

# ESL Faculty

## **Ronald Reano, Assistant Professor**

*Ph.D., University of Michigan*

Coupling of RF/THz/optical electromagnetic phenomena to nanometer and femtosecond technology. Bionanotechnology, nanoimprint lithography, and micro/nano-electro-mechanical systems (MEMS/NEMS). Nonlinear/ultrafast optics, short-pulse solid-state lasers, and polymer/semiconductor electro-optics.



## **Roberto Rojas-Teran, Professor**

*Ph.D., The Ohio State University*

Active integrated antennas, reconfigurable antennas, and conformal arrays. Modeling of planar passive integrated microwave components. Nonlinear dynamics concepts for analysis and design of active microwave circuits and coupled oscillators.



## **Fernando Teixeira, Assistant Professor**

*Ph.D., University of Illinois*

Analytical and numerical techniques for wave propagation and scattering modeling in communication, sensing, material, and device applications including electromagnetic metamaterials, remote sensing, and ultrawideband antennas.



## **John Volakis, Professor, Roy & Lois Chope Chair in Engineering**

*Ph.D., The Ohio State University*

Antennas, radar scattering, and optimization methods for antennas and RF systems. Novel radio frequency materials and metamaterials, propagation and coupling in wireless systems, and electromagnetic compatibility and interference. Computational methods for electromagnetics, including finite element, integral equation, high frequency, and hybrid methods for large scale computing.



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## **Walter Burnside, Professor Emeritus**

*Ph.D., Ohio State University*

Antenna development and analysis. Diffraction and geometrical optics theory. Design and development of a state-of-the-art compact range and instrumentation systems.



## **Stuart A. Collins Jr., Professor Emeritus**

*Ph.D., MIT*

Optics, optical system design, holography, optical computing, and true-time delay control of phased array radars. Atmospheric propagation of light, electromagnetic theory of optics, and liquid crystals.

