



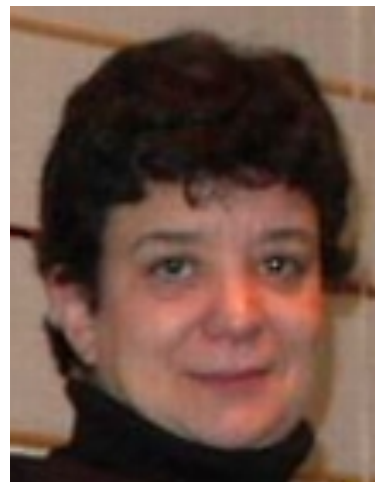
ACS Local Section  
New York  
Analytical Topical Group

## Applications of Vibrational Spectroscopy to Polymer Analysis

**Speaker: Dr. Dana Garcia**

Principal Scientist

Arkema, Inc.



**Date: Thursday, September 23, 2021**

**Time: 12:00 PM**

**Place: [Zoom](#)**

### Abstract:

The presentation will discuss two specific examples of employing vibrational spectroscopy to polymer analysis. The first topic is confocal Raman microscopy characterization of waterborne coatings to investigate spatial distribution of components, surfactant leaching and stain penetration. The second topic will examine application of coupled Rheology  $\square$  FT-IR to understanding structural changes in polylactic acid & acrylic blends at elevated temperature and under shear.

### Bio:

Dr. Dana Garcia got her bachelor's degree in chemistry from Stockton State University (NJ) and her Ph.D. in physical-organic chemistry from the Brandeis University. Currently, she is a Principal Scientist at Arkema Inc., a world-class producer of specialty chemicals. At the Arkema King of Prussia (Pa.) Research Center, she is responsible for the vibrational spectroscopy laboratory. Prior to joining Arkema, Dana spent 4 years at BFGoodrich, where she coordinated the adhesive and composite project: synthesis, characterization using FTIR, thermal and rheological techniques. Before that, she worked at E. I. DuPont Corporation on fundamental long range research projects in the area of polymer structure  $\square$  property relationships, development of nucleating agents and FT-IR characterization methods. She is a 2017 Fellow of the American Chemical Society and a 2012 Fellow of American Chemical Society, Division of Polymer Chemistry.

Presented in collaboration with the  
New York / New Jersey section  
of the Society for Applied Spectroscopy

