Dr. Dennis O'Neal is currently the Holdredge/Paul Professor in Mechanical Engineering at Texas A&M University. He serves as the Associate Dean for Research in the Dwight Look College of Engineering and as Deputy Director for the Texas Engineering Experiment Station.

**Special lecture: Refrigerant Flow through Short-Tube Orifices**

Thursday, January 19, 2012, 12:45 PM
Rogers Engineering Building, Room 109

Many domestic manufacturers of air conditioners and heat pumps utilize short-tube orifices as an expansion device because of their inexpensive cost and ease of installation in the field. While the construction of the short tube is simple, the flow of the refrigerant through it is not. The refrigerant typically enters as a single phase liquid, then expands to a two phase mixture of liquid and vapor before exiting. Typical operating conditions in a system produce choked flow in the orifice.

Dr. O'Neal will present results from over a decade of research evaluating two-phase flow through short-tube orifices in a variety of conditions.

**Public reception with Dr. O’Neal**

Friday, January 20, 2012, 4:00-5:30 PM
Rogers Engineering Building, Student Lounge