



# Polymerization Processes

## CUSTOM POLYMER DESIGN AND SYNTHESIS FOR SPECIFIC APPLICATIONS

### KEY WORDS

POLYMER  
SYNTHESIS,  
DESIGN,  
APPLICATIONS

### DESCRIPTION

This capability focuses on the availability of equipment for polymerization reactions at the laboratory and bench scale. We have the infrastructure and expertise to carry out various polymerization routes, enabling the creation of materials with controlled properties. The development of a polymer is accompanied by a characterization process, using available analytical equipment (chromatography, thermal analysis, spectroscopy, mechanical testing) to validate the molecular structure and evaluate the material's performance. This capability allows for the generation of innovative and patentable solutions for industries that require materials with superior performance or functionalities not found in commercial polymers.

### APPLICATIONS

- Polymer synthesis
- Development of specialty resins and coatings
- Development of polymers with enhanced properties
- Study of polymerization reaction kinetics

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