## SCIENCE SEMINAR

Thursday, October 3 - Carson Taylor Hall room 322

## Dr. Christopher Muratore

Ohio Research Scholars Endowed Chair Professor Chemical and Materials Engineering Department University of Dayton



## "Photonic Crystallization of 2D Transition Metal Dichalcogenide Transducers for Flexible 2D Molecular Sensors"

The fabrication of devices based on 2D materials is described. Flexible molecular sensors are shown to detect vapor phase substances with sub-ppm sensitivity. 2D TMD sensor transducers are demonstrated for healthcare applications. Devices and circuits directly written from TMDs thin films, deposited on large area flexible substrates, are also presented.

Come at 3:30pm for refreshments, speaker at 4:00pm