



# General Characterization of Polymers

## ANALYSIS OF THE CHEMICAL STRUCTURE

### KEY WORDS

POLYMER  
CHARACTERIZATION,

CHEMICAL  
STRUCTURE  
ANALYSIS,

POLYMER  
COMPOSITION  
ANALYSIS

### DESCRIPTION

The Appel and LRGP laboratories provide polymer characterization services focused on chemical composition and thermal behavior. Advanced techniques such as mass spectrometry, Raman spectroscopy, chromatography, Fourier-transform infrared spectroscopy (FTIR), and Differential Scanning Calorimetry (DSC) are used to identify polymer types, additives, contaminants, and molecular structure. Thermal analysis reveals phase transitions, stability, and physicochemical properties. Together, these methods ensure a comprehensive understanding of materials, supporting quality control, recycling, material development, and process optimization.

### AVAILABLE TECHNIQUES AND/OR EQUIPMENT

- Mass spectrometry
- Raman Spectroscopy
- Chromatography
- Fourier Transform Infrared Spectroscopy
- Differential Scanning Calorimetry

### APPLICATIONS

- Quality control
- Polymers
- Materials development

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