

# Capabilities

Our experienced team of polymer science experts provide clients with proven methods to increase business performance and competitive advantage.



## **Opportunity Identification**

- Idea Generation
- · Voice of the Customer
- Quality Function Deployment
- Problem-Based Idea Generation
- Idea Bank Management
- Screening Tools
- Prioritization Tools
- Market Assessment Tools
- Preliminary business case

### **New Product Development**

- Project Planning
- Project Management
- Design for Six Sigma; training and implementation
- Phase/Gate NPD process
- Fast Track NPD process
- Technology and Product Platform Development
- Pipeline Management
- Portfolio Management
- Manufacturing Process Development

#### **Process Optimization**

- Six Sigma Tools
  - Process Mapping
  - Cause/Effect Matrix
  - Failure Modes and Effects Analysis (FMEA)
  - Multivari Analysis
  - Design of Experiments
    - Factorial
    - Fractional Factorial
    - Mixture Designs
- Advanced Statistical Analysis and Modeling
- Lean Manufacturing Tools

## **Intellectual Property**

- Patents and Trademarks
- Patent Strategy Development
  - Barriers to entry
  - Licensing agreement
- Prior Art Searches
- Invention Disclosures

## **Thermosetting Polymers Expertise**

- Characterization
- Cure Kinetics
- Chemorheology and Processing
- Impregnation and B-staging
- Laminating
- Formulations (epoxy, phenolic, polyimide, cyanates, polyesters)

#### **Polymer Characterization Expertise**

- Thermal Analysis
  - o DSC
  - o TGA
  - o TMA
  - o DMA
- Rheological Measurements
- Dielectric Spectroscopy
- Adhesion Measurements
- Structure-Property-Process Relationships
- Underwriters Laboratory (UL) testing
- Reliability testing

#### **Expert Witness Testimony**

- Case research
- Preparation of Expert Opinion
- Deposition and Court Testimony