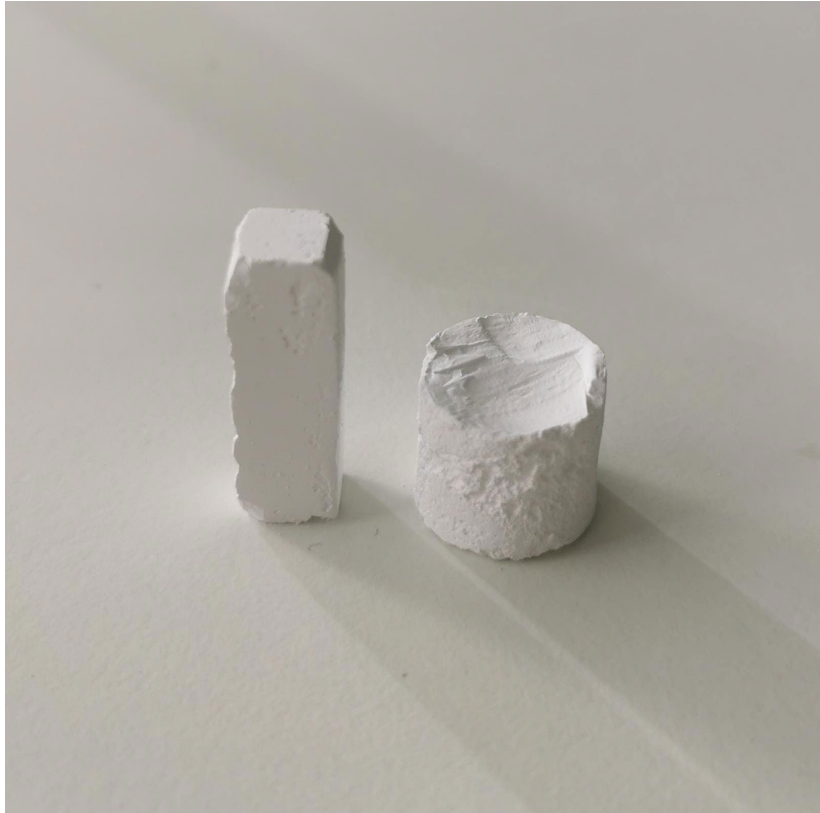


Shaping ceramics



Slip casting (wet)



Mono-axial pressing (dry)

Slip casting

- 1) Stabilize the powder particles in a suspension
- 2) Liquid limit
- 3) Slip casting itself

Slip casting

1) Stabilize the powder particles in a suspension

2) Liquid limit

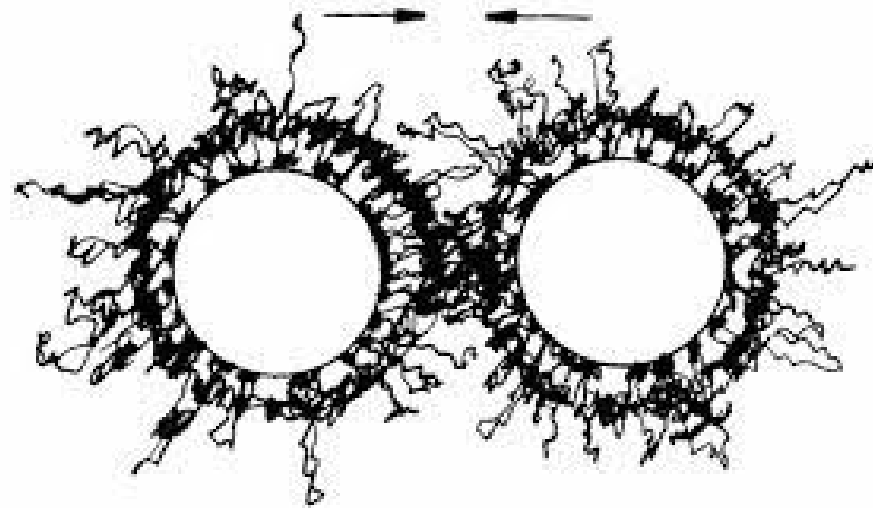
3) Slip casting itself

1) Sedimentation volume



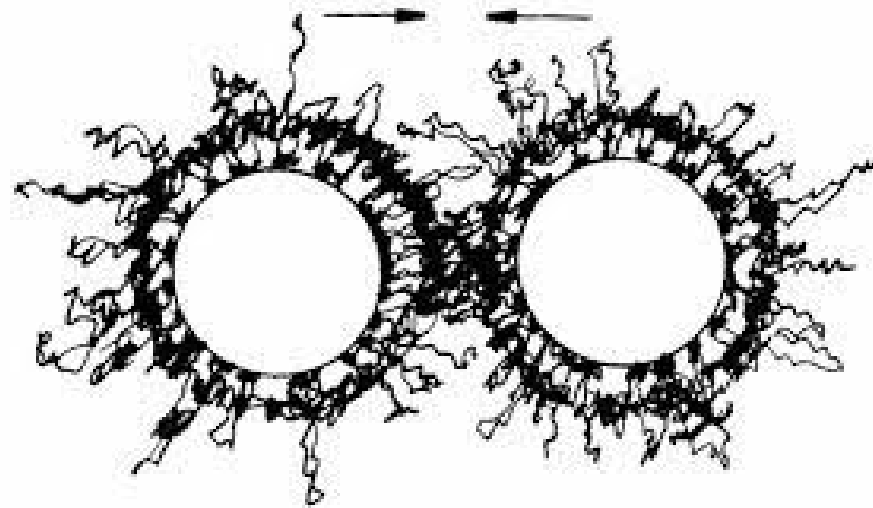
1) Sedimentation volume

Solvent	Mass (Al_2O_3)	$V_{\text{sedimentation}}$
H_2O	2g	
H_2O		
0.3% PAA		
0.5% PAA		



1) Sedimentation volume

Solvent	Mass (Al_2O_3)	$V_{\text{sedimentation}}$
H_2O	2g	4.2 mL
H_2O		4.3 mL
0.3% PAA		3.2 mL
0.5% PAA		2.8 mL



Slip casting

1) Stabilize the powder particles in a suspension

2) Liquid limit

3) Slip casting itself

2) Liquid limit

Solvent	Mass (Al ₂ O ₃)	V solvent	M1 before solvent	M2 after solvent
0.3%	2g	800 uL	14.27	15.04
0.3%		760 uL	14.24	15.07
0.5%		480 uL	14.32	15.00
0.5%		640 uL	14.31	15.01

$$\frac{\mu L}{g}$$

$$\frac{g}{g}$$

2) Liquid limit



Slip casting

1) Stabilize the powder particles in a suspension

2) Liquid limit

3) Slip casting itself

3) Slip Casting

