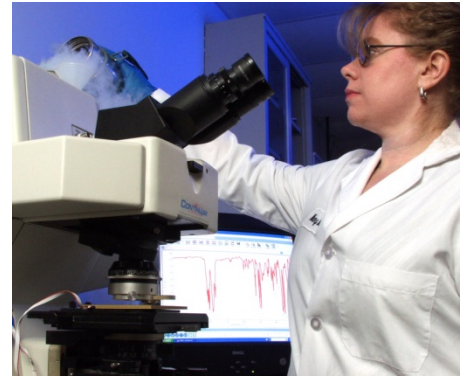


Chemical Material Identification

M+P Labs is fully equipped to characterize materials, identify sources of contamination, and determine root causes for defects. Our expert analysts will help you at every stage of your material life cycle, from R&D and product design, to acceptance testing, failure analysis, quality control, and service performance.



MATERIALS CHARACTERIZATION TECHNIQUES

- FTIR
- ICP-OES
- SEM/EDS/WDS
- Ion Chromatography
- LECO® C/S
- Density
- Viscosity
- Gel time
- pH
- Thermal analysis
- Titrations
- Flashpoint
- Assays
- Soxhlet extractions
- Particle size
- Stress corrosion cracking
- Corrosion rate
- Conductivity

IDENTIFICATION & QUANTIFICATION

- Elements
- Trace metals
- Metal alloys
- Polymers
- Solids
- Halogens/anions
- Leachables/totals
- Volatiles

ADDITIONAL CAPABILITIES

- Fuels/lubricant testing
- Method development
- Literature search
- On-site lab testing personnel
- On-site troubleshooting
- Thermal analysis
- Mechanical testing
- Metallurgical analysis
- Failure analysis
- Verification for nuclear commercial-grade dedication

SOLUTION PREPARATIONS

- Acid/caustic digestion
- Parr® bomb combustion
- Fusions
- Customer-specific

EXAMPLES OF APPLICATIONS

- Nuclear detrimental element analysis
- Source identification (contaminants, residues, particulate or trace metals)
- Alloy identification
- Composition certification for regulatory compliance
- Elemental composition
- Failure analysis/characterizations of defects
- Raw material qualification
- Reverse engineering
- Information about molecular structure
- X-Ray element maps to identify spatial variation



All testing is performed in compliance with the quality requirements mandated by:

