Frequency
Every year

Summary
Introduction to some basic methods used for powder characterisation, particle size measurement and a brief introduction to powder dispersion and suspension characterisation. Discussion of the fundamental theory behind the methods and their limitations. Real world examples.

Content
Please find information on the link below.

Keywords
nanopowders, particle size, dispersion, aggregation, colloidal stability, size reduction

Learning Prerequisites
Required courses
basic scientific background

Learning Outcomes
By the end of the course, the student must be able to:
• Assess / Evaluate Different particle size measurement methods
• Choose an appropriate method for particle size measurement
• Assess / Evaluate colloidal stability of a suspension
• Identify methods for powder characterisation
• Choose an appropriate method for particle size reduction (milling)

Teaching methods
Mixture of power point slide presentations with practical demonstrations in the laboratory.

Assessment methods
Written test at the end of the course.

Resources
Bibliography
Detailed bibliography given with the course notes

Notes/Handbook
copy of slides used in the course will be provided

Websites
• https://www.epfl.ch/research/domains/ccmx/courses-and-events/2020pc/?mc_cid=cc6e51a8d0&mc_eid=1f0a525ce4