



SC

CHIM2141 Exercices de chimie organique

[120h] 7.5 credits

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Language: french
Level: 2nd cycle course

Aims

After these exercises, the student has to be able to reproduce with success a current synthesis, starting from data from literature. The best of them will be able to conceive an operation mode for these syntheses. Learning how to write a report is also part of the objectives. The determination of an unknown product's structure, on the basis of spectroscopic documents, is also a problem that will be faced.

Main themes

The exercises a part specific to organic chemistry and a part integrated in physical and analytical chemistry. The exercises cover a large number of processes used of organic synthesis while illustrating as many reactions as possible. The techniques illustrated in the laboratory are : crystallization, liquid-liquid and solid-liquid extractions, distillations, manipulations and drying gazes, sodium and hydride manipulations, working under anhydride conditions and drying solvents, working in semi-micro, synthesis in inert atmosphere, using Uvs, colon chromatography. The techniques used for the control of products are: physical characteristics: fusion point, refractometry, polarimetry, thin-layer chromatography, gas phase chromatography, liquid HPLC chromatography; spectroscopy: infra-red and RMN (proton-carbon). We also offer an initiation in computerized bibliographic research, and the use of RMN software.

Other credits in programs

CHIM21	Première licence en sciences chimiques	(8 credits)	Mandatory
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