

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **COURSE SYLLABUS**

# **Crystallography and Laboratory of X-ray Powder Diffraction** (Curricular - Chemistry)

2021-94R-SCGA13

#### **Title**

Crystallography and Laboratory of X-ray powder diffraction

### Teacher(s)

Massimo Moret; Chiara Ferrara

#### Language

English

#### **Short description**

Program:

- Symmetry in crystals
- Examples of crystalline structures
- Mechanisms Crystal growth

- Diffraction of X-ray by crystals
- Experimental methods in X-ray: from single crystal to powders

Objectives of the program:

To understand the role of symmetry in periodic structures, basics of crystal growth, theory of diffraction in crystals, the use of diffraction to study solids. To make and interpret experiments on powdered polycrystalline samples.

Evaluation: YES - Oral examination

#### **CFU / Hours**

2 CFU - 18 Hours (12h lecture - 6h laboratory training)

## **Teaching period**

I semester