



Build expertise.
Expand your analysis.

Discover solutions
that will transform
your workflow!

Register today!

QUANTUM ANALYTICS WORKSHOP

Material Characterization

Join us Wednesday, November 6th!

Quantum Analytics and Frontier Laboratories are excited to present a free one-day workshop on pyrolysis GC-MS, XRF and elemental analysis techniques for material characterization of polymeric materials. Learn from industry professionals and application experts on how to broaden your lab's capabilities to include de formulation, reverse engineering, failure analysis, contamination analysis, and quality control testing. The industries covered include oil, gas, paints, coatings, 3D printing, rubbers, plastics, and more!

This workshop is geared to both experienced users who want to expand their understanding, as well as those who are newer to the techniques. If you are not yet currently using these characterization techniques, this seminar will provide insight into how the instrumentation may complement your existing laboratory capabilities. The workshop will also be a great opportunity to meet and discuss your testing needs with our application specialists as well as network with other local professionals in industry.

Plus, we're thrilled to announce that we'll be joined by Prof. Rigoberto Advincula of Case Western Reserve University, who will be presenting his own research during this exclusive event.

Location:

Quantum Analytics
27635 Commerce Oaks Drive
Oak Ridge North, TX 77385

Date:

Wednesday, November 6

You'll be joined by the following professionals:



Prof. Rigoberto Advincula, Ph.D.

Case Western Reserve University
Department of Macromolecular
Science & Engineering



Chuck Renner

National Sales Manager
Quantum Analytics



Rojin Belganeh

Technical Director
Frontier Laboratories North America



Bryan DeVerse

Spectroscopy Product Manager
Quantum Analytics



Reserve your spot today!

go.lqa.com/frontier-houston-fall2019





Pyrolysis-GC/MS, XRF and Elemental Analysis

We'll show you the instrumentation needed to make your lab an analytical powerhouse. We'll start with a deep dive into multi-mode pyrolysis systems, which are designed to broaden the capabilities of GC/MS systems by analyzing any solid sample without the need of solvents, solvent extractions, or pre-treatments. Then, we'll explore modern, automated CHNS/O elemental analyzers and benchtop XRF instruments.

Attendees will:

- ✓ Learn pyrolysis and elemental analysis techniques for reverse engineering, material characterization, failure analysis for supply chain, and comparative analysis
- ✓ Explore applications in oil & gas, paints & coatings, 3D printing, rubbers, and plastics research
- ✓ Get hands-on experience with the Pyrolysis-GC/MS system in the lab and analyze data using the F-Search interpretation libraries

Join us Wednesday, November 6th from 9:00 AM to 4:00 PM

Time	Agenda
08:30 - 09:00	Seminar Check-In / Light Breakfast
09:00 - 10:00	Welcome & Intro to Pyrolysis-GC/MS, System Configuration, Frontier "Method Map", Modes of Operation
10:00 - 10:15	Failure Analysis of Rubber Materials Using Pyrolysis-GC/MS-Nitrogen Phosphorus Detector
10:15 - 10:30	ASTM D7823-18: Analysis of Regulated Phthalates in a Complex Matrix Using Thermal Desorption-GC/MS
10:30 - 10:45	Break & Networking
10:45 - 11:15	Uncover Trace Elements to Characterize Polymer Materials Using a Modern and Automated CHNS/O Elemental Analyzer
11:15 - Noon	Lab Session
Noon - 12:45	Lunch
12:45 - 01:15	Characterization of Resin Coated Proppants
01:15 - 01:45	3D Printing, Polyurethane and Silicone
01:45 - 02:15	Using XRF to Detect the Presence of Specific Additives in Polymers and Elastomers
02:15 - 02:30	Break & Networking
02:30 - 02:50	Analysis, Characterization, and Deformulation of Apparently Similar Rubber Parts using Multiple Modes of Pyrolysis GC/MS
02:50 - 04:00	Hands-on F-Search Libraries Workshop
04:00 - 04:30	Closing & Networking

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