**Materials Seminar**

Department of Materials Science & Engineering

# Tuesday November 28, 2017

2:15 – 3:15 ~ SERF 307

**Please join us for refreshments at 2:10**

"Meteorites: Structure-Processing-Properties in the Solar System's Oldest Composites"

**Speaker:**



**Mr. Chris Wetteland**   
Lecturer, Materials Science & Engineering

University of Tennessee, Knoxville

Abstract:

Meteorites are recovered fragments of rock and metal that originate in outer space and have survived transit through the earth’s atmosphere. They possess a variety of chemical compositions and morphologies which can be used to decipher early solar system history; including planetary formation. Chemically, meteorites can be classified as irons or stones. Iron meteorites almost exclusively contain iron and nickel and represent the cores of small planetary bodies, while stones are oxide materials that are similar to many silicate minerals found on earth. Stoney meteorites can have complex processing conditions, and may record a violent history of solar flares I will review some interesting materials properties of meteorites and their unique processing conditions which are not present on earth.