

Chem 476: Polymer Chemistry

Course description: Chemistry of polymers. Structure-property relationships and applications.

Course Goals

Develop an understanding of polymer synthesis

Develop an understanding of the concepts underlying the properties of polymers and soft materials

Develop an understanding of the role and function of instrumentation used for polymer characterization

Develop an understanding of thermodynamics as applied to polymers

Develop the ability to relate chemical structure to observable properties

Develop an understanding of the importance of chemistry in society

Develop an understanding of contemporary and relevant industrial chemical processes

Develop the ability to choose the appropriate methods for characterization of polymers

Program Goals

Develop the ability to represent chemical information.

Develop the ability to apply error analysis and determine significant figures.

Develop an understanding of the use of models, their premises, advantages and limitations.

Develop competence in problem solving.

Develop an understanding of the impact and relevance of chemistry in society.