

### **Polymer analysis for REACH requirements**

**The problem:** REACH is a European Union regulatory framework for chemicals management. Under REACH (Registration, Evaluation and Authorization of Chemicals), manufacturers and importers of chemicals will be required to submit hazard, use, exposure and risk data for identified uses of substances manufactured or imported in quantities of more than one metric ton per year. Manufacturers, importers and their customers are required to communicate information on chemicals throughout the supply chain in order to be aware of information relating to health and safety of the products supplied. With polymers, monomers as well as any other substances that have been reacted into the polymer backbone must be registered if a polymer produced in or imported into the EU consists of 2% or more by weight of such monomers or other substances and if the volumes of monomers or other substances in reacted form exceed one metric ton per annum. Polymer additives need to be registered if they are manufactured or imported on their own or in compounded form in volumes of one metric ton or more per annum.

**The challenge:** This challenge with polymers requires, for example, the analysis of additives that may migrate into food, or a catalyst support consisting of diatomaceous earth, etc. These types of challenges require development of a new and often innovative test method to determine both the composition and quantity often in low concentrations in the formulation.

#### **How STRIDE can help:**

Our group of analytical scientists draw from their breadth of experience of solving challenges in many industrial polymers such as Polyolefins, Bio-derived Polymers, Polyesters, Polyamides, Aramids, Elastomers, Liquid crystalline polymers, Fluoropolymers, Ionomers, Silicone polymers, Hydrogels used in a wide variety of application such as adhesives, films, coatings, composites, fibers. Having this breadth of experience enables them to apply lateral thinking, for example, using an archaic gravimetric digestion procedure developed by brick layers to analyze clays in brick manufacturing, one of our scientists quantified the total amount of amorphous silica in a catalyst support. This data was used to support a successful REACH submission.

**Contact us to learn more at [research@stride2future.org](mailto:research@stride2future.org)**