

## Dr. Dean R. Evans

National Research Council Advisor & Agile Filters Project Leader Air Force Research Laboratory Wright-Patterson Air Force Base, Ohio

> Friday, January 29th 11:10AM-12:00PM Bourns Hall A265

## Development of Inorganic Crystals for Photorefractive Beam Coupling Applications

**Abstract:** The Air Force has an interest in photorefractive materials for beam coupling applications. In order to increase the photorefractive gain coefficient, to maximize the beam coupling efficiency, we explore methods to:

- increase the effective trap density,
- 2. maximize the electro-optic coefficient,
- 3. minimize the dielectric contrast.

The details of these methods will be discussed.

**Bio:**Dean R. Evans received the B.S. degree in physics from The Citadel, Charleston, SC, in 1992, and the M.S. and Ph.D. degrees in physics from the University of Georgia, Athens, in 1995 and 2000, respectively.

He joined the Air Force Research Laboratory, Wright-Patterson Air Force Base, OH, in 2000. He has been a National Research Council Advisor since 2003. He is currently the Agile Filters Project Leader. His current research interests are in nonlinear optical materials, particularly photorefractive materials, and laser spectroscopy.