Indoor air quality is an oft overlooked, yet serious, environmental health hazard. Techniques typically used to remove particulates are ineffective against molecular pollutants such as the volatile organic compounds. One approach to remediation of this problem is to employ light activated catalysts to decompose the pollutants into harmless products. I’ll describe some research I’ve done on TiO$_2$ thin film photocatalysts and point out some of the issues where knowledge of condensed matter provides unique insight into the production and functioning of these materials.

*Wednesday, March 16$^{th}$ 2005, MCEC 230, 3:00 pm, Refreshments 2:45 pm*