Université catholique de Louvain

Introduction to polymer chemistry

3.0 credits

LCHM1361

2013-2014

22.5 h

2q

Teacher(s) :	Gohy Jean-François ;
Language :	Français
Place of the course	Louvain-la-Neuve
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.
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). The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".
Cycle and year of study :	Master [120] in Biochemistry and Molecular and Cell Biology Bachelor in Biology Master [60] in Biology Bachelor in Chemistry
Faculty or entity in charge:	СНІМ