MSE-653

CCMX Advanced Course - Inorganic Particle Synthesis by Precipitation: From Nanoparticles to Self-organised Mesocrystals and from Theory to Practice

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Cursus	Sem.	Type
Materials Science and Engineering		Opt.

Language of teaching	English
Credits	1
Session	
Exam	Written
Workload	30h
Hours	**21**
Courses	19
Exercises	2
Number of positions	

Frequency

Every year

Remark

Registration : ONLY here : https://inform.epfl.ch/index.php?form=2020_IPS_1580125755 Please don t register on IS-Academia.

Summary

The basics behind precipitation of particles in theory and in practice will be introduced. Fundamental concepts of supersaturation, nucleation, growth and aggregation will be discussed. Some basic methods used for inorganic powder and particles characterisation will also be briefly introduced.

Content

Please find information on the link below.

Keywords

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

Resources

Websites

- https://www.epfl.ch/research/domains/ccmx/2020ips/?mc_cid=cc6e51a8d0&mc_eid=1f0a525ce4