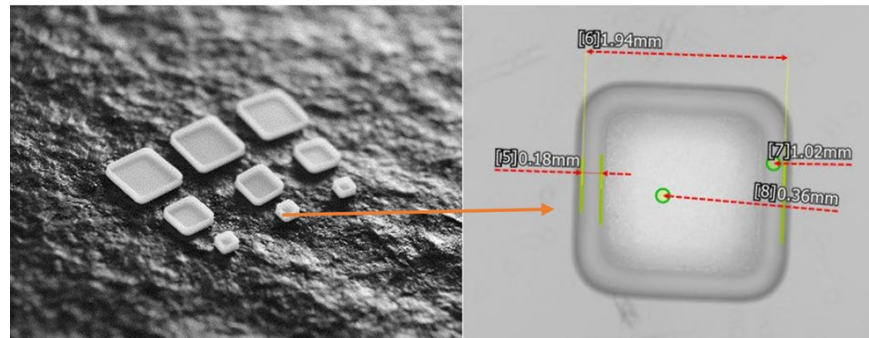
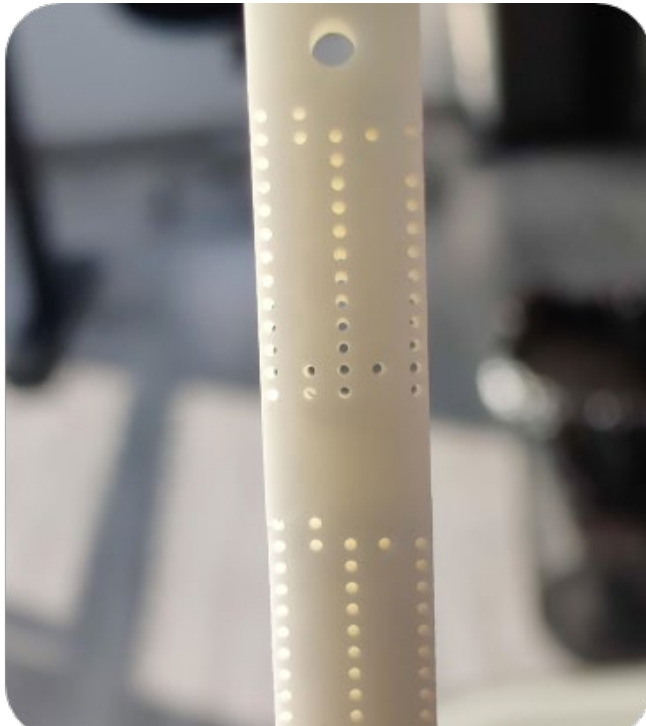


MSE 495 – Advanced Ceramics Technology

Michael Stuer (Empa) - Andrea Testino (PSI)

Course Organisation



Advanced Ceramics Technology

MA2 & MA4 & PhD Spring semester – ENGLISH

Room: [INR 219](#) - 10:00 – 13:00

Credits: 3

The course is divided in two major blocks AT and MS (variations possible, check for slides in the morning)

Week	date	who	Major topic
1	20.02.2025	AT	General introduction. Ceramics processing
2	27.02.2025	AT	Powder characterization including synchrotron
3	06.03.2025	AT	Powder synthesis
4	13.03.2025	AT	Colloidal stability
5	20.03.2025	AT	Perovskites
6	27.03.2025	AT	Spinel, Doping
7	03.04.2025	MS	Shaping
8	10.04.2025	MS	Conventional and UHS sintering
9	17.04.2025	AT	Computational tools
break			
10	01.05.2025	MS	Flash sintering
11	08.05.2025	MS	SPS sintering and MAX phases
12	15.05.2025	MS	Stereological projection and EBSD
13	22.05.2025	MS	Complexions and GB engineering
14	29.05.2025	MS	ZrO ₂ (ceramic steel)

Exam

- Oral, summer session
- 20 min
- No preparation, no notes, etc.
- Active participation during classes (plusses method)

an example today

Proposed time: Let's start at 10 (unless train issues)

10:00 – 10:30 slides, block I
10:30 – 10:45 discussion
10:45 – 11:00 break

11:00 – 11:30 slides, block II
11:30 – 11:45 discussion
11:45 – 12:00 break

12:00 – 12:30 slides, block III
12:30 – 12:45 discussion
12:45 END

Votes



Yes :

No :

Decision: