



UNIVERSITÀ DEGLI STUDI DI MILANO

Corso di Dottorato in Scienze della Terra



**6-17th February 2023 - Short course (4 cfu, 20 hours) – Room first floor
Dipartimento di Scienze della Terra “A. Desio”, via Botticelli 23, Milano**

Advanced experimental synthesis and characterization of minerals and rocks by Marco Merlini and Patrizia Fumagalli

PROGRAM

- Experimental methodologies and protocols for synthesis of minerals at HP/HT
- Laboratory characterization of minerals and rocks by diffraction (multipurpose diffractometer) and spectroscopy (micro-Raman)
- Introduction to synchrotron radiation application for advanced characterization of minerals and possible visit to the Elettra synchrotron facility



Per informazioni e iscrizione contattare:

Prof. Marco Merlini (marco.merlini@unimi.it) and/or Patrizia Fumagalli (patrizia.fumagalli@unimi.it)

Course description and/or schedule

4 days in the first half of February. The exact date and the visit to the synchrotron will be defined with participants.

Day 1 (Milano – 4 hours) Introduction to experimental methodologies for synthesis of rocks and minerals. Lecture and tutorials in laboratories.

Day 2 (Milano – 4 hours) Diffraction techniques: remind of basic theory; example of data collection with multipurpose diffractometer and data processing. Lecture and tutorials in laboratory

Day 3 (Milano – 4 hours) Spectroscopic techniques: micro-Raman. Lecture and tutorial

Day 4 (Trieste – 8 hours) Introduction to synchrotron radiation; diffraction and spectroscopic techniques with synchrotron radiation. Lectures and tutorials at the Elettra synchrotron radiation facility (Basovizza, Trieste)

(Alternatively, in Milano: introduction to synchrotron radiation and applications (lectures) and tutorial on data processing and analysis)

