



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Structure-Property Relationships in Porous Crystalline Materials for Gas Storage

2324-116R-M10

Titolo

Structure-Property Relationships in Porous Crystalline Materials for Gas Storage

Docente(i)

Prof. Len Barbour
Department of Chemistry and Polymer Science,
University of Stellenbosch, Stellenbosch, 7600, South Africa

Lingua

Inglese

Breve descrizione

The course aims at giving an introduction to porous materials with particular attention to porous molecular crystals and metal organic frameworks (MOFs) and their applications. The course will address the most advanced characterization techniques for the study of crystalline porous materials.

The following topics will be discussed:

1. Introduction to porosity
2. Porous molecular materials
3. Porous metal-organic frameworks
4. Applications of porous materials
5. Measuring gas sorption isotherms
6. Adsorption calorimetry
7. Crystallography under gas pressure - apparatus
8. Crystallography under gas pressure - interpretation of structures.

CFU / Ore

2 CFU / 16 ore

Periodo di erogazione

Il corso si svolgerà dal 3 al 14 giugno 2024.

Sustainable Development Goals

ENERGIA PULITA E ACCESSIBILE | IMPRESE, INNOVAZIONE E INFRASTRUTTURE | CONSUMO E PRODUZIONE RESPONSABILI
