

MSE-713

CCMX Advanced Course - From Additive Manufacturing to Field-assisted Sintering

Bowen Paul, Derlet Peter, Zhao Zhe

Cursus	Sem.	Type
Materials Science and Engineering		Obl.

Language of teaching	English
Credits	1
Session	
Exam	Written
Workload	30h
Hours	18
Courses	17
Exercises	1
Number of positions	30

Frequency

Every year

Summary

This course introduces the basics behind the processing and sintering of powders, highlighting, additive manufacturing, the use of field and pressure assisted sintering and describing different modelling aspects (MD/FEM).

Content

Please find information on the link below.

Note

This course is open to participants with a basic background in materials science, chemistry and physics.

Keywords

precipitation; inorganic powders; supersaturation; nucleation mechanism; growth mechanism; aggregation mechanism; characterisation; reactors; sol-gel routes; aqueous; non-aqueous; thermodynamic modelling, kinetic modelling

Assessment methods

Written

Resources

Websites

- <https://ccmx.epfl.ch/courses-and-events/advanced-course-from-additive-manufacturing-to-field-assisted-sintering-2019>