

**University of Rochester  
Department of Electrical and Computer Engineering  
Colloquia Speaker Series**

**Nanostructured materials for optoelectronic devices: applications in infrared  
light generation and solar energy conversion**

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**Wednesday, March 18th**

**12:00 1:00PM**

**Computer Studies Building, Room 209**

Abstract: The ability to control the electrical and optical properties of materials at the nanoscale has enabled unique opportunities in optoelectronic device engineering with a variety of applications ranging from light generation and manipulation to detection and conversion. Here, I present two such applications which take advantage of nanostructures to improve and extend upon existing device modalities. In the first part of this talk I will focus on the generation of infrared light using the quantum cascade laser scheme.

