UCLouvain

Introduction to polymer chemistry

3.00 credits

Ichm1361

2024

22.5 h

Q2

Teacher(s)	Gohy Jean-François ;				
Language :	French				
Place of the course	Louvain-la-Neuve				
Prerequisites	It is recommended to have acquired the knowledge and skills developed in the teaching unit: LCHM1141 Chimie organique				
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. 				
Learning outcomes	At the end of this learning unit, the student is able to : 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 1 field. It does not constitute a necessary prerequisite to the more specialized courses of 4th year (although quite useful).				
Evaluation methods	Written exam in the form of open-ended questions covering all the material covered in class.				
Inline resources	Course materials are available on the course moodle site.				
Faculty or entity in charge	СНІМ				

Programmes containing this learning unit (UE)					
Program title	Acronym	Credits	Prerequisite	Learning outcomes	
Bachelor in Chemistry	CHIM1BA	3		٩	
Minor in Chemistry	MINCHIM	3		٩	
Master [120] in Biochemistry and Molecular and Cell Biology	BBMC2M	3		٩	
Master [120] in Chemistry and Bioindustries	BIRC2M	3		٩	