



CHM1361 Introduction to polymer chemistry

[22.5h] 2 credits

Teacher(s): Jean-François Gohy
Language: French
Level: First cycle

Aims

The course is for chemistry student interested in an introduction to polymers. It forms a homogeneous entity giving sufficient bases for students that do not desire to specialize in this field. It does not constitute a necessary prerequisite to the more specialized courses of 4th year (although quite useful).

Main themes

The following questions are examined (in parenthesis the number of hours for that point) :

1. Basic notions (6 hrs) : macromolecule notion : types of polymers, nomenclature notion, stereochemistry notion, molecular masses and their distribution - polymer material notion.
2. Main methods of synthesis (6 hrs) : general problems - chain polymers : introduction to radical, ionic and coordination polymers - polymerization by steps : main ideas and chosen examples - modification of polymers.
3. Methods of characterization (6 hrs) : brief presentation of characterization methods particularly used in polymer chemistry : techniques of characterization of molecular masses, characterization techniques of the main physical properties.
4. Typical applications (4 hrs) : brief description of some applications of polymer materials.

Other credits in programs

CHIM13BA	Troisième année de bachelier en sciences chimiques	(2 credits)	Mandatory
CHIM22	Deuxième licence en sciences chimiques	(2 credits)	