are described, as well as the RF and mechanical implementations and limitations of these applications.

Workshop outline:

Our keynote speakers are Dr. Vince Rodriguez and Bruce Williams. Our workshop is a two-part seminar. Vince will be presenting on the top of modern chamber design techniques and Bruce will speak on load box design. In both seminars, design approaches and practical examples will be given.



Dr. Vince Rodriguez oversees the chamber engineering division at NSI-MI Technologies. He holds a Ph.D. in electrical engineering and is author of “Anechoic Range Design for Electromagnetic Measurements” and over 90 publications in technical journals, trade magazines, and conferences. Vince holds two patents, one for EMC/RF absorber and another for a broadband horn antenna.

Bruce Williams is a senior staff electrical engineer at NSI-MI Technologies and is active in the development of advanced techniques for antenna measurement, having managed the design and manufacturing of our standard and custom products, as well as complete subsystems. He holds a M.S. in electrical engineering from the University of Massachusetts at Amherst and has regularly authored and presented papers at technical conferences.