## **thermo**scientific

# Join us for Spectroscopy Week

During this virtual users meeting, international technical experts and scientists will apply and demonstrate critical tools in real-world applications. In addition to the following topics, practical demonstrations will be given throughout each day's program. Each day will conclude with a live Ask the Expert Q & A session.



### Forensics

Monday, May 24 • 10:00 – 1:30 EDT, 14:00 – 17:30 CEDT		
1	Understanding trace materials analysis investigations Lawrence Wayne, SGS Forensics Lab	
2	Gunshot residue analysis by desktop SEM Binyam Abraham, Nanoscience Instruments, Inc. Fluorescence and Raman imaging for detection and identification of gunshot residue during crime investigations Dr. Alex Rzhevskii	
3	Safe analysis of hazardous chemicals with fiber optic-ATR and FT-Raman Dr. Suja Sukumaran	
4	From physical evidence to illicit drugs: XRD applications in forensics science Dr. Noureddine Anibou	
5	Molecular spectroscopy solutions for cultural material analysis  Dr. Ron Rubinovitz	



### Polymers

Tuesday, May 25 • 10:00 – 1:30 EDT, 14:00 – 17:30 CEDT		
1	Applications of vibrational spectroscopy to polymer analysis Dr. Dana Garcia, Arkema Inc.	
2	Using FTIR as a quality control tool for the polymer industry Dr. Matt Bartucci	
3	Importance of vibrational Spectroscopy and TGA IR in plastics and polymer Industry Kevin Hellemans	
4	Polymer analysis by XRF: from manufacturing to recycling Chris Shaffer	
5	In-line compounding for the production of custom 3D printing filaments with trace additive concentrations Scott Martin	



# thermo scientific



# Food and Beverage

Wednesday, May 26 • 10:00 – 1:30 EDT, 14:00 – 17:30 CEDT		
1	Extrusion of plant-based meat – Introduction on high and low moisture extrusion of plant proteins DrIng. Valerie Pietsch, Thermo Fisher Scientific	
2	Application of NIR spectroscopy in food industry Luigi Ciani	
3	Investigating heat-induced gelation of whey protein using simultaneous rheology and FTIR spectroscopy  Dr. Nate Crawford	
4	Raman microscopy: the best choice to analyze multilayer films for packaging Barbara Bravo	
5	Quality control of beer and wine production using UV-Vis spectroscopy  Brian Matlock	



### Pharmaceuticals

Thursday, May 27 • 10:00 – 1:30 EDT, 14:00 – 17:30 CEDT		
1	BCAbox algorithm expands capabilities of Raman microscope for single organelles assessment Dr. Andrey Kuzmin, SUNY Buffalo	
2	Maintaining compliance in QA/QC labs Patrick Brown and Matthew Gundlach	
3	Polymorphs analysis by X-ray diffraction Raphael Yerly	
4	Confocal Raman and SEM/EDX – Complimentary tools for characterization of pharmaceutical products Shaileshkumar Karavadra and Dlangir Cordero	
5	Process development for injectable with hot melt extrusion DrIng. Valerie Pietsch	