UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Investigation of origin of life and Molecule-surface interaction: an experimental approach between Astrophysics and Surface Physics

2425-116R-M05

Title

Investigation of origin of life and molecule-surface interaction: an experimental approach between Astrophysics and Surface Physics

Teacher(s)

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Language

English

Short description

Among the topics of interest in the fascinating scientific research on the origin of life, a contribution can come from materials science, when considering that relevant mechanisms may have been the condensation and possible

reaction on solid surfaces of molecules at the basis of life. In particular, in this course we will discuss how the interaction between molecules, such as amino acids or DNA bases, and surfaces of minerals present in rocks on the promordial Earth, or surfaces of carbonaceous materials that constitute interstellar dust, can be reproduced and studied in laboratory experiments dedicated to the growth of thin films and aggregates of organic molecular materials and their study with techniques typical of surface physics.

A brief description of the content of each lesson is proposed in the elearning page of the course.

CFU / Hours

1 CFU / 8 h

Teaching period

December 2024

Sustainable Development Goals

QUALITY EDUCATION