**SERVICES and APPLICATIONS**

* Plastic, Bioplastic, Polymer, Elastomer, Rubber, Syntactic Foam and Composite Material Testing Laboratories
* Analytical Laboratory Services: Plastic Testing Laboratory
* Product De-formulation, Reverse Engineering, Composition Identification
* Plastic Additive Laboratory; BPA, Phthalates, Fillers, Slip, Antioxidants, Stearate, Stearamide, UV Block, Paraben
* Rheology, Blending, Mixing, and Extrusion
* Protective Packaging Development and Testing: Foams, Plank, Bags, Inflatable, Films, Barrier Films, Bubble Wrap
* Stretch Wrap, Cling Wrap, Shrink Wrap Film
* Residual Foaming and Blowing Agents in Foam Products, Warehousing, LEL and Aging Models
* Chemical Foaming Agent Performance Testing, Activation Temperature, Weight Loss, Loading Percentage
* Product Stability & Compatibility Testing
* New Product Development, Technology, Patents, and Patent Writing
* Small Scale Compounding and Custom Products
* Rigid Gas Permeable Contact Lens Products (RGP), Hydrogel Lenses, Transdermal Patch, and Coatings
* Cosmetics & Pharmaceuticals: Complete Analysis, Purity, Shelf life stability
* Medical Devices, Implants & Catheter Tubing
* Epoxy, Epoxies, Prepregs, Nanotubes, Laminates & Composites
* Contamination and Contaminant Identification
* Plastic Failure Analysis
* Litigation and Patent Infringement Support
* Custom Test Method Development, ASTM and ISO Test Methods, QC and QA programs
* Materials Analysis & Identification
* Consulting

**CAPABILITIES**

* **Rheology, Modeling, and Flow Analysis** 
  + Rheometrics Solids Analyzer (RSA)
  + Dynamic Mechanical Analysis (DMA)-Viscoelastic Properties
  + Stress Rheometer (SR5)-Melt Strength Rheology
  + Capillary Rheometer
  + Torque Rheometer
  + Extrusion Plastometer, Melt Flow Rate
  + Rheometry and Rheological Properties
  + Brookfield Viscometer
  + Intrinsic Viscosity, Viscosity Number
* **Thermal Analysis** 
  + Differential Scanning Calorimetry (DSC), Tg, Tm, Tc Transition
  + Modulated Differential Scanning Calorimetry (MDSC)
  + Thermal Gravimetric Analysis (TGA)
  + Thermal Mechanical Analysis (TMA)
* **Chemical Analysis** 
  + Fourier Transform Infrared Spectroscopy (FTIR)
  + Micro FTIR
  + UV-Vis Spectroscopy
* **Physical Properties**
  + Density and Specific Gravity
  + Ash Content
  + Shore Hardness
* **Chromatography** 
  + Gel Permeation Chromatography (GPC) with RI, MALS, DAD
  + Gas (GC), Gas with Mass Spectroscopy (GCMS)
  + Liquid (HPLC)
  + Thin Layer (TLC)
* **Mechanical Analysis** 
  + Universal Testing Machine (UMT)
  + Cycle Testing and Fatigue
  + Custom Grips and Fixtures
  + Tensile Testing and Elongation
  + Tensile Strength and Modulus
  + Compression Strength and Set
  + Yield point and Youngs Modulus
  + Break Point and Toughness
  + Creep and Stress Relaxation
  + 3 Point Bending Flexural Modulus
  + Poisson’s Ratio
  + Coefficient of Friction
  + Puncture Resistance
  + Stretch Wrap, Cling Peel
  + Stress Relaxation and Creep Recovery
  + Elastic Recovery and Permanent Deformation and Stress Retention of Stretch Wrap Film
  + Tear Strength and Trouser Tear