

# **EASTERN MICHIGAN UNIVERSITY**

## ***Chemistry Department***

***Dr. Mark Kemper***

*Vice-President of Sales and Global Distribution for  
Tornado Spectral Systems*

***Monday, June 16<sup>th</sup> 2:30 pm***

***Science Complex Room 156***

### ***New Applications for Raman Spectroscopy***

Raman spectroscopy is a versatile technology that has grown significantly in popularity over the last two decades due to a substantial leap forward in instrumentation. There has also been a discovery of various applications for Raman, many of which no one could have imagined only a few years ago. Recently, this potential has been augmented with developments such as Tornado Spectral Systems' High Throughput Virtual Slit (HTVS) technology, which enhances spectral sensitivity and/or speed of collection for dynamic processes. These developments raise expectations for the increased use of Raman for a variety of applications involving measurements for all chemical phases (solid, liquid, gas). In this talk, various success stories with Raman will be presented to stimulate thoughts concerning where the technology might fit into various ongoing projects. The discussion will focus on applications that involve dynamic monitoring to ascertain changes in chemical systems over time. Evidence will also be shown that Raman can provide valuable insights concerning fundamental properties critical to the understanding of both materials and processes.