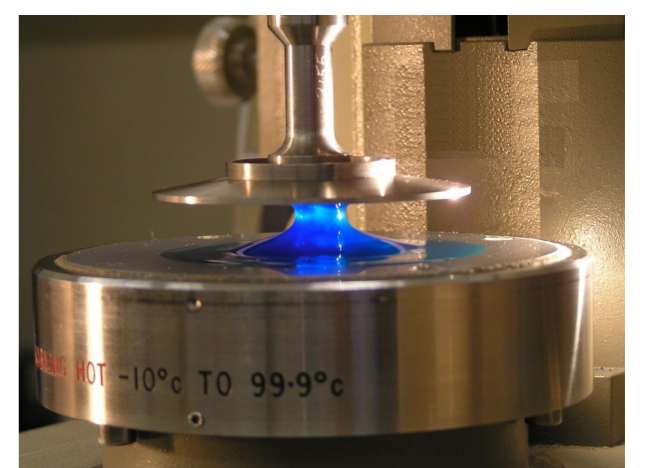


WEE-Knowledge

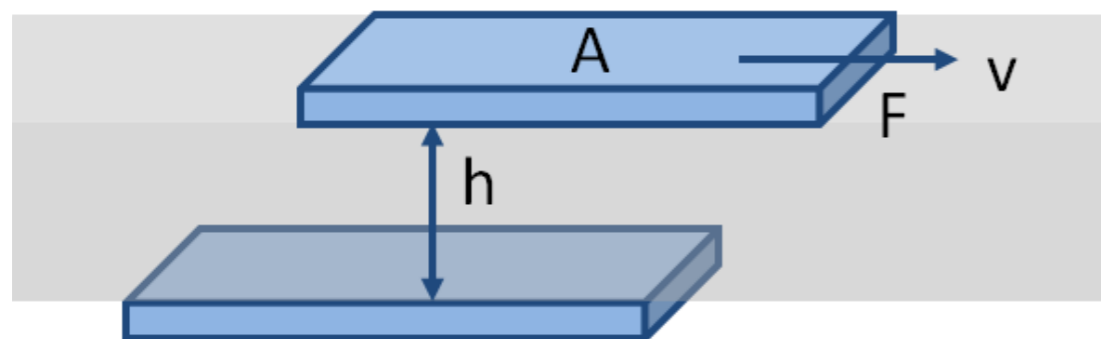
Rheology



Rotational experiments

Important formulas

2-Plates model



A: shear area [m²]
 F: shear force [N]
 h: gap width [m]
 v: velocity [m/s]

Shear stress

[N/m²=Pa]

$$\tau = \frac{F}{A}$$

Shear rate

[1/s]

$$\dot{\gamma} = \frac{v}{h}$$

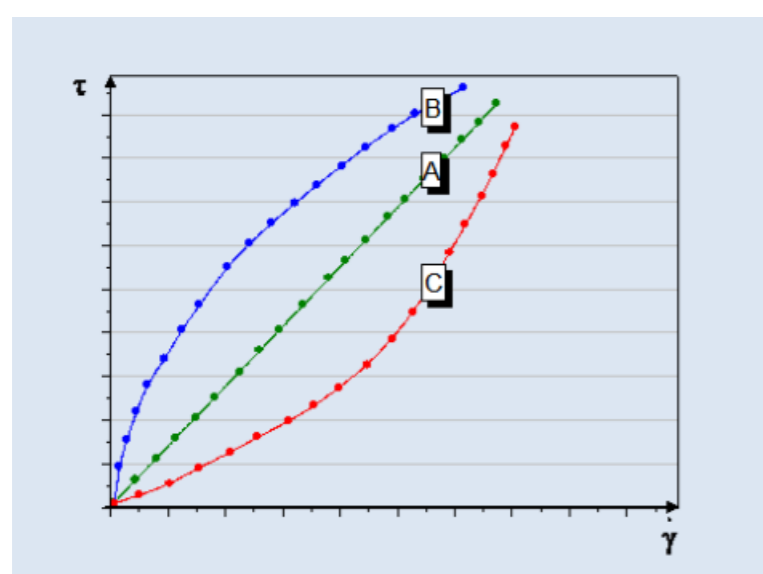
Dynamic viscosity

[Pa s]

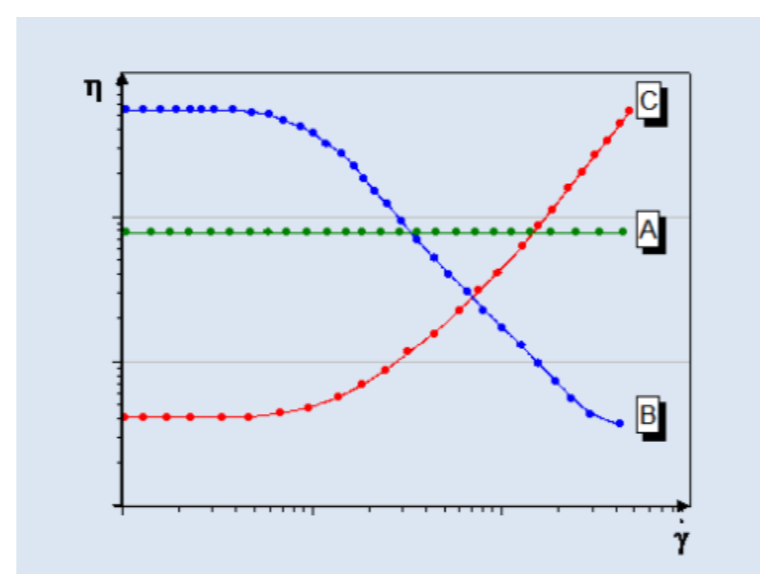
$$\eta = \frac{\tau}{\dot{\gamma}}$$

Important graphs

Flow curve

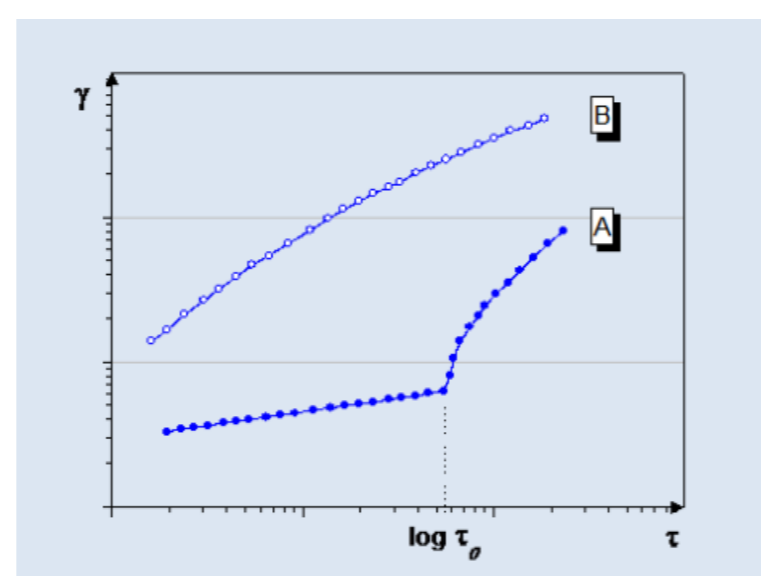
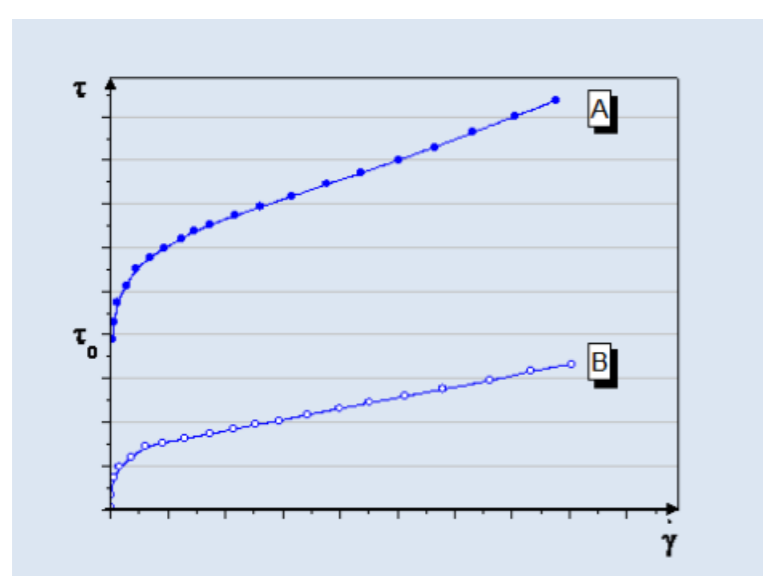


Viscosity curve



a: ideal viscous
 b: shear-thinning
 c: shear-thickening

Yield Point



a: with yield point
 b: without yield point