



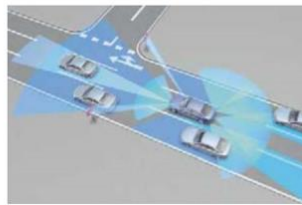
## GWT/IEEE Joint Seminar on Dominant-mode Leakage on Stripline and Microstrip Transmission-line Structures at Millimeter Wave (mmW) Frequencies: Issues & Solutions

Dr. David Nghiem

Founding CEO & Chief Scientist

Global Wireless Technology, Inc.

**Abstract:** Leaky modes have been found on a variety of waveguiding structures. For transmission-line applications, their presence is undesirable since they carry energy away from the structure, thus causing additional loss on the line and interference between circuit elements. Of particular interest for planar transmission-line structures are dominant leaky modes. The term “dominant” implies that the strip current is similar to that of the conventional transverse-electromagnetic (TEM) mode. In this seminar, the dominant leaky-modes for common stripline and microstrip-line structures at millimeter wave (mmW) frequencies: Issues and Solutions will be presented. System analysis, antenna element/array designs (including Leaky Wave Antennas: LWAs), and radiation safety for mmW communication systems, such as 5G for WBAN (Wireless Body Area Network), wireless gigabit Ethernet (60 GHz, 80GHz) for indoor/outdoor (point-to-point), automotive radar (77 GHz) and imaging (94 GHz) systems will also be discussed.



**Biography:** Dr. David Nghiem is the Founding CEO & Chief Scientist of Global Wireless Technology (GWT), Inc. Dr. Nghiem has spent many years in the telecommunication and medical industries, including Harris Corporation, Qualcomm, USA Wireless and Medtronic, and has become an industry leader in medical wireless telemetry systems. He was an Assistant Dean of the Cullen College of Engineering, and a Director of the Telecommunication Center at the University of Houston. Dr. Nghiem is also a senior IEEE member. He was the Chairman of the IEEE-MTT-S Twin Cities chapter. In 2016, Twin Cities IEEE Section has honored Dr. Nghiem’s outstanding engineering career with the IEEE Outstanding Engineer Award. Dr. David Nghiem discovered the dominant leaky modes for a variety of common planar transmission-line structures through his Ph.D. research program 25 years ago.

**Time:** 11:30 AM – 12:00 PM Social/Lunch  
12:00 PM – 1:00 PM Presentation

**Day:** Tuesday

**Date:** December 12<sup>th</sup>, 2017

**Place:** Best Western Plus  
1000 Gramsie Rd.  
Shoreview, MN 55126

**Free Registration:** Please send a request to [Seminar@GlobalWirelessTechnology.com](mailto:Seminar@GlobalWirelessTechnology.com) before December 1<sup>st</sup>, 2017. Space is limited. **Door Prize:** Samsung Galaxy Tab S2! The seminar will also be broadcasted through WebEx.