UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Raman Spectroscopy: A Flexible Tool for an Integrated Research Approach

2526-1-124R006

Title

Raman spectroscopy: a flexible tool for an integrated approach in scientific research

Teacher(s)

Sergio Andò ; Claudia Conti; Luca Ferrero; Maria Luce Frezzotti; Veronica Nava; Alberto Resentini; Francesco Saliu; Chiara Urani

Language

English

Short description

- Raman spectroscopy in Earth and Planetary Sc. and Provenance Studies (S. Andò) - 2h
- Raman spectroscopy Training 1 (Minerals) (S. Andò) - 1h
- Raman spectroscopy of inclusions in minerals (M.L. Frezzotti) - 2h
- Raman spectroscopy and U-Pb geochronology (A. Resentini) - 2h
- Identification of microplastic in air and sea water by Raman spectroscopy (L. Ferrero) – 2h

- Raman spectroscopy in Cultural Heritage (C. Conti) - 1h
- Raman spectroscopy Training 2 (Anthropogenic compounds) (S. Andò) -1h
- Identification of Microfibers in Natural Environments, a new analytical challenge:
- the contribution of Raman Spectroscopy (F. Saliu) - 1h
- Identification of microplastic in lakes and rivers by Raman spectroscopy (V. Nava) – 2h
- Raman spectroscopy in Health and Environmental Studies: (C. Urani) - 1h

Final Evaluation: The final assessment involves the preparation of a short report (minimum 2 and maximum 6 pages) consisting of a critical analysis of a scientific publication, chosen among those proposed by the course teachers. The report must highlight the innovations introduced by the authors of the article, the weak points of their research and the developments and future applications of this approach and methodology.

CFU / Hours

2 CFU - 16 Hours (Lecture)

Teaching period

II semester

Sustainable Development Goals