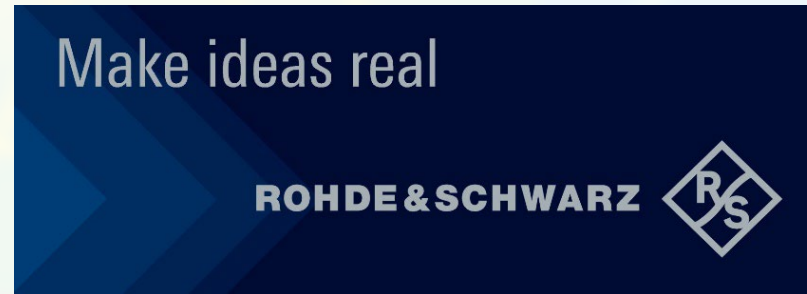




System development and instrumentation

- **EW Environmental Generation Overview by Rohde & Schwarz** SPEAKER : **Tim FOUNTAIN**



Biography: Tim Fountain is the Global Market Segment Manager at Rohde & Schwarz, where he is responsible for the Electro Magnetic Spectrum Operations (EMSO), segment, which comprises radar and Electronic Warfare (EW) . Tim has over 30 years of experience with market leaders in the Test & Measurement industry, focusing on RF and microwave applications in Aerospace & Defense. He started his professional life as an applications engineer and has also held roles in R&D, corporate management, product planning, product marketing and business development. Tim holds a master's degree in electrical and Electronic engineering from University of Hertfordshire in the UK.

Talk title:

EW Environmental Generation Overview

Abstract:

Simulating an electromagnetic environment relevant for testing electronic warfare devices, subsystems or even a whole platform is a challenging engineering problem that is balances design complexity, overall system cost, and ease of implementation. In this session we will review the basics of EW environment generation and discuss the main engineering challenges and design considerations required to create a complex, realistic, threat environments. We will discuss the trade-offs between Over The Air (OTA) vs. direct injection into the platform undertest. We will discuss threat modelling, whole system calibration and the role of PDWs and raw IQ data in creating high-fidelity, realistic threat environments. We will conclude with a discussion of open loop scenario-based generation vs. closed loop, deterministic systems.